PSM Collection

Question Bank with Answers & Explanations

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66 Topics • 1343 Questions

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- Master Index links take you to topic parts.

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DIRECTORY EXPLORER

Click a folder below to open it.

» **01_ Concept of Health and Disease**

» **02_Epidemiology**

» **03_Vaccines and Cold Chain**

» **04_Screening of Diseases**

» **05_Communicable and Non-communicable Diseases**

» **06_National Health Programs**

» **07_Demography and Health**

» **08_Family Planning and Contraceptives**

» **09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics**

» **10_Nutrition and Health**

» **11_Social Sciences and Health**

» **12_Environment and Health**

» **13_Allied Health Disciplines**

» **14_Health Education and Communication**

» **15_Health Planning and Management**

» **16_Health Care of The Community in India**

» **17_International Health**

» **18_Biostatistics**

» **19_Miscellaneous**

» **20_Biomedical Waste Management**

» 01_ Concept of Health and Disease

« Back to Parent Directory

Path: 01_ Concept of Health and Disease

• 001 Concept Of Disease Well-Being	***Questions***	***Answers***
• 002 Disease Control Monitoring And Surveillance	***Questions***	***Answers***
• 003 Health Indicators	***Questions***	***Answers***
• 004 Previous Year Questions	***Questions***	***Answers***

» 02_Epidemiology

« Back to Parent Directory

Path: 02_Epidemiology

• 005 Basics Of Epidemiology	***Questions***	***Answers***
• 006 Study Designs In Epidemology - I	***Questions***	***Answers***
• 007 Bias And Confounders	***Questions***	***Answers***
• 008 Systematic Review Meta-Analysis And Evidence-Based Studies	***Questions***	***Answers***
• 009 Previous Year Questions	***Questions***	***Answers***

» 03_Vaccines and Cold Chain

« Back to Parent Directory

Path: 03_Vaccines and Cold Chain

• 010 National Immunization Schedule Delayed Immunization Cold Chain	***Questions***	***Answers***
• 011 Vaccines And Open Vial Policy	***Questions***	***Answers***
• 012 Previous Year Questions	***Questions***	***Answers***

» 04_Screening of Diseases

« Back to Parent Directory

Path: 04_Screening of Diseases

• 013 Screening Of Diseases - I	***Questions***	***Answers***
• 014 Previous Year Questions	***Questions***	***Answers***

» 05_Communicable and Non-communicable Diseases

« Back to Parent Directory

Path: 05_Communicable and Non-communicable Diseases

• 015 Infectious Epidemiology	***Questions***	***Answers***
• 016 Mumps Measles Rubella Pertussis	***Questions***	***Answers***
• 017 Chicken Pox Small Pox And Diphtheria	***Questions***	***Answers***
• 018 Acute Respiratory Infection And Tuberculosis	***Questions***	***Answers***
• 019 Polio Hepatitis Diarrhoea Cholera Typhoid	***Questions***	***Answers***
• 020 Dengue Malaria And Rabies	***Questions***	***Answers***
• 021 Filariasis Leptospirosis Japanese Encephalitis And Helminthic Infections	***Questions***	***Answers***
• 022 Plague Tetanus Hiv Aids Rickettsial Disease Ebola Nipah And Zika Virus	***Questions***	***Answers***
• 023 Previous Year Questions	***Questions***	***Answers***

» 06_National Health Programs

« Back to Parent Directory

Path: 06_National Health Programs

• 024 National Health Mission Rmnch - A Maternal Initiatives Child And Adolescents Health Initiatives	***Questions***	***Answers***
• 025 Nacp Global Initiatives	***Questions***	***Answers***
• 026 National Tb Elimination Program Ntep	***Questions***	***Answers***
• 027 Nvbdcp	***Questions***	***Answers***
• 028 Endgame Strategy And National Polio Surveillance Program	***Questions***	***Answers***
• 029 Ncds Npcds	***Questions***	***Answers***
• 030 Blindness Control Program Nlep Health Programs Misc	***Questions***	***Answers***
• 031 Previous Year Questions	***Questions***	***Answers***

» 07_Demography and Health

« Back to Parent Directory

Path: 07_Demography and Health

• 032 Demography And Health	***Questions***	***Answers***
• 033 Previous Year Questions	***Questions***	***Answers***

» 08_Family Planning and Contraceptives

« Back to Parent Directory

Path: 08_Family Planning and Contraceptives

• 034 Family Planning And Contraceptives	***Questions***	***Answers***
• 035 Previous Year Questions	***Questions***	***Answers***

» 09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics

« Back to Parent Directory

Path: 09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics

• 036 Preventive Medicine In Obstetrics Pediatrics And Geriatrics	***Questions***	***Answers***
• 037 Previous Year Questions	***Questions***	***Answers***

» 10_Nutrition and Health

« Back to Parent Directory

Path: 10_Nutrition and Health

• 038 Macronutrients	***Questions***	***Answers***
• 039 Food Adulteration And Food Fortification	***Questions***	***Answers***
• 040 Micronutrients	***Questions***	***Answers***
• 041 Recommended Dietary Allowances And Nutritional Health Programmes	***Questions***	***Answers***
• 042 Previous Year Questions	***Questions***	***Answers***

» 11_Social Sciences and Health

« Back to Parent Directory

Path: 11_Social Sciences and Health

• 043 Social Sciences And Health	***Questions***	***Answers***
• 044 Previous Year Questions	***Questions***	***Answers***

» 12_Environment and Health

« Back to Parent Directory

Path: 12_Environment and Health

• 045 Water Ii Disinfection Chlorination	***Questions***	***Answers***
• 046 Air Light Sound And Radiation	***Questions***	***Answers***
• 047 Entomology - I	***Questions***	***Answers***
• 048 Previous Year Questions	***Questions***	***Answers***

» 13_Allied Health Disciplines

« Back to Parent Directory

Path: 13_Allied Health Disciplines

• 049 Occupational Health	***Questions***	***Answers***
• 050 Esi Act Factory Act Nrega Act And Disaster Management	***Questions***	***Answers***
• 051 Previous Year Questions	***Questions***	***Answers***

» 14_Health Education and Communication

« Back to Parent Directory

Path: 14_Health Education and Communication

• 052 Health Education And Communication	***Questions***	***Answers***
• 053 Previous Year Questions	***Questions***	***Answers***

» 15_Health Planning and Management

« Back to Parent Directory

Path: 15_Health Planning and Management

• 054 Health Planning And Management	***Questions***	***Answers***
• 055 Previous Year Questions	***Questions***	***Answers***

» 16_Health Care of The Community in India

« Back to Parent Directory

Path: 16_Health Care of The Community in India

• 056 Healthcare Of Community And Health Delivery Systems	***Questions***	***Answers***
• 057 Previous Year Questions	***Questions***	***Answers***

» 17_International Health

« Back to Parent Directory

Path: 17_International Health

• 058 International Health	***Questions***	***Answers***
• 059 Previous Year Questions	***Questions***	***Answers***

» 18_Biostatistics

« Back to Parent Directory

Path: 18_Biostatistics

• 060 Biostatistics And Measures Of Central Tendency	***Questions***	***Answers***
• 061 Types Of Dispersion Distribution And Errors	***Questions***	***Answers***
• 062 Test Of Statistical Significance Graphical Representation Of Data Sampling And Probability	***Questions***	***Answers***
• 063 Previous Year Questions	***Questions***	***Answers***

» 19_Miscellaneous

« Back to Parent Directory

Path: 19_Miscellaneous

	Questions	*Answers*
• 064 Previous Year Questions		

» 20_Biomedical Waste Management

« Back to Parent Directory

Path: 20_Biomedical Waste Management

• 065 Biomedical Waste Management And Genetics And Health	***Questions***	***Answers***
• 066 Previous Year Questions	***Questions***	***Answers***

Part A — All Questions

• [01_ Concept of Health and Disease] 001 Concept Of Disease Well-Being

« Back to Folder Directory

[01_ Concept of Health and Disease] 001 Concept Of Disease Well-Being — Quick Jump

Q1 (p. 24)	*Q2 (p. 24)*	*Q3 (p. 25)*	*Q4 (p. 25)*	*Q5 (p. 25)*	*Q6 (p. 26)*
Q7 (p. 26)	*Q8 (p. 26)*	*Q9 (p. 27)*	*Q10 (p. 27)*	*Q11 (p. 28)*	*Q12 (p. 28)*
Q13 (p. 28)	*Q14 (p. 29)*	*Q15 (p. 29)*	*Q16 (p. 29)*	*Q17 (p. 30)*	*Q18 (p. 30)*
Q19 (p. 30)	*Q20 (p. 31)*	*Q21 (p. 31)*	*Q22 (p. 31)*	*Q23 (p. 32)*	*Q24 (p. 32)*
Q25 (p. 32)	*Q26 (p. 33)*	*Q27 (p. 33)*	*Q28 (p. 34)*	*Q29 (p. 34)*	

Q1: Which aspect of a disease does the Case Fatality Rate (CFR) primarily measure ? (Q840546)

A. Infectivity

B. Pathogenicity

C. Virulence

D. Transmissibility

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which theory of disease causation emphasises the role of genetic predisposition and environmental factors in the development of diseases? (Q840544)

A. Miasma Theory

B. Germ Theory

C. Multifactorial Theory

D. Epidemiological Triad Theory

See Answer in Part B → Q2

@Neet_pg_bot

Q3: How much weightage is placed on health outcomes to calculate NITI Aayog's annual health index? (Q846674)

A. 65%

B. 70%

C. 12%

D. 18%

See Answer in Part B → Q3

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Q4: Which of the following is not included in the Global Hunger Index? (Q840555)

A. Infant mortality rate

B. Child undernutrition

C. Child mortality rate

D. Food availability

See Answer in Part B → Q4

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Q5: How does the Multidimensional Poverty Index (MPI) offer a more comprehensive view of poverty than traditional income-based measures? (Q840554)

A. By measuring only the income levels of households.

B. By focusing solely on the employment status of individuals.

C. By including various indicators of health, education, and living standards.

D. By evaluating the GDP per capita of the country.

See Answer in Part B → Q5

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Q6: Which of the following is not an indicator of the human poverty index? (Q840553)

A. The proportion of people not surviving until the age of 40 years

B. Occupation and income

C. Percentage of underweight children

D. No access to safe water supply and sanitation

See Answer in Part B → Q6

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Q7: A public health researcher analyses data to understand gender disparities in human development within a specific region. The researcher is particularly interested in the components used to calculate the Gender Development Index (GDI). All of the following are components of the GDI except? (Q840552)

A. Life expectancy at birth for both males and females

B. Education index of both males and females

C. Infant mortality rates of both males and females

D. Standard of living for both males and females

See Answer in Part B → Q7

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Q8: Which of the following is true regarding the Physical quality of life index (PQLI)? (Q840551)

A. Measures life expectancy at birth

B. Measures the infant mortality rate

C. Measures gross national income (GNI) per capita

D. Lies between 0-1

See Answer in Part B → Q8

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Q9: Which of the following diseases typically does not exhibit a large hidden portion according to the Iceberg phenomenon? (Q840550)

A. Tuberculosis

B. Measles

C. HIV

D. Cancer

See Answer in Part B → Q9

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Q10: Which of the following diseases does NOT follow the spectrum of disease principle? (Q840549)

A. Leprosy

B. Influenza

C. Rabies

D. Tuberculosis

See Answer in Part B → Q10

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Q11: Why is the web of causation models considered beneficial for public health interventions? (Q840547)

A. It identifies a single cause for targeted intervention.

B. It suggests that only one factor needs to be addressed for disease control.

C. It highlights multiple points where interventions can reduce disease occurrence.

D. It eliminates the need for further research.

See Answer in Part B → Q11

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Q12: In the new ICD-11, gender incongruence has been moved from mental health conditions to which new chapter? (Q890873)

A. Traditional medicine

B. Sexual health

C. Immune system disorders

D. Addictive disorders

See Answer in Part B → Q12

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Q13: Maternal and neonatal tetanus was declared eliminated in India in which year, as certified by WHO? (Q890870)

A. 2014

B. 2015

C. 2016

D. 2017

See Answer in Part B → Q13

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Q14: Prescribing spectacles for refractive error is an example of: (Q890869)

A. Disability limitation (tertiary prevention)

B. Secondary prevention

C. Primary prevention

D. Health promotion

See Answer in Part B → Q14

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Q15: Prevention of disability by appropriate treatment (before disability occurs) is an example of: (Q890866)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primordial prevention

See Answer in Part B → Q15

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Q16: Pap smear for early detection of cervical cancer is an example of: (Q890865)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primordial prevention

See Answer in Part B → Q16

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Q17: Use of iodised salt in iodine-deficient areas (e.g., hilly regions) is an example of: (Q890862)

A. Primordial prevention

B. Primary prevention

C. Secondary prevention

D. Tertiary prevention

See Answer in Part B → Q17

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Q18: Asymptomatic patients are the target population for: (Q890861)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primordial prevention

See Answer in Part B → Q18

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Q19: Adoption of a healthy lifestyle from childhood to prevent coronary artery disease in adulthood is an example of: (Q890860)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primordial prevention

See Answer in Part B → Q19

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Q20: Public health surveillance is preferentially aimed at: (Q890859)

A. Direct patient care

B. Health planning

C. Individual diagnosis

D. Quarantine enforcement

See Answer in Part B → Q20

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Q21: Sentinel surveillance helps in: (Q890857)

A. Identifying cases free of disability

B. Identifying missing cases to supplement routine notifications

C. Directly treating patients

D. Eradicating diseases

See Answer in Part B → Q21

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Q22: Surveillance of a disease does not have a direct role in: (Q890851)

A. Health planning

B. Providing information about public health disasters

C. Breaking the chain of transmission

D. Detecting new and changing disease trends

See Answer in Part B → Q22

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Q23: The analysis of routine measurements aimed at detecting changes in the health status or environment of a population is called: (Q890843)

A. Surveillance

B. Monitoring

C. Sentinel surveillance

D. Systematic review

See Answer in Part B → Q23

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Q24: Which disease is referred to as the "silent epidemic of the century"? (Q890840)

A. Hypertension

B. Diabetes

C. Alzheimer's disease

D. Depression

See Answer in Part B → Q24

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Q25: If a disease has zero incidence in a region, it can be said that the disease has been: (Q890838)

A. Eliminated from the region

B. Eradicated globally

C. Controlled

D. Reached the iceberg phenomenon

See Answer in Part B → Q25

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Q26: Which factor aids the most in disease elimination? (Q890836)

A. Isolation

B. Quarantine

C. Herd immunity

D. Surveillance

See Answer in Part B → Q26

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Q27: Reduction of new cases of an infectious disease to zero in a defined geographical area through deliberate efforts, but requiring continued measures, is called: (Q890835)

A. Eradication

B. Elimination

C. Control

D. Surveillance

See Answer in Part B → Q27

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Q28: A person loses a foot in an accident, is unable to walk, and subsequently becomes unemployed. Which of the following correctly matches the events? (Q890833)

A. Accident - Impairment; Loss of foot - Disease; Cannot walk - Handicap; Unemployed - Disability

B. Accident - Disease; Loss of foot - Impairment; Cannot walk - Disability; Unemployed - Handicap

C. Accident - Disability; Loss of foot - Impairment; Cannot walk - Handicap; Unemployed - Disease

D. Accident - Handicap; Loss of foot - Disability; Cannot walk - Impairment; Unemployed - Disease

See Answer in Part B → Q28

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Q29: Which of the following is not a component of the epidemiological triad for tuberculosis? (Q890830)

A. Host factors

B. Agent factors

C. Environmental factors

D. Duration of illness

See Answer in Part B → Q29

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• [01_ Concept of Health and Disease] 002 Disease Control Monitoring And Surveillance

« Back to Folder Directory

[01_ Concept of Health and Disease] 002 Disease Control Monitoring And Surveillance — Quick Jump

Q1 (p. 35)	*Q2 (p. 35)*	*Q3 (p. 36)*	*Q4 (p. 36)*	*Q5 (p. 36)*	*Q6 (p. 37)*
Q7 (p. 37)	*Q8 (p. 37)*	*Q9 (p. 38)*	*Q10 (p. 38)*	*Q11 (p. 39)*	*Q12 (p. 39)*
Q13 (p. 39)	*Q14 (p. 40)*	*Q15 (p. 40)*			

Q1: All of the following diseases are targeted by India for elimination in the future, except? (Q840595)

A. Neonatal tetanus by 2025

B. HIV/AIDS by 2024

C. TB by 2025

D. Malaria by 2030

See Answer in Part B → Q1

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Q2: Termination of all modes of transmission of which of the following has not been achieved? (Q840597)

A. Smallpox

B. Wild poliovirus type 2

C. Wild poliovirus type 3

D. Dracunculiasis

See Answer in Part B → Q2

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Q3: Match the following level of prevention with their correct definition. Level of prevention Definition 1) Primary a) Prevention of establishment of risk factors in a population. 2) Secondary b) Prevention of the development of disease in a high-risk group/individual. 3) Tertiary c) Prevention or limitation of disability in a diseased individual. 4) Primordial d) Prevention of the progression of diseases that are in their early stages. (Q840600)

A. 1-c, 2-b, 3-d, 4-a

B. 1-b, 2-d, 3-c, 4-a

C. 1-b, 2-d, 3-a, 4-c

D. 1-a, 2-c, 3-b, 4-d

See Answer in Part B → Q3

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Q4: Which of the following is a mode of intervention for the secondary level of prevention? (Q840602)

A. Immunisation program

B. Health education

C. Rehabilitation programs

D. Early diagnosis and treatment

See Answer in Part B → Q4

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Q5: Which of the following modes of intervention is not a primary level of prevention? (Q840606)

A. Administration of MR vaccination to children

B. Examination of school students to identify signs of anemia

C. Iodization of common salt

D. Implementing strict laws regarding drinking and driving

See Answer in Part B → Q5

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Q6: Choose the correct statements from the following: a)BCG vaccine for TB- primary b) Reconstructive surgery- secondary c)OCP for contraception- primary d) Crutches for polio- secondary (Q840607)

A. a,c

B. a,b,c,d

C. b,c,d

D. a,c,d

See Answer in Part B → Q6

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Q7: Arrange the following events in the correct sequence: Impairment Disability Functional Limitation Handicap Disease (Q840609)

A. 5 → 1 → 3 → 2 → 4

B. 3 → 1 → 5 → 4 → 2

C. 5 → 1 → 2 → 3 → 4

D. 2 → 5 → 1 → 3 → 4

See Answer in Part B → Q7

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Q8: In a rural village, trachoma remains a significant public health concern. A public health officer is tasked with implementing a comprehensive prevention strategy for trachoma. Match each intervention with the appropriate level of prevention: 1. Primary Prevention a. Coordinates surgical treatment for blindness 2. Secondary Prevention b. Promotes facial cleanliness and sanitation. 3. Tertiary Prevention c. Ensures antibiotics are prescribed only to confirmed cases. 4. Quaternary Prevention d. Conduct regular eye screenings. (Q840612)

A. 1-b, 2-d, 3-a, 4-c

B. 1-d, 2-a, 3-b, 4-c

C. 1-c, 2-b, 3-d, 4-a

D. 1-a, 2-c, 3-d, 4-b

See Answer in Part B → Q8

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Q9: Which of the following interventions is an example of rehabilitation? (Q840613)

A. HPV vaccination in a reproductive-age woman.

B. Organising physical therapy sessions for stroke survivors.

C. Administering insulin to manage diabetes.

D. Conducting regular screenings to detect early signs of diabetes-related neuropathy.

See Answer in Part B → Q9

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Q10: For which of the following diseases is "mass prophylaxis" more commonly employed than "mass treatment"? (Q840617)

A. Lymphatic filariasis

B. Malaria

C. Cholera

D. Onchocerciasis

See Answer in Part B → Q10

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Q11: Which of the following international declarations or charters is primarily associated with outlining the principles and strategies for health promotion? (Q840621)

A. Alma-Ata Declaration

B. Jakarta Declaration

C. Ottawa Charter

D. Helsinki Declaration

See Answer in Part B → Q11

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Q12: Which term describes the systematic collection, analysis, and interpretation of health data for the planning, implementing, and evaluating public health practices? (Q840623)

A. Monitoring

B. Surveillance

C. Evaluation

D. Impact assessment

See Answer in Part B → Q12

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Q13: Which surveillance method involves routine reporting and data collection without active efforts to enhance reporting? (Q840628)

A. Active surveillance

B. Passive surveillance

C. Sentinel surveillance

D. Syndromic surveillance

See Answer in Part B → Q13

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Q14: What is the main objective of evaluating healthcare establishments? (Q840631)

A. Monitoring patient satisfaction levels

B. Assessing the efficacy and efficiency of health services

C. Expanding healthcare facilities

D. Reducing operational costs

See Answer in Part B → Q14

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Q15: Which of the following measures is implemented for individuals who are already ill and potentially infectious? (Q840635)

A. Isolation

B. Quarantine

C. Social distancing

D. Contact tracing

See Answer in Part B → Q15

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• [01_ Concept of Health and Disease] 003 Health Indicators

« Back to Folder Directory

[01_ Concept of Health and Disease] 003 Health Indicators — Quick Jump

Q1 (p. 42) *Q2 (p. 42)* *Q3 (p. 42)* *Q4 (p. 43)* *Q5 (p. 43)* *Q6 (p. 43)*
Q7 (p. 44) *Q8 (p. 44)* *Q9 (p. 45)* *Q10 (p. 45)* *Q11 (p. 45)* *Q12 (p. 46)*
Q13 (p. 46) *Q14 (p. 46)*

Q1: Which of the following mortality indicators is a positive mortality indicator? (Q840671)

A. Age-specific mortality rate

B. Proportional mortality rate

C. Expectation of life

D. Year of potential life lost

See Answer in Part B → Q1

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Q2: Which of the following is true regarding maternal mortality rate? (Q840675)

A. The reproductive age group is taken between ages 15 to 50 years

B. Pregnancy-related deaths are counted up to 6 weeks postpartum

C. Most common direct cause of maternal mortality is anemia

D. Most common indirect cause of maternal mortality is hemorrhage(Post-partum hemorrhage).

See Answer in Part B → Q2

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Q3: All of the following are morbidity indicators except? (Q840680)

A. Notification rate

B. Incidence

C. Attendance rate

D. Expectation of life

See Answer in Part B → Q3

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Q4: Which of the following statements best describes DALY? (Q840684)

A. It measures years lost to disability alone

B. It measures years lost to death alone

C. It measures years lost to disability and death

D. None of the above

See Answer in Part B → Q4

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Q5: Which of the following is not a healthcare delivery indicator? (Q840698)

A. Population per Sub Centre

B. Doctor nurse ratio

C. Bed occupancy rates

D. Population- bed ratio

See Answer in Part B → Q5

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Q6: According to the WHO definition, health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. In recent years, this definition has been modified to also include: (Q889263)

A. Spiritual well-being

B. Ability to lead a socially and economically productive life

C. Environmental well-being

D. Genetic well-being

See Answer in Part B → Q6

@Neet_pg_bot

Q7: The biomedical concept of disease is based on which theory, postulated by Louis Pasteur? (Q889264)

A. Ecological concept

B. Psychosocial concept

C. Germ theory of disease

D. Holistic concept

See Answer in Part B → Q7

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Q8: "Number of days of restricted activity" is classified as which type of health indicator? (Q889267)

A. Mortality indicator

B. Morbidity indicator

C. Disability indicator

D. Health utilization indicator

See Answer in Part B → Q8

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Q9: Health Adjusted Life Expectancy (HALE) estimates: (Q889269)

A. Life expectancy at birth

B. Years a newborn is expected to live in full health based on current rates of ill health and mortality

C. Disability-free life expectancy

D. Years lost to premature death

See Answer in Part B → Q9

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Q10: The simplest measure for estimating the burden of a disease in the community is: (Q889272)

A. Case fatality rate

B. Incidence rate

C. Crude death rate

D. Proportional mortality rate

See Answer in Part B → Q10

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Q11: All of the following are health utilisation rates except: (Q889279)

A. Proportion of infants immunised

B. Proportion of women receiving antenatal care

C. Bed disability days

D. Bed occupancy rate

See Answer in Part B → Q11

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Q12: For optimum utilisation of health services in a hospital, the bed turnover interval must be: (Q889287)

A. Always slightly positive

B. Zero

C. Always negative

D. Maximised

See Answer in Part B → Q12

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Q13: The best indicator of the availability, utilisation, and effectiveness of health care, and a very sensitive indicator of overall health status, is: (Q889289)

A. Crude death rate

B. Infant mortality rate

C. Under-5 mortality rate

D. Maternal mortality rate

See Answer in Part B → Q13

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Q14: Which measure is used to assess the cost-effectiveness (value for money) of a medical intervention, combining both quality and quantity of life? (Q889295)

A. DALY

B. QALY

C. HALE

D. PQLI

See Answer in Part B → Q14

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• [01_ Concept of Health and Disease] 004 Previous Year Questions

« Back to Folder Directory

[01_ Concept of Health and Disease] 004 Previous Year Questions — Quick Jump

Q1 (p. 48)	*Q2 (p. 48)*	*Q3 (p. 49)*	*Q4 (p. 49)*	*Q5 (p. 49)*	*Q6 (p. 50)*
Q7 (p. 50)	*Q8 (p. 51)*	*Q9 (p. 51)*	*Q10 (p. 51)*	*Q11 (p. 52)*	*Q12 (p. 52)*
Q13 (p. 53)	*Q14 (p. 53)*	*Q15 (p. 53)*	*Q16 (p. 54)*	*Q17 (p. 54)*	*Q18 (p. 54)*
Q19 (p. 55)	*Q20 (p. 55)*				

Q1: Which of the following demographic indicators is used to compare the life expectancy of two different countries? (Q793769)

A. QALY

B. DALY

C. HDI

D. HPI

See Answer in Part B → Q1

@Neet_pg_bot

Q2: The average life expectancy for a woman in Japan is 87 years. Due to recent advances in testing for cervical cancer, there is an increase in life expectancy by 15 years. The healthcare utility value is 0.8. Which of the following can be calculated from the parameters given? (Q855619)

A. HALE

B. DALY

C. DFLE

D. QALY

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the options below aids in determining the severity of a disease? (Q859211)

A. Proportional mortality rate

B. Incidence

C. Case fatality rate

D. Prevalence

See Answer in Part B → Q3

@Neet_pg_bot

Q4: In Sustainable Development Goal 3, the target 3.1 aims to reduce the Maternal Mortality Ratio by 2030 to_____ (per 1 lakh live births)? (Q858453)

A. <70

B. < 100

C. < 50

D. <130

See Answer in Part B → Q4

@Neet_pg_bot

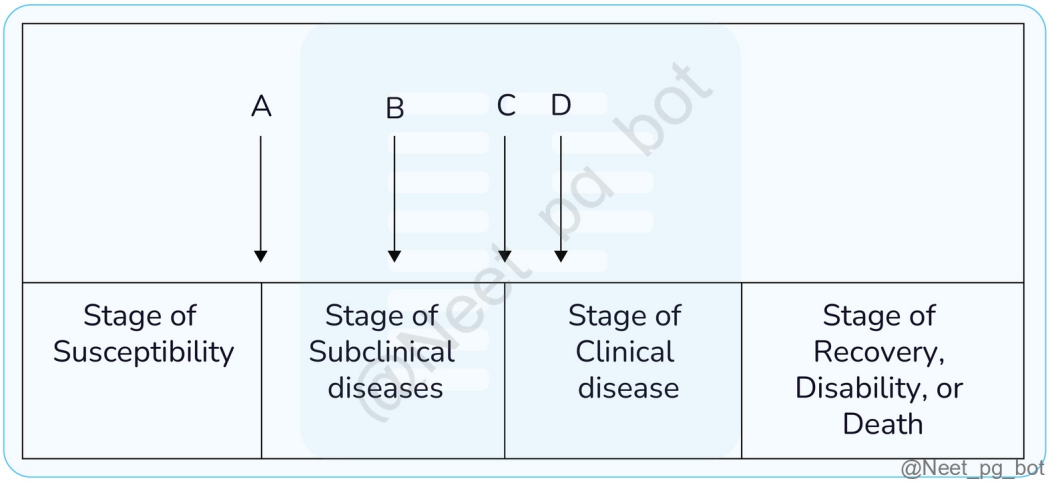
Q5: What does the point labeled C denote? (Q856592)

A. Onset of symptoms

B. Onset of pathological changes

C. Usual time of diagnosis

D. Exposure to etiologic agent



See Answer in Part B → Q5

@Neet_pg_bot

Q6: When quarantine was introduced in the 14th century for plague, how many days were people who were suspected to have the infection quarantined for? (Q857754)

A. 14 days

B. 35 days

C. 40 days

D. 28 days

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following indicators is the best to know the overall burden of disease? (Q857725)

A. Quality-adjusted life years (QALY)

B. Health-adjusted life expectancy (HALE)

C. Disability-adjusted life years (DALY)

D. Disability-free life expectancy (DFLE)

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A public health worker is going out into the community once every 15 days for collection of blood smears for malaria surveillance. What type of surveillance is this? (Q857088)

A. Sentinel

B. Active

C. Passive

D. None of the above

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Match the following stages with their relevant descriptions: 1. Pre-pathogenesis a. Normal course without any intervention 2. Pathogenesis b. Appearance of clinical signs and symptoms 3. Natural history of a disease c. Reaching normalcy with the help of the community 4. Rehabilitation d. Period before the onset of the disease (Q855128)

A. 1-c, 2-d, 3-a, 4-d

B. 1-d, 2-b, 3-a, 4-c

C. 1-b, 2-d, 3-c, 4-d

D. 1-a, 2-c, 3-d, 4-b

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following explains Social factors and disease causation ? (Q793849)

A. Sociology

B. Social pathology

C. Society

D. Community

See Answer in Part B → Q10

@Neet_pg_bot

Q11: The time interval between acquiring an infection and reaching the period of maximum infectivity is known as? (Q866469)

A. Generation time

B. Communicable period

C. Incubation period

D. Serial interval

See Answer in Part B → Q11

@Neet_pg_bot

Q12: A 35-year-old man is unemployed because he is unable to walk after an accident . His unemployment is classified as a: (Q793720)

A. Disability

B. Handicap

C. Disease/disorder

D. Impairment

See Answer in Part B → Q12

@Neet_pg_bot

Q13: According to the NACO guidelines, what level of prevention is achieved when an HIV patient undergoes counselling and screening for TB at an ICTC clinic? (Q793621)

A. Primordial

B. Primary

C. Secondary

D. Primary & secondary

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A government plans to outline tobacco control laws. What is the level of prevention here? (Q857969)

A. Primordial prevention

B. Primary prevention

C. Secondary prevention

D. Tertiary prevention

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Hand washing during COVID-19 is what level of prevention? (Q857967)

A. Primordial prevention

B. Primary prevention

C. Secondary prevention

D. Tertiary prevention

See Answer in Part B → Q15

@Neet_pg_bot

Q16: The years of potential life lost could be attributed to: (Q855419)

A. Years lost to morbidity

B. Years lost due to premature death

C. Years lost to disability

D. Years lost to poor quality of life

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Fetal cardiac monitoring comes under which level of prevention? (Q860023)

A. Primordial

B. Primary

C. Secondary

D. Tertiary

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which of the following is not a part of the global hunger index? (Q860536)

A. U5MR

B. Malnutrition

C. Inadequate food supply

D. Infant mortality rate

See Answer in Part B → Q18

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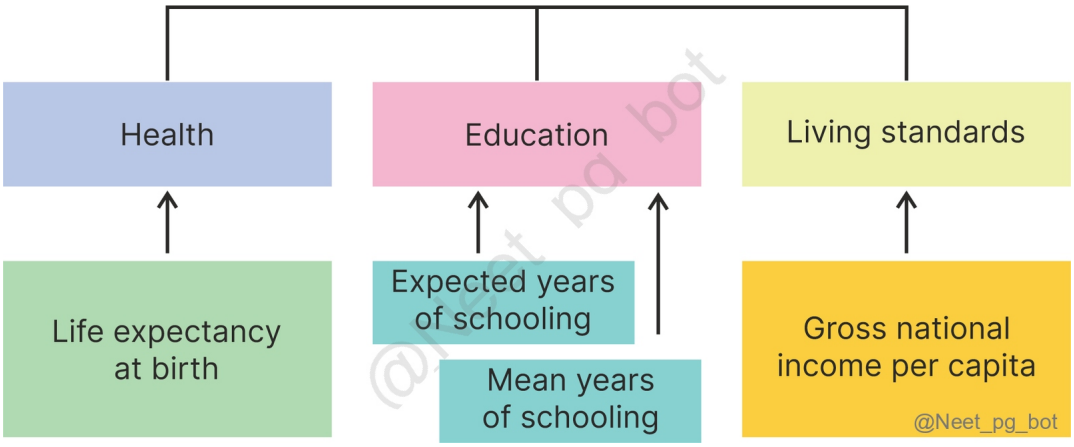
Q19: Identify the index? (Q844080)

A. Human developmental index

B. POLI

C. Human poverty index

D. Multidimensional poverty index



See Answer in Part B → Q19

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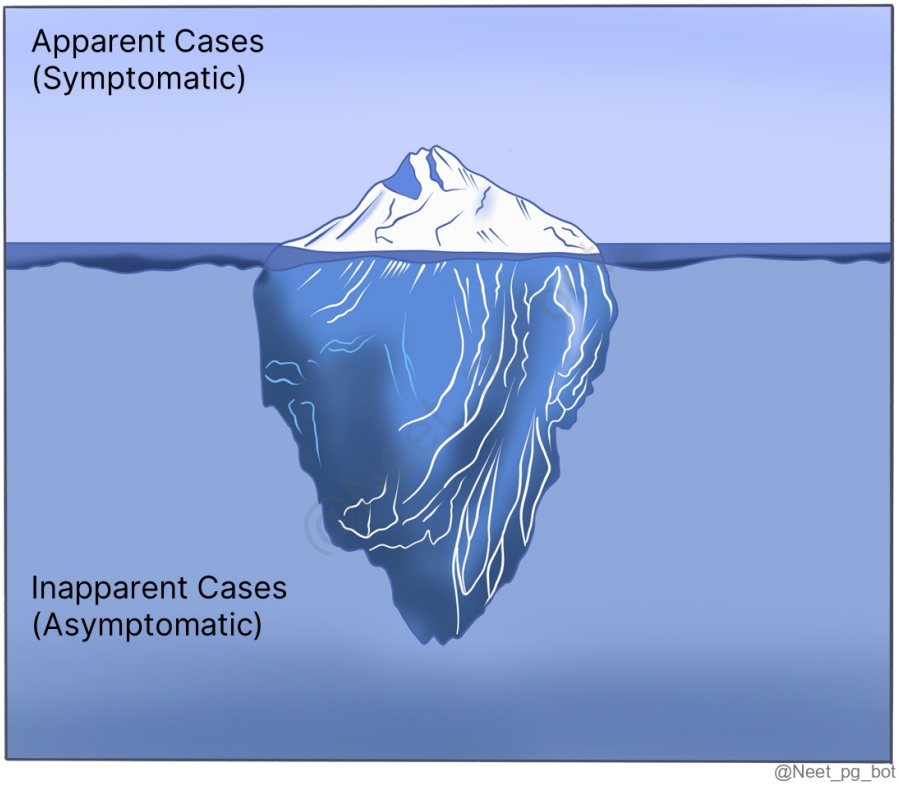
Q20: Which of the following diseases has the maximum submerged portion of the iceberg? (Q843998)

A. Influenza

B. Chicken pox

C. Tetanus

D. Rabies



See Answer in Part B → Q20

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• [02_Epidemiology] 005 Basics Of Epidemiology

« Back to Folder Directory

[02_Epidemiology] 005 Basics Of Epidemiology — Quick Jump

Q1 (p. 57)	*Q2 (p. 57)*	*Q3 (p. 58)*	*Q4 (p. 58)*	*Q5 (p. 58)*	*Q6 (p. 59)*
Q7 (p. 59)	*Q8 (p. 60)*	*Q9 (p. 60)*	*Q10 (p. 60)*	*Q11 (p. 61)*	*Q12 (p. 61)*
Q13 (p. 61)	*Q14 (p. 62)*	*Q15 (p. 62)*	*Q16 (p. 63)*	*Q17 (p. 63)*	*Q18 (p. 63)*
Q19 (p. 64)	*Q20 (p. 64)*	*Q21 (p. 64)*	*Q22 (p. 65)*	*Q23 (p. 65)*	*Q24 (p. 65)*
Q25 (p. 66)					

Q1: What are rate, ratio, and proportion commonly referred to as in the context of epidemiology? (Q841290)

A. Tools for risk assessment

B. Tools for biostatistical analysis

C. Basic tools of measurement in epidemiology

D. Measures of central tendency

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A researcher studies serum cholesterol levels (continuous variable) in two independent groups of patients (100 patients in one group and 200 patients in another group). Which of the following statistical tests is most appropriate for analysis? (Q882184)

A. Paired t-test

B. Unpaired t-test

C. Chi-square test

D. ANOVA

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following components of epidemiology is associated with descriptive epidemiology? (Q844332)

A. Disease determinants

B. Disease distribution

C. Disease frequency

D. Both A and C

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A public health department is implementing a new vaccination program to prevent the spread of a contagious disease in a community. After several years of the vaccination program, which of the following outcomes is most likely to occur due to the successful vaccination program? (Q841304)

A. Prevalence of the disease remain the same

B. Increase in the prevalence of the disease

C. Decrease in the incidence of the disease

D. Incidence of the disease remain the same

See Answer in Part B → Q4

@Neet_pg_bot

Q5: A research team conducted a study containing 5,000 participants who were free of diabetes at the start of the study for 10 years. During the follow-up period, 300 participants developed Type 2 diabetes. Which of the following measures best describes the outcome assessed in this study? (Q841303)

A. Includes both new and existing cases of the disease

B. Follow up not required

C. Independent of the duration of the illness

D. Estimates the burden of the disease

See Answer in Part B → Q5

@Neet_pg_bot

Q6: During a food festival in a small town, 200 people attended a barbecue event. Within 48 hours, 60 attendees developed symptoms of food poisoning. Local health officials want to measure the extent of the outbreak among those who attended the event. What is the term used to describe the proportion of people who developed symptoms out of all the attendees? (Q841302)

A. Attack rate

B. Secondary attack rate

C. Case fatality rate

D. Prevalence rate

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A health survey reported 5 confirmed cases of Chronic Kidney Disease in a community of 100 people in December. By the end of January, 3 new cases of CKD were diagnosed. Prevalence was reported for Dec and Jan, particularly on Jan 31st. Which of the following statements is true in this scenario? (Q841301)

A. Point prevalence is more than period prevalence

B. Point prevalence is less than period prevalence

C. Point prevalence is equal to period prevalence

D. Point prevalence and Period prevalence cannot be compared

See Answer in Part B → Q7

@Neet_pg_bot

Q8: In a small town with a population of 2,00,000 people, a public health team is investigating an outbreak of gastroenteritis. Over one month, 1,500 new cases of gastroenteritis are reported. Calculate the incidence rate of gastroenteritis in the above population. (Q841295)

A. 0.75 per 1,000 population

B. 1.5 per 1,000 population

C. 7.5 per 1,000 population

D. 15 per 1,000 population

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A town with a population of 10,000 people is experiencing an influenza outbreak. Over the past two weeks, 500 cases have been reported. What is the proportion of the population affected by influenza during these two weeks? (Q841294)

A. 0.5%

B. 2%

C. 5%

D. 10%

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following is the correct formula for calculating the Sex Ratio? (Q841293)

A. (Number of females / Number of males) x 100

B. (Number of males / Number of females) x 100

C. (Number of females / Total population) x 100

D. (Number of females / Number of males) x 1000

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following is an example of a ‘Rate’ in epidemiology? (Q841291)

A. The number of students who prefer chocolate ice cream to vanilla ice cream in a class.

B. The percentage of female students in a school.

C. The number of deaths from lung cancer per 100,000 people in a year.

D. The ratio of males to females in a population.

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following components of epidemiology is associated with descriptive epidemiology? (Q841289)

A. Disease determinants

B. Disease distribution

C. None of the above

D. Both A and B

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following is NOT a primary use of disease incidence? (Q841297)

A. Identifying and monitoring disease trends over time

B. Evaluating the effectiveness of public health interventions

C. Helps to determine the efficacy of primary prevention of the disease

D. Determining the genetic predisposition of individuals to certain diseases

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Prevention of an acute disease like hepatitis A through vaccination will first cause: (Q890908)

A. Decrease in prevalence

B. Decrease in incidence

C. Decrease in both simultaneously

D. Increase in prevalence

See Answer in Part B → Q14

@Neet_pg_bot

Q15: In a population of 8,000, there are 1,200 old cases and 400 new cases of a disease. What is the prevalence? (Q890906)

A. 15%

B. 18%

C. 20%

D. 25%

See Answer in Part B → Q15

@Neet_pg_bot

Q16: In a population of 80,000, 5% are above 60 years of age. If the prevalence of hypertension in this age group is 2%, how many individuals above 60 years have hypertension? (Q890905)

A. 40

B. 60

C. 80

D. 100

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Prevalence is best described as: (Q890904)

A. A rate

B. A proportion

C. An incidence measure

D. A mortality measure

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which study designs can be used to calculate incidence? (Q890903)

A. Cross-sectional studies only

B. Cohort studies and longitudinal studies

C. Case-control studies only

D. Ecological studies only

See Answer in Part B → Q18

@Neet_pg_bot

Q19: In a food poisoning outbreak, 55 of 70 people who ate the fruit salad became ill. What is the attack rate? (Q890902)

A. 55%

B. 78.6%

C. 70%

D. 85.5%

See Answer in Part B → Q19

@Neet_pg_bot

Q20: When comparing mortality rates of two countries with different age distributions, which procedure is necessary? (Q890901)

A. Calculation of crude death rates

B. Standardisation of rates

C. Calculation of case fatality rates

D. Calculation of proportional mortality

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Which measure is used as a yardstick for the assessment of standards of therapy, especially in cancer studies? (Q890900)

A. Case fatality rate

B. Survival rate

C. Proportional mortality rate

D. Incidence rate

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Sex-specific death rates are used for all of the following purposes except: (Q890899)

A. Comparing mortality between males and females

B. Identifying high-risk sex for a particular disease

C. Comparing mortality across different age groups

D. Studying sex-related differences in causes of death

See Answer in Part B → Q22

@Neet_pg_bot

Q23: A patient with chronic kidney disease due to long-standing hypertension develops septicemia following a urinary tract infection and eventually dies of septic shock. Which of the following should be written in line I (a) of the death certificate? (Q890897)

A. Septic shock

B. Septicemia

C. Urinary tract infection

D. Hypertension

See Answer in Part B → Q23

@Neet_pg_bot

Q24: You are filling the death certificate of a patient who died due to cardiac tamponade following ventricular free wall rupture, which occurred after an acute myocardial infarction, secondary to longstanding hypertension. What should be written in line I (c) of the death certificate? (Q890896)

A. Cardiac tamponade

B. Ventricular free wall rupture

C. Acute myocardial infarction

D. Hypertension

See Answer in Part B → Q24

@Neet_pg_bot

Q25: Which of the following is not included in the WHO format for a death certificate? (Q890894)

A. Cause of death

B. Interval between onset and death

C. Age at the time of death

D. Sex of the deceased

See Answer in Part B → Q25

@Neet_pg_bot

• [02_Epidemiology] 006 Study Designs In Epidemology - I

« Back to Folder Directory

[02_Epidemiology] 006 Study Designs In Epidemology - I — Quick Jump

Q1 (p. 67)	*Q2 (p. 67)*	*Q3 (p. 68)*	*Q4 (p. 68)*	*Q5 (p. 68)*	*Q6 (p. 69)*
Q7 (p. 69)	*Q8 (p. 69)*	*Q9 (p. 70)*	*Q10 (p. 70)*	*Q11 (p. 71)*	*Q12 (p. 71)*
Q13 (p. 72)	*Q14 (p. 73)*	*Q15 (p. 73)*	*Q16 (p. 73)*	*Q17 (p. 74)*	*Q18 (p. 74)*
Q19 (p. 74)	*Q20 (p. 75)*	*Q21 (p. 76)*	*Q22 (p. 76)*	*Q23 (p. 76)*	*Q24 (p. 77)*
Q25 (p. 77)	*Q26 (p. 78)*	*Q27 (p. 78)*	*Q28 (p. 78)*	*Q29 (p. 79)*	*Q30 (p. 79)*
Q31 (p. 80)	*Q32 (p. 80)*				

Q1: Which of the following is true about secular trends? (Q841340)

A. A roadside accident is a good example.

B. It is due to environmental factors.

C. This is due to the commonly occurring variation in herd immunity.

D. Consistent change in a particular direction over a period of time.

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A community medicine intern was asked to compare two study designs. What is the similarity between Cross-sectional study design and Ecological study design? (Q882195)

A. Both studies are done at a point of time

B. Both provide prevalence

C. Both are based on primary data

D. The unit of study is the population

See Answer in Part B → Q2

@Neet_pg_bot

Q3: What is an ecological fallacy or an ecological bias? (Q841408)

A. Associations observed at the group level may not hold true at the individual level.

B. Associations observed at an individual level may not hold true at the group level.

C. Associations observed at a group level will apply to individual levels.

D. Associations at the group level and individual levels are opposite to each other.

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Among the following statements, which is true regarding ecological study designs? (Q841407)

A. It is expensive

B. Analysis at a population level

C. Associations observed at the group level always hold true at the individual level

D. Complex study model

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following studies takes repeated observations from a population via follow-ups? (Q841406)

A. Cross-sectional

B. Longitudinal

C. Both

D. None

See Answer in Part B → Q5

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Q6: All of the following statements regarding cross-sectional study are true except? (Q841405)

A. Observations are done only once

B. This is cheap and not time-consuming

C. Does help to study the natural history of disease

D. Carried over a given point of time or period of time

See Answer in Part B → Q6

@Neet_pg_bot

Q7: In a population of 1000 individuals, 200 develop oral cancers over a 10-year period. Among the total population, 100 are regular tobacco users, from which 60 developed oral cancers. Calculate the Population Attributable Risk (PAR) of oral cancers due to tobacco use in this population. (Q841404)

A. 76%

B. 42%

C. 38%

D. 22%

See Answer in Part B → Q7

@Neet_pg_bot

Q8: In a study of 500 children, 200 were vaccinated against measles, and 300 were not. Out of the 200 vaccinated children, 10 developed measles. Among the 300 unvaccinated children, 90 developed measles. Calculate the attributable risk of

developing measles due to lack of vaccination. (Q841403)

A. 0.83

B. 0.75

C. 0.64

D. 0.25

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A study was conducted over 10 years to evaluate the risk of mesothelioma among people working in the ship-based industry. The study included 200 workers exposed to asbestos and 300 workers not exposed to asbestos. Among those exposed, 40 developed mesothelioma and died at the terminal stage, while only 5 of the unexposed group developed mesothelioma and died. What is the relative risk of developing mesothelioma and dying for workers exposed to asbestos compared to those not exposed? (Q841402)

A. 12.00

B. 3.33

C. 6.00

D. 2.00

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A cohort study was conducted with green tea drinkers and non drinkers to study relation between green tea & its effect on Diabetes Mellitus. Risk ratio obtained was 0.8. Which of the following is the correct statement ? (Q841401)

A. Green tea increases risk of DM

B. Green tea reduces the risk of DM

C. Green tea has no effect on DM

D. Data is insufficient to establish causal association

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following is true regarding the cross-product ratio? (Q841400)

A. It is also known as the incidence rate.

B. It measures the relative risk in cohort studies.

C. It provides an estimation of disease risk associated with exposure.

D. A value of > 1 indicates an inverse association or protective factor

See Answer in Part B → Q11

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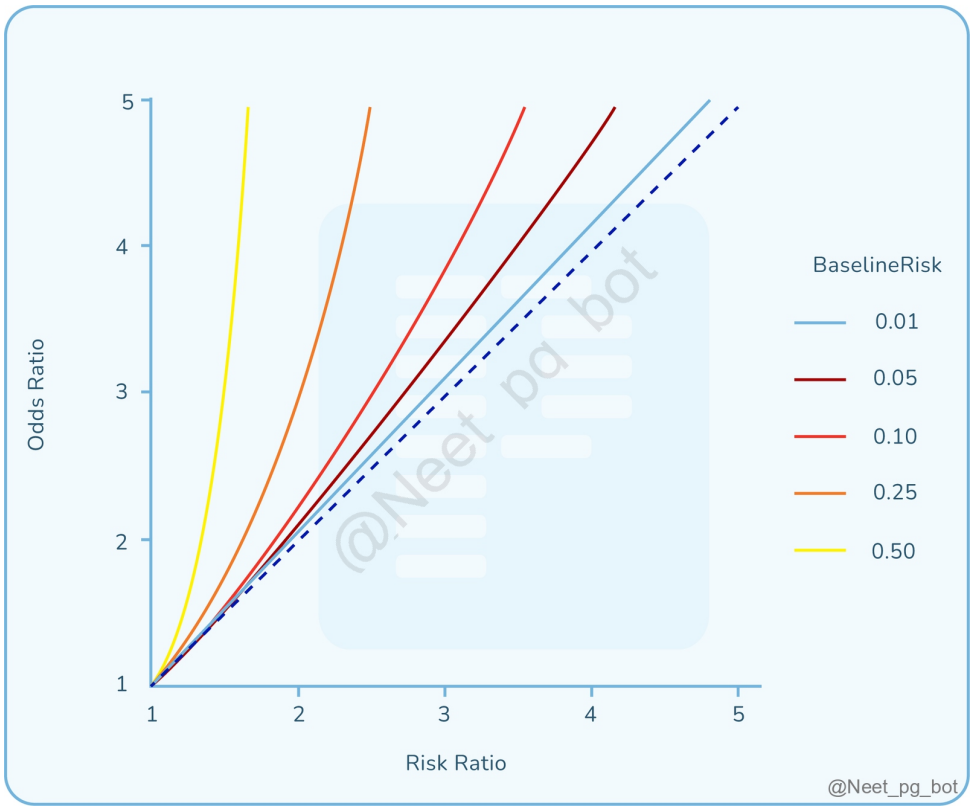
Q12: Below is a graphical representation of the odds ratio (OR) and risk ratio (RR) for various incidence rates. Which of the following is false? (Q841399)

A. As RR increases, OR increases at a higher rate for all incidence rates

B. OR always underestimates the RR

C. The yellow line represents a much larger OR than the RR

D. The red line represents a lower incidence rate.



See Answer in Part B → Q12

@Neet_pg_bot

Q13: To investigate the association between high cholesterol levels and the development of hypertension, researchers collected data from 100 patients with hypertension and 210 patients without the disease. 60 patients had high cholesterol levels in the hypertensive group, while 30 patients had high cholesterol levels in the non-hypertensive group. Calculate the odds ratio? (Q841398)

A. 4.0

B. 1.5

C. 9.0

D. 0.25

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A research team conducts a study to investigate the association between smoking and bladder cancer. They select a group of patients with and without bladder cancer and compare their smoking history. Which of the following best describes the significance of the study in this scenario? (Q841397)

A. It allows for the determination of the incidence of bladder cancer among smokers and non-smokers.

B. It helps to establish a temporal relationship between smoking and bladder cancer.

C. It is a cost-effective and efficient way to study the association between smoking and bladder cancer.

D. It can be used to follow patients over time to observe the development of bladder cancer.

See Answer in Part B → Q14

@Neet_pg_bot

Q15: To investigate the relationship between hormone replacement therapy (HRT) and breast cancer, researchers conducted a study where they selected patients with breast cancer from an ongoing cohort study and compared HRT usage among cancer-free women from the same cohort. What type of study design does this scenario indicate? (Q841396)

A. Cohort study

B. Case-control study

C. Nested case-control study

D. Cross-sectional study

See Answer in Part B → Q15

@Neet_pg_bot

Q16: The following are some steps taken to investigate an epidemic. Arrange the steps in the correct sequence. Verification of the diagnosis. Define the population at risk. Data analysis. Confirmation of the existence of an epidemic. Evaluation of ecological factors. Testing of hypothesis. (Q841341)

A. 1, 4, 2, 3, 6, 5

B. 4, 1, 2, 3, 6, 5

C. 1, 2, 3, 4, 5, 6

D. 4, 1, 3, 6, 2, 5

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Study designs are used for which of the following purposes? (Q841300)

A. Formulating a hypothesis

B. Testing a hypothesis

C. Confirming a hypothesis

D. All of the above

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Diseases that follow seasonal trend are? (Q841339)

A. Varicella

B. Cerebro-spinal meningitis

C. Poliomyelitis

D. All of the above

See Answer in Part B → Q18

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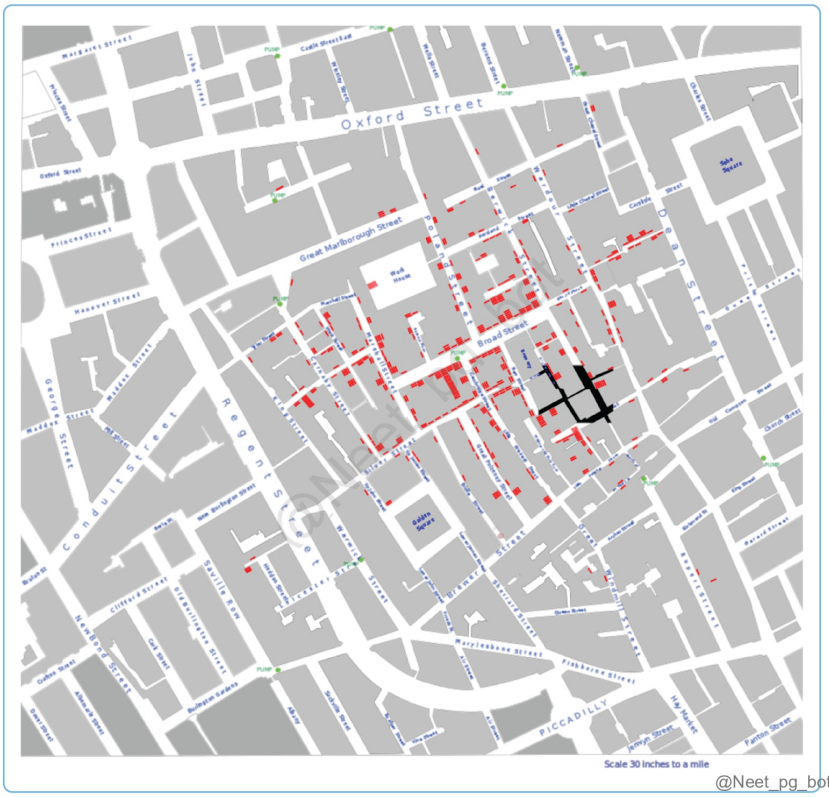
Q19: What is the image given below used for? (Q841338)

A. Local distribution of a disease

B. Rural-urban variation

C. National variation

D. Migration studies



See Answer in Part B → Q19

@Neet_pg_bot

Q20: Which of the following best describes ‘person distribution’ in descriptive epidemiology? (Q841337)

A. The distribution of people across an area under study.

B. The population's disease analysis is based on the characteristics of the people who develop them.

C. Distribution of human resources to various tasks of the study.

D. Distribution of residents within different neighbourhoods or urban areas.

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Which of the following statements best describes a propagated epidemic? (Q841336)

A. It is typically caused by a single brief and simultaneous exposure to a common source.

B. It shows an epidemic curve with one peak that rises and falls rapidly with no secondary waves.

C. Transmission occurs gradually through person-to-person transmission, rising and tailing off in the epidemic curve.

D. A propagated epidemic can only occur if the disease has a short incubation period.

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Which of the following is not a characteristic of a common source epidemic with a single exposure? (Q841335)

A. The epidemic curve shows a rapid increase and decrease in cases.

B. Cases are spread across multiple incubation periods of the disease.

C. The epidemic often appears as an explosive outbreak with cases clustered quickly.

D. Most cases occur within a single incubation period of the disease.

See Answer in Part B → Q22

@Neet_pg_bot

Q23: Which of the following correctly distinguishes between hyperendemic and holoendemic diseases with appropriate examples? (Q841334)

A. Hyperendemic- Malaria in sub-Saharan Africa Holoendemic- Common cold worldwide

B. Hyperendemic- Influenza during winter in temperate regions Holoendemic- Malaria in sub-Saharan Africa

C. Hyperendemic- Tuberculosis in urban areas Holoendemic- Seasonal influenza

D. Hyperendemic- Malaria in sub-Saharan Africa Holoendemic- Influenza during winter in temperate regions

See Answer in Part B → Q23

@Neet_pg_bot

Q24: Match the following terms related to disease distribution with their appropriate examples: Term Example i) Endemic a) A sudden surge in influenza cases during the winter months. ii) Epidemic b) The persistent occurrence of malaria in certain regions of Africa. iii) Pandemic c) Isolated instances of tetanus infection with no discernible pattern. iv) Sporadic d) The global spread of COVID-19 affecting multiple continents. (Q841333)

A. i-b, ii-a, iii-d, iv-c

B. i-a, ii-b, iii-d, iv-c

C. i-c, ii-d, iii-a, iv-b

D. i-d, ii-c, iii-a, iv-b

See Answer in Part B → Q24

@Neet_pg_bot

Q25: A public health researcher is investigating the association between air pollution and asthma in children. The researcher collects data from a population over several years, documenting the levels of air pollution and the incidence of new asthma cases. Which of the following best describes the study design? (Q841313)

A. Interventional study

B. Analytical Study - Cohort

C. Descriptive Study

D. Analytical Study - Case Control

See Answer in Part B → Q25

@Neet_pg_bot

Q26: What is the first step in determining a descriptive study design? (Q841312)

A. Defining the disease under study

B. Defining the population of interest

C. Describe the disease in terms of time, place, and person

D. Formulate a hypothesis

See Answer in Part B → Q26

@Neet_pg_bot

Q27: Which of the following statements is FALSE regarding descriptive epidemiology? (Q841311)

A. It is a study of the distribution of disease w.r.t. time, place, and person

B. It tests a hypothesis

C. It is the first phase of epidemiological investigation

D. Descriptive epidemiology does not involve a comparison group

See Answer in Part B → Q27

@Neet_pg_bot

Q28: A researcher is interested in examining the prevalence of hypertension among adults in a city and wants to identify any associated risk factors such as age, diet, and physical activity at a single time. The researcher collects data from a large sample of adults in the city. Which type of study design is the researcher using in this scenario? (Q841310)

A. Cohort study

B. Cross-sectional study

C. Case-control study

D. Ecological study

See Answer in Part B → Q28

@Neet_pg_bot

Q29: Which of the following statements regarding experimental studies is false? (Q841309)

A. Interventional study can confirm/discard a hypothesis

B. Healthy individuals are a unit of study in randomised clinical trials

C. Cost and ethical concerns are seen in experimental studies

D. Experimental studies often include control groups to compare the effects of the intervention.

See Answer in Part B → Q29

@Neet_pg_bot

Q30: Match column A's types of studies with the appropriate option in column B. COLUMN A COLUMN B a) Cross-sectional i) Testing of hypothesis b) Ecological ii) Prevalence c) Descriptive study iii) First Phase in Epidemiology d) Analytical study iv) Population as the unit of study (Q841308)

A. a-ii, b-iv, c- iii, d-i

B. a-i, b-ii, c- iv, d-iii

C. a-iv, b-iii, c-i, d-ii

D. a-iii, b-iv, c-i, d-ii

See Answer in Part B → Q30

@Neet_pg_bot

Q31: In community medicine research, which of the following statements is true? (Q841307)

A. Case series are used to establish causality between an exposure and an outcome.

B. Case reports are descriptive studies, while case series are analytical studies

C. Case series is formed by compiling reports of cases with diverse characteristics

D. Case series do not include a comparison group

See Answer in Part B → Q31

@Neet_pg_bot

Q32: Which of the following is a characteristic of analytical study? (Q841306)

A. The subject of interest is the population

B. The subject of interest is an individual within the population

C. Helps in formulating a hypothesis

D. No comparison group is present

See Answer in Part B → Q32

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• [02_Epidemiology] 007 Bias And Confounders

« Back to Folder Directory

[02_Epidemiology] 007 Bias And Confounders — Quick Jump

Q1 (p. 81) *Q2 (p. 81)* *Q3 (p. 81)* *Q4 (p. 82)* *Q5 (p. 82)* *Q6 (p. 83)*
Q7 (p. 83) *Q8 (p. 84)* *Q9 (p. 84)* *Q10 (p. 84)*

Q1: Which of the following best describes a bias? (Q840967)

A. Random variation in data collection between exposure and disease

B. Systematic error in determining an association between exposure and disease

C. Measure of strength of association between exposure and disease

D. Direct estimation of frequency of exposure between disease and non-disease groups

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A case-control study is being conducted by researchers to investigate the association between the onset of cardiovascular disease (CVD) and a high-calorie diet. Which of the following scenarios best reflects a form of Neyman bias? (Q840968)

A. Asking participants to recall and report their dietary habits over the past five years.

B. Excluding cases who had CVD in the past but have since died or fully recovered.

C. Including cases as patients admitted with CVD and controls as patients admitted for non-CVD causes

D. Publishing findings with a strong association, while those with inconclusive associations are unpublished.

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A researcher is investigating the association between a new dietary supplement and the development of a rare type of cancer. The study includes 100 patients with the cancer and 100 healthy individuals. All of the following biases can occur in this type of study except? (Q840969)

A. Recall Bias

B. Selection Bias

C. Ascertainment Bias

D. Pygmalion Bias

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A research study monitors smoking cessation among participants using daily self-reporting. Despite being heavy smokers outside the study, participants consistently report reduced cigarette consumption during the study period. What phenomenon is likely influencing these findings? (Q840970)

A. Hawthorne effect

B. Ascertainment bias

C. Interviewer bias

D. Recall bias

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following statements best describes the purpose of double blinding in clinical trials (Q840971)

A. It fails to avoid performance bias

B. It avoids both subject and observer bias

C. Researchers are aware and participants are unaware of the intervention given

D. It avoids selection bias

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Researchers found a significant correlation in a study examining the association between coffee drinking and heart disease. However, further analysis revealed that smoking might be influencing this relationship. In this context, smoking is considered as (Q840972)

A. Causal variable

B. Random error

C. Confounding factor

D. Spurious correlation

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Q. Match the following: 1. Randomisation a. Eliminates only the known confounders. 2. Standardisation b. Eliminate the effect of age and gender. 3. Restriction c. Eliminates both known and unknown confounders. 4. Matching d. Limits the participation in the study to individuals who are similar concerning confounders. (Q840973)

A. 1-a, 2-b, 3-c, 4-d

B. 1-b, 2-a, 3-d, 4-c

C. 1-c, 2-b, 3-d, 4-a

D. 1-d, 2-c, 3-a, 4-b

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A study investigating the relationship between smoking and lung cancer found that the association was stronger in individuals who exercised less and weaker in those who exercised more. In this context, what role does exercise play? (Q840976)

A. Confounding Variable

B. Effect Modifier

C. Spurious Association

D. None of the above

See Answer in Part B → Q8

@Neet_pg_bot

Q9: In a mountainous region, many residents suffer from endemic goitre. What type of association best describes the relationship between living at high altitudes and the prevalence of goitre in these residents? (Q840977)

A. Spurious Association

B. Indirect Association

C. One-to-One Causal Association

D. Multifactorial Causation

See Answer in Part B → Q9

@Neet_pg_bot

Q10: In a subcenter population, CBR is 20. What is the minimum number of pregnancies registered with ANM? (Q880859)

A. 110

B. 120

C. 55

D. 100

See Answer in Part B → Q10

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• [02_Epidemiology] 008 Systematic Review Meta-Analysis And Evidence-Based Studies

« Back to Folder Directory

[02_Epidemiology] 008 Systematic Review Meta-Analysis And Evidence-Based Studies — Quick Jump

Q1 (p. 86) *Q2 (p. 86)* *Q3 (p. 87)* *Q4 (p. 87)* *Q5 (p. 87)* *Q6 (p. 88)*
Q7 (p. 88) *Q8 (p. 88)* *Q9 (p. 89)* *Q10 (p. 89)* *Q11 (p. 89)* *Q12 (p. 90)*

Q1: Below are the steps for conducting a systematic review. Select the option that states the correct order of the steps. Data extraction Data synthesis Selecting the studies Defining the review question and eligibility criteria Searching for the studies Result Interpretation (Q840960)

A. 3-5-4-2-1-6

B. 5-3-1-2-4-6

C. 4-5-3-1-2-6

D. 2-1-5-3-4-6

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following best describes meta-analysis? (Q840961)

A. Quantitative analysis of the result derived from a single study

B. Conducting time-specific research and analysing the same

C. Analysis of results derived from multiple studies

D. Conducting population-specific research and analysing the same

See Answer in Part B → Q2

@Neet_pg_bot

Q3: All of the following are true about funnel plot except? (Q840963)

A. It is used in both systematic review and meta-analysis

B. Unbiased results of large-scale studies will be near the average

C. A triangular distribution of results indicates the absence of heterogeneity

D. A positive file drawer means many good outcomes of research were unpublished

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following best describes the use of a blobbogram? (Q840964)

A. Association of multiple risk factors with the same disease

B. Association of one risk factor with selected diseases

C. Association of one risk factor for a disease with another

D. Association of multiple risk factors with selected diseases

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which is not a reporting format used in systematic review and meta-analysis? (Q840965)

A. PRISMA

B. COCHRANE

C. QUOROM

D. CONSORT

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following incorporates the advantage of researched science into a doctor's clinical expertise and patient values? (Q840966)

A. Correlational research

B. Controlled trials

C. Evidence-based medicine

D. Meta-analysis

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following is an example of experimental epidemiology? (Q844340)

A. Case-reference study

B. Follow-up study

C. Prevalence study

D. Evaluation of health services

See Answer in Part B → Q7

@Neet_pg_bot

Q8: All of the following have individuals as the unit of study except? (Q844341)

A. Descriptive studies

B. Case-control study

C. Cross-sectional study

D. Cohort study

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A study observed 23,000 individuals aged 15-49 who were using oral contraceptives, along with a comparable number of controls using alternative contraception methods or none. The study involved 1400 general practitioners who recorded diagnoses of illnesses, pregnancies, and deaths during the follow-up period. What kind of study is this? (Q844342)

A. Cohort

B. Cross-sectional

C. Community trial

D. Case-control

See Answer in Part B → Q9

@Neet_pg_bot

Q10: All are false about experimental trials except? (Q844343)

A. Animal trials can’t be unblinded

B. All animal trials are unethical

C. Interim analysis can’t be done

D. None of the above

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Match the following criteria for judging causality with their descriptions: Criteria: Descriptions: A. Temporal association 1. Requires that exposure precedes the onset of a disease. B. Strength of association 2. Based on relative risk and dose-response relationship. C. Specificity of the association 3. Implies a "one-to-one" relationship between cause and effect. D. Consistency of the association 4. Replication

of results in different settings strengthens evidence. E. Biological plausibility 5. Agreement with current understanding of biological response. F. Coherence of the association 6. Consistency with known relevant facts. (Q844344)

A. a-1, b-2, c-3, d-4, e-5, f-6

B. a-2, b-1, c-3, d-4, e-5, f-6

C. a-6, b-5, c-4, d-3, e-2, f-1

D. a-1, b-3, c-2, d-4, e-5, f-6

See Answer in Part B → Q11

@Neet_pg_bot

Q12: "A factory worker was exposed to asbestos for 20 years starting in the 1980s. 30 years later, he developed mesothelioma." This scenario is an example of? (Q844345)

A. Temporal association

B. Strength of association

C. Consistency of association

D. Biological plausibility

See Answer in Part B → Q12

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• [02_Epidemiology] 009 Previous Year Questions

« Back to Folder Directory

[02_Epidemiology] 009 Previous Year Questions — Quick Jump

Q1 (p. 91)	*Q2 (p. 91)*	*Q3 (p. 92)*	*Q4 (p. 92)*	*Q5 (p. 92)*	*Q6 (p. 93)*
Q7 (p. 93)	*Q8 (p. 94)*	*Q9 (p. 94)*	*Q10 (p. 94)*	*Q11 (p. 95)*	*Q12 (p. 95)*
Q13 (p. 95)	*Q14 (p. 96)*	*Q15 (p. 96)*	*Q16 (p. 97)*	*Q17 (p. 97)*	*Q18 (p. 97)*
Q19 (p. 98)	*Q20 (p. 98)*	*Q21 (p. 99)*	*Q22 (p. 99)*	*Q23 (p. 99)*	*Q24 (p. 100)*
Q25 (p. 100)	*Q26 (p. 101)*	*Q27 (p. 101)*	*Q28 (p. 101)*	*Q29 (p. 102)*	*Q30 (p. 102)*
Q31 (p. 103)	*Q32 (p. 103)*	*Q33 (p. 103)*	*Q34 (p. 104)*	*Q35 (p. 104)*	*Q36 (p. 104)*
Q37 (p. 105)	*Q38 (p. 105)*	*Q39 (p. 106)*	*Q40 (p. 106)*	*Q41 (p. 106)*	*Q42 (p. 107)*
Q43 (p. 107)	*Q44 (p. 107)*	*Q45 (p. 108)*	*Q46 (p. 108)*	*Q47 (p. 109)*	*Q48 (p. 109)*
Q49 (p. 109)	*Q50 (p. 110)*	*Q51 (p. 110)*	*Q52 (p. 111)*	*Q53 (p. 111)*	*Q54 (p. 111)*
Q55 (p. 112)	*Q56 (p. 113)*	*Q57 (p. 113)*	*Q58 (p. 113)*	*Q59 (p. 114)*	*Q60 (p. 114)*

Q1: What is the most effective quantitative method for examining previous research studies? (Q856888)

A. Cohort study

B. Systematic review

C. Meta-analysis

D. RCT

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which statement accurately describes the single exposure point source epidemic? (Q858125)

A. Has more than one incubation period

B. Has multiple peaks

C. Explosive in nature

D. Slow rise and fall

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Match the following scientists with their discoveries: 1. Walter reed a. Prevention of scurvy by citrus fruits 2. Edward Jenner b. Yellow fever 3. James Lind c. Smallpox vaccination (Q855298)

A. 1-a, 2-b, 3-a

B. 1-b, 2-a, 3-c

C. 1-c, 2-b, 3-a

D. 1-b, 2-c, 3-a

See Answer in Part B → Q3

@Neet_pg_bot

Q4: An intern has to study the relationship between ordering food online and development of obesity using a case-control study. What are the best study groups to be selected? (Q857134)

A. Only obese persons

B. Only online food eaters

C. Obese and non-obese persons

D. Online food eaters and non-online food eaters

See Answer in Part B → Q4

@Neet_pg_bot

Q5: A study to determine the association between maternal smoking histories from pregnant women during their antenatal visits and then subsequently assessing the

birth weight of their babies soon after delivery. What type of study is this? (Q857716)

A. Prospective cohort

B. Retrospective cohort

C. Case-control

D. Cross-sectional

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following is used to reduce the selection bias in a clinical trial? (Q857739)

A. Selecting the population

B. Intervention

C. Randomization

D. Written informed consent

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following components are included in the Human Development Index (HDI), as per the World Health Organization (WHO)? (Q855331)

A. Life expectancy at birth, literacy and standard of living

B. Life expectancy at 1 year, literacy and standard of living

C. Infant mortality rate, literacy and standard of living

D. Life expectancy at 1 year, literacy and infant mortality rate

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the options below does not constitute a component of case-control studies? (Q855334)

A. Follow up

B. Matching

C. Strength of association

D. Selection of study subjects

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following statements is true regarding prevalence and incidence in relation to a newly introduced drug that reduces mortality but does not cure the disease? (Q855340)

A. Decrease in incidence

B. Decrease in prevalence

C. Increase in incidence

D. Increase in prevalence

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following statements accurately describes the relationship between prevalence, incidence, and the introduction of a new drug that reduces mortality but does not provide a cure? (Q855345)

A. Decrease in incidence

B. Decrease in prevalence

C. Increase in incidence

D. Increase in prevalence

See Answer in Part B → Q10

@Neet_pg_bot

Q11: What does the standardized age mortality ratio indicate? (Q856601)

A. Death rate of a population adjusted to a standard age distribution

B. Death rate of a population adjusted to a standard sex distribution

C. Removal of bias due to different age group population in different countries

D. To eliminate age structure of different countries

See Answer in Part B → Q11

@Neet_pg_bot

Q12: What is the most effective study design to demonstrate the relationship between cause and effect among the options listed below? (Q856609)

A. Case control study

B. Cohort study

C. Cross-sectional study

D. Clinical trial

See Answer in Part B → Q12

@Neet_pg_bot

Q13: A researcher wants to know whether there is an association of CRP values with the risk of myocardial infarction/stroke. The study group was divided into quintiles and the following table is formed based on the study results. Which of the following statements is true regarding the relationship between CRP and the risk of myocardial

infarction/stroke? Quintile CRP Values (mg/L) Relative Risk (RR) Study Population 1 0.1–1 1 6000 2 1.1–2 1.3 6000 3 2.1–3 1.7 6000 4 3.1–4 2.1 6000 5 4.1–5 2.8 6000 (Q856070)

A. CRP has no association with risk of Ml/stroke

B. Increase in CRP increases the risk of Ml/stroke

C. Increase in CRP decreases the risk of Ml/stroke

D. In quintile 1, there is no risk of Ml/stroke

See Answer in Part B → Q13

@Neet_pg_bot

Q14: The maternal mortality ratio is defined as? (Q856866)

A. Maternal Deaths per 10,000 live births

B. Maternal Deaths per 100,000 live births

C. Maternal Deaths per 10,000 women in reproductive age group

D. Maternal Deaths per 100,000 women in reproductive age group

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A new drug combination of chemotherapy and immunotherapy for metastatic melanoma was prescribed by a radiotherapist. It prolongs survival. Which of the following is true in this situation? (Q856882)

A. Incidence increases and prevalence reduces

B. Incidence reduces and prevalence remains the same

C. Incidence remains the same and prevalence increases

D. Incidence reduces and prevalence increases

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A long-term study found that individuals who had high blood pressure (BP) during childhood continued to have high BP in adulthood, and those with low BP in childhood tended to maintain lower levels later in life. Which of the following epidemiological concepts does this pattern best represent? (Q866890)

A. Rule of halves

B. Regression to the mean

C. Tracking of blood pressure

D. Cohort effect

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Which data set provides the most comprehensive explanation for the variation between the highest and lowest values? (Q856889)

A. Variance

B. Coefficient of variation

C. Range

D. Interquartile range

See Answer in Part B → Q17

@Neet_pg_bot

Q18: The maternal mortality ratio defined as? (Q856439)

A. Maternal Deaths per 10,000 live births

B. Maternal Deaths per 100,000 live births

C. Maternal Deaths per 10,000 women in reproductive age group

D. Maternal Deaths per 100,000 women in reproductive age group

See Answer in Part B → Q18

@Neet_pg_bot

Q19: The health authorities are launching a smoking cessation program by designing different activities for smokers. These are very expensive but still useful as a large proportion of lung cancer will be eliminated if smoking is stopped. This proportion of lung cancer can be indicated by? (Q854858)

A. Relative risk

B. Attributable risk

C. Population Attributable risk

D. Prevalence

See Answer in Part B → Q19

@Neet_pg_bot

Q20: What type of study is it when a person collects data on lung cancer patients from government hospitals and the corresponding number of cigarette packets sold during the same time period, in order to examine the relationship between smoking and lung cancer? (Q854860)

A. Cross sectional

B. Ecological

C. Experimental

D. Quasi-experimental

See Answer in Part B → Q20

@Neet_pg_bot

Q21: The number of polio cases has been steadily declining in comparison to previous years. This pattern is known as: (Q859178)

A. Seasonal

B. Cyclical

C. Periodical

D. Secular

See Answer in Part B → Q21

@Neet_pg_bot

Q22: What is the recommended duration for quarantine for the 30 individuals who had contact with a 28-year-old male who is tested positive for SARS-COV-2, but are currently asymptomatic? (Q859458)

A. Minimum incubation period

B. Maximum incubation period

C. Period of communicability

D. Median incubation period

See Answer in Part B → Q22

@Neet_pg_bot

Q23: What is the term used to describe a disease that is typically not found in a country but is brought in from abroad, as seen in the case of a 25-year-old male who was diagnosed with the condition upon arrival at an Indian airport, leading to quarantine? (Q860011)

A. Endemic

B. Epidemic

C. Zoonotic

D. Exotic

See Answer in Part B → Q23

@Neet_pg_bot

Q24: Which of the following statements accurately describes the findings of a cohort study examining the impact of green tea consumption on diabetes mellitus risk? The study revealed a risk ratio of 0.84 between drinkers and non-drinkers of green tea. (Q855629)

A. Green tea reduces the risk of diabetes

B. Green tea increases the risk of diabetes

C. Data insufficient to establish causal association

D. The value (0.85) tends to be close to 1, hence there is no effect

See Answer in Part B → Q24

@Neet_pg_bot

Q25: In a community, several children have been diagnosed with acute lymphoblastic leukemia (ALL). It is suspected that exposure to a cytotoxic chemical in the local water may be responsible. You plan to conduct a case-control study to investigate whether exposure to the chemical is associated with ALL. Which of the following groups would be the most appropriate controls for this study? (Q855879)

A. Children from the same area who were exposed to the chemical but do not have ALL

B. Children from the same area who were not exposed but have ALL

C. Children visiting the hospital who do not have ALL, regardless of exposure

D. All children with ALL, regardless of exposure status

See Answer in Part B → Q25

@Neet_pg_bot

Q26: Regarding case–control studies, which of the following statements are FALSE? Matching prevents all confounders. Using multiple controls can increase study power. Selection bias is more common in hospital-based studies. Controls should be selected from the same population as cases. Case–control studies provide incidence directly. (Q878920)

A. 1 and 2

B. 1 and 3

C. 1 and 4

D. 1 and 5

See Answer in Part B → Q26

@Neet_pg_bot

Q27: In a population of 500 people, 20 new cases of a disease were reported over 2 years. The total person-time observed was 950 person-years. Calculate the incidence rate of the disease. (Q879024)

A. 2.1 per 1000 person-years

B. 2.1 per 100 person-years

C. 4 per 1000 person-years

D. 2 per 100 person-years

See Answer in Part B → Q27

@Neet_pg_bot

Q28: A study finds that exercise reduces the incidence of cardiovascular disease. However, it was found that the people who exercise also tend to consume a healthy diet, and a good diet itself lowers the risk of cardiovascular disease. What does a

healthy diet act as in this context? (Q879029)

A. A healthy diet is a confounding factor

B. Diet is an effect modifier

C. There is no association; it can be ignored

D. Diet is a mediator for reducing cardiovascular disease

See Answer in Part B → Q28

@Neet_pg_bot

Q29: Which of the following is NOT a component of Bradford Hill's criteria for causation? (Q879031)

A. Temporality

B. Dose–response relationship

C. Biological plausibility

D. Sensitivity

See Answer in Part B → Q29

@Neet_pg_bot

Q30: Which of the following best helps assess the issues in the quality of healthcare? (Q857354)

A. Bar diagram

B. Histogram

C. Multiple regression model

D. Ishikawa diagram/ Fishbone diagram

See Answer in Part B → Q30

@Neet_pg_bot

Q31: A study was conducted using office records over the past 20 years to compare the incidence of disease among factory workers exposed to aniline dye and unexposed clerical staff. What type of epidemiological study is this? (Q866777)

A. Prospective study

B. Retrospective study

C. Ambispective study

D. Ecological study

See Answer in Part B → Q31

@Neet_pg_bot

Q32: In a village of 100 children, 10 children have a past history of measles (i.e, they are not at risk now), 20 new cases of measles were reported this year. What is the incidence of measles in this population for the year? (Q865279)

A. 20%

B. 22.22%

C. 10%

D. 30%

See Answer in Part B → Q32

@Neet_pg_bot

Q33: During the Maha Kumbh Mela, mobile health units and medical bases were set up, along with multiple surveillance units for monitoring cases of fever, diarrhea, and respiratory illnesses. What was the primary purpose of setting up these surveillance units? (Q865359)

A. To reduce the need for medical professionals

B. For early diagnosis and detection of potential outbreak warning signs

C. For immediate quarantine of all symptomatic individuals

D. To provide curative treatment only

See Answer in Part B → Q33

@Neet_pg_bot

Q34: What are the steps of a research study, in chronological order? a. Formulating the objective b. Selecting the sample population c. Finalising the study analysis d. Formulating the research question (Q865364)

A. d,a,c,b

B. a,c,b,d

C. a,d,c,b

D. d,a,b,c

See Answer in Part B → Q34

@Neet_pg_bot

Q35: A diabetic patient with COVID-19 dies in the hospital. Which type of surveillance does this death report fall under? (Q866428)

A. Passive surveillance

B. Active surveillance

C. Sentinel surveillance

D. Syndromic surveillance

See Answer in Part B → Q35

@Neet_pg_bot

Q36: In designing a rigorous experimental study, the order of steps is critical to minimize bias and ensure valid results. Which of the following sequences correctly reflects this principle? Steps: A) Defining inclusion and exclusion criteria B) Randomization of participants C) Blinding of participants and investigators D) Performing statistical analysis (Q852838)

A. A→B→C→D

B. D→C→B→A

C. B→A→C→D

D. C→B→A→D

See Answer in Part B → Q36

@Neet_pg_bot

Q37: To study the effect of vitamin C on respiratory disease pre-post study is done. Arrange in the correct sequence. A. Select case and control. B. Matching C. Measure total exposure D. Analysis (Q844051)

A. ABCD

B. BCDA

C. CBAD

D. DABC

See Answer in Part B → Q37

@Neet_pg_bot

Q38: In which phase of clinical trials is drug dosing determined? (Q844107)

A. Phase 1

B. Phase 2

C. Phase 3

D. Phase 4

See Answer in Part B → Q38

@Neet_pg_bot

Q39: Mid-year population is the denominator in? (Q860580)

A. CDR

B. CFR

C. MMR

D. NMR

See Answer in Part B → Q39

@Neet_pg_bot

Q40: Blood cholesterol shown as mg/ml value is in which scale? (Q860585)

A. Ordinal

B. Nominal

C. Discrete

D. Continuous

See Answer in Part B → Q40

@Neet_pg_bot

Q41: A gym owner observes that individuals who drink iced tea during their workouts tend to lose more weight. What is the nature of this relationship? (Q859981)

A. Spurious

B. Relative

C. Direct

D. One-to-One causal

See Answer in Part B → Q41

@Neet_pg_bot

Q42: A study was conducted in 3 states to measure the mean blood pressure in each community. Health workers were assigned to visit each house in the 3 communities. The mean blood pressure of each community was then compared. What is the study design called? (Q859982)

A. Case-control

B. Cross-sectional

C. Cohort

D. Ecological study

See Answer in Part B → Q42

@Neet_pg_bot

Q43: In the context of a new onset of a morbid disease, how does the change in incidence affect the prevalence of the disease? (Q859984)

A. Prevalence is not related to incidence

B. Incidence will increase, and prevalence will decrease

C. Incidence and prevalence will increase

D. Prevalence will increase with a decrease in the incidence

See Answer in Part B → Q43

@Neet_pg_bot

Q44: Calculate relative risk for the given situation: Exposed to malaria Not exposed to malaria Vaccinated 6 94 Non-vaccinated 12 88 (Q860001)

A. 0.5

B. 2

C. 1.5

D. 1.7

See Answer in Part B → Q44

@Neet_pg_bot

Q45: Which among the following cannot be studied using case-control study? (Q860041)

A. Effect to cause

B. Rare Disease

C. Odds ratio

D. Cause to effect

See Answer in Part B → Q45

@Neet_pg_bot

Q46: What is the serial interval? (Q858023)

A. Time taken to develop a Primary case A

B. Time gap between entry of organism till maximum infectivity

C. Interval between Primary and secondary case

D. Time gap between onset till first detection

See Answer in Part B → Q46

@Neet_pg_bot

Q47: According to SDG proposed goals towards 2030, Which of the following is the target for maternal mortality rate reduction? (Q820561)

A. <60/100000

B. <70/100000

C. <50/100000

D. <80/100000

See Answer in Part B → Q47

@Neet_pg_bot

Q48: Which of the following statement is correct about triage? (Q820563)

A. Red- ambulatory

B. Yellow- stable need observation

C. Black- minor injuries

D. Green- life threatening

See Answer in Part B → Q48

@Neet_pg_bot

Q49: Denominator in incidence rate is? (Q820624)

A. Total observed population

B. Total population at risk in a year

C. Total live births

D. Total new cases in a year

See Answer in Part B → Q49

@Neet_pg_bot

Q50: In an experiment 39 was the highest number but was mistaken for 93. It will affect which of the following? (Q820654)

A. Mean will remain same, median will increase

B. Mean and median both will increase

C. Mean will increase, median will remain same

D. Both mean and median will decrease

See Answer in Part B → Q50

@Neet_pg_bot

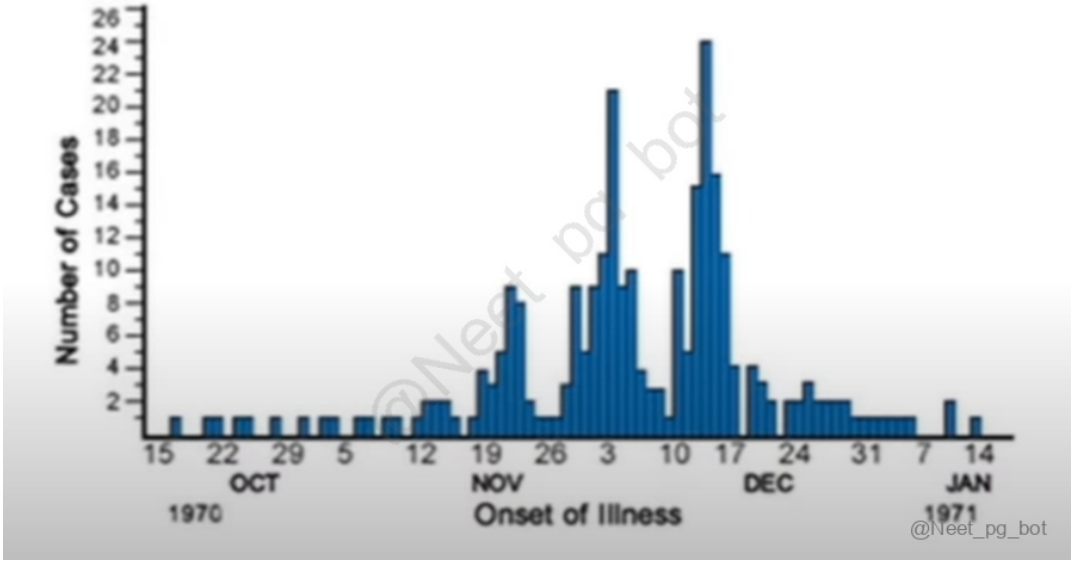
Q51: Identify the graph below: (Q820656)

A. Point source single exposure epidemic

B. Common source, Continuous exposure epidemic

C. Intermittent Exposure

D. Propagated epidemic



See Answer in Part B → Q51

@Neet_pg_bot

Q52: No. of live births/1000 women in reproductive age group? (Q820682)

A. Total fertility rate

B. General Fertility rate

C. Net Reproduction Rate

D. Crude birth Rate

See Answer in Part B → Q52

@Neet_pg_bot

Q53: In a hospital pharmacy setting, a budget of 50,000 Rs is allocated for the purchase of three types of drugs: 35,000 Rs for A drugs, 10,000 Rs for B drugs, and the remaining amount for C drugs. Which type of analysis is being used in this scenario? (Q820698)

A. Network Analysis

B. ABC Analysis

C. VED Analysis

D. System Analysis

See Answer in Part B → Q53

@Neet_pg_bot

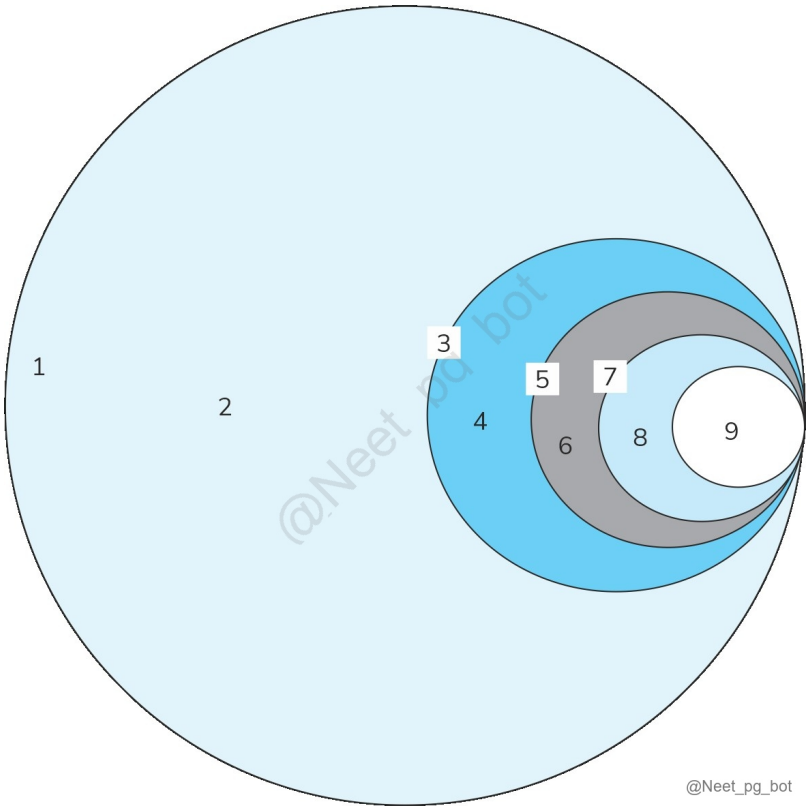
Q54: What does the number 9 in the provided diagram on hypertension represent? (Q830733)

A. Diagnosed and untreated

B. Diagnosed and treated

C. Inadequately treated

D. Adequately treated



See Answer in Part B → Q54

@Neet_pg_bot

Q55: A longitudinal, observational, and analytical study is also known as? (Q854738)

A. Cross-sectional Study

B. Cohort Study

C. Ecological Study

D. Randomized Control Trial

See Answer in Part B → Q55

@Neet_pg_bot

Q56: Match the following columns on Epidemiology Guidelines: A. Care 1. RCT B. Consort 2. Case report C. Prisma 3. Observational study D. Strobe/Moose 4. Systematic Review (Q854751)

A. A2-B4-C1-D3

B. A4-B1-C2-D3

C. A2-B1-C4-D3

D. A4-B1-C3-D2

See Answer in Part B → Q56

@Neet_pg_bot

Q57: Research is being conducted to find the association between aniline dye exposure and bladder cancer in workers who have worked in the industry for >20 years. Two groups were formed: one directly involved with dye handling and the other group consisting of office clerks not directly exposed to the dye. Years of occupation were noted from records. What type of study is being performed? (Q855435)

A. Retrospective cohort study

B. Prospective cohort study

C. Case-control study

D. Intervention and response

See Answer in Part B → Q57

@Neet_pg_bot

Q58: What is the primary factor responsible for the demographic burden? (Q793759)

A. Decreased old age dependency ratio

B. Increased young age dependency ratio

C. Decreased young age dependency ratio

D. Increased old age dependency ratio

See Answer in Part B → Q58

@Neet_pg_bot

Q59: What is the term used to describe the number of maternal deaths per 100,000 live births ? (Q793741)

A. Maternal mortality rate

B. Maternal mortality ratio

C. Infant mortality rate

D. Perinatal mortality rate

See Answer in Part B → Q59

@Neet_pg_bot

Q60: What is the method used to assess the relative risk (RR)? (Q793609)

A. Case control study

B. Cohort study

C. Randomized controlled trial

D. Cross-sectional study

See Answer in Part B → Q60

@Neet_pg_bot

• [03_Vaccines and Cold Chain] 010 National Immunization Schedule Delayed Immunization Cold Chain

« Back to Folder Directory

[03_Vaccines and Cold Chain] 010 National Immunization Schedule Delayed Immunization Cold Chain — Quick Jump

Q1 (p. 115)	*Q2 (p. 115)*	*Q3 (p. 116)*	*Q4 (p. 116)*	*Q5 (p. 116)*	*Q6 (p. 117)*
Q7 (p. 117)	*Q8 (p. 117)*	*Q9 (p. 118)*	*Q10 (p. 118)*	*Q11 (p. 119)*	*Q12 (p. 119)*
Q13 (p. 119)	*Q14 (p. 120)*	*Q15 (p. 120)*	*Q16 (p. 121)*	*Q17 (p. 121)*	*Q18 (p. 121)*
Q19 (p. 122)	*Q20 (p. 122)*	*Q21 (p. 122)*			

Q1: A vaccination campaign in a remote village with limited electricity access. Which of the following vaccines is most susceptible to damage if not properly maintained during transport? (Q840679)

A. Hepatitis B vaccine

B. Pentavalent vaccine

C. Oral Polio Vaccine (OPV)

D. Tetanus-Diphtheria vaccine

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which vaccinations can be given to a 13 month child who has never been immunized? (Q880867)

A. BCG, OPV, Hep B

B. DPT 1 and OPV 1

C. DPT 1, OPV 1 and Measles 1

D. DPT 1 and Measles 1

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A health worker in a rural village is preparing to transport a stool sample from a suspected case of acute flaccid paralysis (AFP). Which of the following is/are the most important considerations for transporting this sample? (Q846615)

A. Transport in a vaccine carrier lined with four ice packs

B. Maintain sample temperature between +2°C to +8°C during transport

C. Deliver to National Institute of Virology within 24 hours

D. All of the above.

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Match the following vaccines with their strains: VACCINES STRAINS A) Measles i) RA 27/3 B) Mumps ii) 17 D C) Rubella iii) Edmonston Zagreb D) Yellow fever iv) Jeryl Lynn strain (Q844352)

A. A-iii; B-iv; C-i; D-ii

B. A-i ; B-ii ; C-iii ; D-iv

C. A-iv ; B-iii ; C-ii ; D-i

D. A-ii ; B-i ; C-iv ; D-iii

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following is true regarding vaccine disposal? (Q840873)

A. Empty plastic syringes should be categorized as white

B. Empty vaccine vials should be categorized as blue

C. Expired vaccines should be categorized as red

D. A hub cutter is used to dispose of vaccine vials

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following can maintain vaccine temperatures for the longest duration? (Q840867)

A. Cold box

B. Vaccine carrier

C. Day carrier

D. Conditioned ice pack

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following is not true regarding ice packs? (Q840865)

A. Plain water is used to prepare ice packs.

B. The entire volume of the ice pack can be filled with water.

C. Vials of DPT/TT should not be placed directly with the ice pack.

D. OPV vials should be placed with ice packs.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Match the following types of thermometers with their correct example: Term Example i) Dial Thermometer a) Monitors the temperature of the Deep freezer ii) Hygro Thermometer b) Monitors the temperature of the ILR iii) Steam Alcohol Thermometer c) Used to determine air humidity (Q840861)

A. i) - b, ii) - c, iii) - a.

B. i) - c, ii) - a, iii) - b.

C. i) - a, ii) - b, iii) - c.

D. i) - c, ii) - b, iii) - a.

See Answer in Part B → Q8

@Neet_pg_bot

Q9: The hospital management is deciding between procuring a large ILR (Ice-Lined Refrigerator) or a large deep freezer for vaccine storage due to frequent power outages in that area. Which of the following would be the most important factor to consider when making this decision? (Q840856)

A. The difference in temperature ranges between the ILR and the deep freezer.

B. The equipment's ability to maintain temperature during power outages.

C. The physical space available for installation of either piece of equipment.

D. The need to store ice packs for vaccine transportation.

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A nurse is preparing to administer a 0.1 ml dose of the BCG vaccine to a 6-month-old infant. Which type of syringe should the nurse use? (Q840851)

A. Tuberculin syringe

B. Insulin syringe

C. Either A or B

D. Neither A or B

See Answer in Part B → Q10

@Neet_pg_bot

Q11: If a healthcare provider temporarily uses a domestic refrigerator to store vaccines, where should he place the BCG and Measles vaccines inside the refrigerator? (Q840685)

A. Middle shelf

B. Door shelves

C. Top shelf

D. Bottom shelf

See Answer in Part B → Q11

@Neet_pg_bot

Q12: A 10-month-old infant came to the clinic for a regular follow-up visit. He missed his most recent vaccine, which was scheduled for 9 months. According to the National Immunization Schedule, which of the following vaccines is not administered to a 10-month-old infant? (Q840559)

A. Measles

B. DPT

C. PCV

D. None of the above

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following storage practices is appropriately matched with the corresponding cold chain level? Level Storage practice A. Subcenter Use walk-in cold rooms to store large quantities of vaccines. B. Primary Health Center Use small ice-lined refrigerators to store vaccines for up to one month. C. Community Health

Center Store vaccines in vaccine carriers for daily use. D. State Level Use domestic refrigerators due to their large storage capacity. (Q840676)

A. A

B. B

C. C

D. D

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A nurse is preparing to administer a 0.1 ml dose of the BCG vaccine to a 6-month-old infant. Which type of syringe should the nurse use? (Q840667)

A. Tuberculin syringe

B. Insulin syringe

C. Either A or B

D. Neither A or B

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following vaccines is appropriate to administer to an 18-month-old child who has not received any prior vaccination according to national immunisation schedule? (Q840663)

A. OPV + MMR

B. Pentavalent

C. BCG + OPV

D. BCG + OPV + MMR

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A 68 y/o man with a history of chronic obstructive pulmonary disease (COPD) and hypertension hasn't received any vaccines in recent years and is concerned about his increased risk of infections. Which of the following vaccines should be given to him? (Q840656)

A. Influenza vaccine

B. Pneumococcal vaccine (PCV13 followed by PPSV23)

C. Tdap vaccine

D. All of the above

See Answer in Part B → Q16

@Neet_pg_bot

Q17: A 30 y/o woman at 16 weeks gestation has a history of three prior pregnancies and her last delivery was 18 months ago. Which of the following is the most appropriate Td vaccination schedule for this patient? (Q840653)

A. 2 doses of Td vaccine, one month apart, starting immediately.

B. 1 dose of Td vaccine now.

C. 1 dose of Td vaccine around the 7th month of pregnancy.

D. No Td vaccine is needed for this pregnancy.

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which of the following is true regarding BCG vaccination? (Q840651)

A. It is an inactivated vaccine

B. Can be administered only on the left upper arm

C. Provides protection only against extrapulmonary TB

D. None of the above

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Match the following vaccines with their route of administration VACCINE ROUTE A) Rotavirus i) Subcutaneous B) BCG ii) Oral C) JE iii) Intramuscular D) Pentavalent iv) Intradermal (Q840645)

A. A-ii; B-iv; C-i; D-iii

B. A-i; B-iii; C-ii; D-iv

C. A-iv; B-i; C-iii; D-ii

D. A-iii; B-ii; C-iv; D-i

See Answer in Part B → Q19

@Neet_pg_bot

Q20: Under the Vitamin A distribution scheme, which of the following is the appropriate dose of Vitamin A to prevent blindness in a 3-year-old? (Q840641)

A. 100,000 IU

B. 150,000 IU

C. 200,000 IU

D. 50,000 IU

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Consider the following statements: i) f IPV is a live attenuated vaccine. ii) fIPV is not effective in control of epidemics iii) OPV has a shorter shelf life than IPV iv) fIPV provides humoral immunity only v) 5 ml of fIPV is administered via IM route Which of the following are correct? (Q840625)

A. i, ii and iii

B. ii, iii and iv

C. ii, iii and v

D. i, iii and v

See Answer in Part B → Q21

@Neet_pg_bot

• [03_Vaccines and Cold Chain] 011 Vaccines And Open Vial Policy

« Back to Folder Directory

[03_Vaccines and Cold Chain] 011 Vaccines And Open Vial Policy — Quick Jump

Q1 (p. 124)	*Q2 (p. 124)*	*Q3 (p. 125)*	*Q4 (p. 125)*	*Q5 (p. 125)*	*Q6 (p. 126)*
Q7 (p. 126)	*Q8 (p. 126)*	*Q9 (p. 127)*	*Q10 (p. 127)*	*Q11 (p. 128)*	*Q12 (p. 128)*
Q13 (p. 128)	*Q14 (p. 129)*	*Q15 (p. 129)*	*Q16 (p. 130)*	*Q17 (p. 130)*	

Q1: Which of the following is the diluent used for the Measles Rubella vaccine? (Q840640)

A. Normal Saline

B. Phosphate Buffer Solution

C. Distilled water/ Sterile Water

D. Cold Physiological saline

See Answer in Part B → Q1

@Neet_pg_bot

Q2: MMR, Hepatitis-b, BCG, and JE vaccines were being carried for immunisation camp and have been opened. Which of the following opened vials can be reused provided that the cold chain is maintained? (Q844354)

A. Measles, Mumps, and Rubella (MMR) Vaccine

B. BCG Vaccine

C. Hepatitis B Vaccine

D. Japanese encephalitis (JE) vaccine

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following statements is TRUE regarding the "Switch" from tOPV to bOPV in India? (Q840677)

A. The switch included the removal of wpv1 from the vaccine formulation.

B. The reason for the switch was the eradication of wpv3 in September 2015.

C. bOPV contains attenuated forms of wpv1 and wpv3.

D. IPV was introduced after the switch to compensate for the removal of wpv2 from the vaccine.

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following is not included in the IT initiatives under Mission Indradhanush? (Q840672)

A. eVIN (Electronic Vaccine Intelligence Network)

B. ANMOL (Auxiliary Nurse Midwife Online)

C. SAFE-VAC (Surveillance and Actions for Events following Vaccination)

D. AEFI (Adverse Event Following Immunization)

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following diseases is not part of the Pan-India diseases covered under Mission Indradhanush? (Q840669)

A. Extra-pulmonary tuberculosis

B. Polio

C. Rotavirus diarrhea

D. Japanese encephalitis

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following steps is incorrect when conducting a shake test to check for vaccine vial damage due to freezing? (Q840665)

A. Take a vaccine vial you suspect may have been frozen and label it as the "Test" vial.

B. Freeze a control vial of the same antigen, manufacturer, and batch number at -20°C overnight, and label it as the "Frozen control vial."

C. Thaw the "Frozen control vial" by heating it gently.

D. Shake both the "Test" vial and the "Frozen control vial" together for 10-15 seconds, then place them side-by-side on a flat surface to observe sedimentation.

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following statements about the Vaccine Vial Monitor (VVM) is incorrect? (Q840658)

A. The VVM is a heat-sensitive chemical indicator placed on the body of the vial, neck of the ampule, or cap of the vial.

B. The VVM records cumulative heat exposure of the vaccines through a gradual change in color.

C. If the inner square of the VVM is darker than the outer circle, the vaccine can still be used.

D. The VVM number is the time in days for the inner square to reach the colour indicating a discard point, if the vial is exposed to a constant temperature of 37°C.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following statements is true based on thermolability of vaccines? (Q840652)

A. The most heat-sensitive vaccine is Hepatitis B.

B. The most freeze-sensitive vaccine is Pentavalent.

C. The loss of potency of vaccines due to exposure to heat or cold is permanent and cannot be regained.

D. The physical appearance of a damaged vaccine always changes.

See Answer in Part B → Q8

@Neet_pg_bot

Q9: You have been posted in a rural PHC where you just received a new batch of vaccines for the upcoming vaccination drive. You need to educate your team on the conditions that have to be fulfilled in order to reuse opened vaccine vials during the drive. Which of the following would you not suggest regarding the same? (Q840648)

A. The Vaccine Vial monitor has not reached the discard point.

B. An aseptic technique must be used to withdraw all doses.

C. Vaccines are stored strictly under an appropriate temperature (+6° C to +10° C) range during transportation and storage at cold chain point.

D. The expiry date should not have passed.

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following is an example of a vaccine used as a secondary level of prevention? (Q840594)

A. Hepatitis B vaccine

B. MMR (Measles, Mumps, Rubella) vaccine

C. BCG (Bacillus Calmette-Guérin) vaccine

D. Influenza vaccine

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Match the following vaccines with their well-known side effects: Vaccine Side effect a. Rotavirus 1. Inconsolable cry & convulsions b. BCG 2. Toxic Shock Syndrome c. Measles 3. Scar d. Pertussis 4. Intussusception (Q840634)

A. a-2, b-3,c-4, d-1

B. a-2, b-1, c-3, d-4

C. a-3, b-4, c-1,d-2

D. a-4, b-3, c-2, d-1

See Answer in Part B → Q11

@Neet_pg_bot

Q12: A 7 y/o girl is brought to a makeshift medical camp that was set up following a massive earthquake 3 days ago. She has no prior history of vaccinations. The child was exposed to a confirmed case of measles two days ago. Which of the following would be your next step in helping the child? (Q840630)

A. Administer the measles vaccine immediately.

B. Administer typhoid and cholera vaccines first.

C. Administer OPV.

D. No vaccines are necessary at this time.

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following statements is FALSE regarding the contraindications of vaccines? (Q840624)

A. Yellow fever vaccine can be given to pregnant women

B. DPT Vaccine is unsafe in children with Spina bifida

C. All live vaccines are contraindicated in patients on corticosteroids

D. All vaccines except MMR, measles, rubella & varicella are contraindicated in adults with symptomatic HIV

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which of the following statements is true about polysaccharide vaccines? (Q840614)

A. They are often combined with a toxoid component to enhance the immune response against toxins produced by bacteria.

B. Multiple immunizing agents are included in the vaccine.

C. More effective in children < 2 years

D. Polysaccharide based vaccines are available against S.pneumoniae, H.influenza b

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following statements is wrong with regard to administration of two live vaccines? (Q840611)

A. Do not administer both vaccines at the same site simultaneously.

B. Administer both vaccines at different sites simultaneously.

C. Administer both vaccines with an interval of 4 weeks.

D. Administer both vaccines with a minimum interval of 2 weeks.

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which of the following vaccines cannot be given to a pregnant woman? (Q840605)

A. Rabies vaccine

B. IPV

C. Rotavirus vaccine

D. Kyasanur Forest Disease Vaccine

See Answer in Part B → Q16

@Neet_pg_bot

Q17: A 2-year-old child is brought by his mother. During the consultation, it is revealed that the child has not received any vaccinations since birth due to the family's geographical isolation and lack of access to healthcare services. The healthcare worker is concerned about the child's susceptibility to vaccine-preventable diseases and advises immediate initiation of the vaccination schedule. Based on this scenario, how would you classify this child's immunization status? (Q840599)

A. Fully immunized

B. Completely immunized

C. Dropout

D. Left out

See Answer in Part B → Q17

@Neet_pg_bot

• [03_Vaccines and Cold Chain] 012 Previous Year Questions

« Back to Folder Directory

[03_Vaccines and Cold Chain] 012 Previous Year Questions — Quick Jump

Q1 (p. 131)	*Q2 (p. 131)*	*Q3 (p. 132)*	*Q4 (p. 132)*	*Q5 (p. 132)*	*Q6 (p. 133)*
Q7 (p. 133)	*Q8 (p. 133)*	*Q9 (p. 134)*	*Q10 (p. 134)*	*Q11 (p. 134)*	*Q12 (p. 135)*
Q13 (p. 136)	*Q14 (p. 136)*	*Q15 (p. 136)*	*Q16 (p. 137)*	*Q17 (p. 138)*	*Q18 (p. 138)*
Q19 (p. 138)	*Q20 (p. 139)*	*Q21 (p. 139)*	*Q22 (p. 139)*	*Q23 (p. 140)*	*Q24 (p. 141)*
Q25 (p. 141)	*Q26 (p. 141)*	*Q27 (p. 142)*	*Q28 (p. 142)*	*Q29 (p. 142)*	*Q30 (p. 143)*
Q31 (p. 143)	*Q32 (p. 143)*	*Q33 (p. 144)*	*Q34 (p. 144)*	*Q35 (p. 145)*	

Q1: Which vaccine among the options exhibits a seroconversion rate that is quicker than the incubation period of the corresponding disease? (Q857698)

A. Coronavirus

B. Measles

C. Polio

D. Mumps

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Open vial policy is accepted for? (Q855881)

A. BCG

B. Measles

C. Live JE

D. IPV

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which vaccine is administered as part of the immunization program for a 10-year-old student in school? (Q856039)

A. BCG

B. MMR

C. TT/ Td

D. DPT

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Considering the immune status of a girl child who has been experiencing repeated yeast infections and respiratory virus infections since the age of 3 months, which vaccine should be avoided? (Q856082)

A. Killed IPV

B. Measles/MMR

C. DPT

D. TT/Td

See Answer in Part B → Q4

@Neet_pg_bot

Q5: There is an outbreak of acute encephalitis in the community and a vaccination drive is launched. Which of the following is true about the vaccine given in this condition? (Q856088)

A. Killed and intramuscular

B. Live and subcutaneous

C. Live and intramuscular

D. Killed and subcutaneous

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the options listed below indicates the degree of heat resistance exhibited by vaccines? (Q856467)

A. VMV

B. VVM

C. MVV

D. VMM

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of these vaccines do not follow open vial policy? (Q857086)

A. OPV

B. DPT

C. TT

D. Measles

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A 10-week-old infant comes for routine vaccination. The baby had a history of inconsolable crying following vaccination at 6 weeks. What should be the next step regarding vaccination? (Q857357)

A. Don't give DT

B. Give DPT

C. Don't give DPT

D. Defer for 1 month

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following is the initial step when an immunization survey is being conducted? (Q857697)

A. Cluster identification

B. Conducting the survey

C. Completing the cluster and summary forms

D. Calculating the total fertility rate of the area

See Answer in Part B → Q9

@Neet_pg_bot

Q10: What would be the most appropriate approach to managing a young male patient who has presented at the hospital with a clean-cut wound that is not bleeding, and who received a complete tetanus vaccination 10 years ago? (Q855529)

A. Human tetanus immunoglobulin and full course of vaccine

B. Human tetanus immunoglobulin

C. Single-dose tetanus toxoid

D. Full course tetanus toxoid

See Answer in Part B → Q10

@Neet_pg_bot

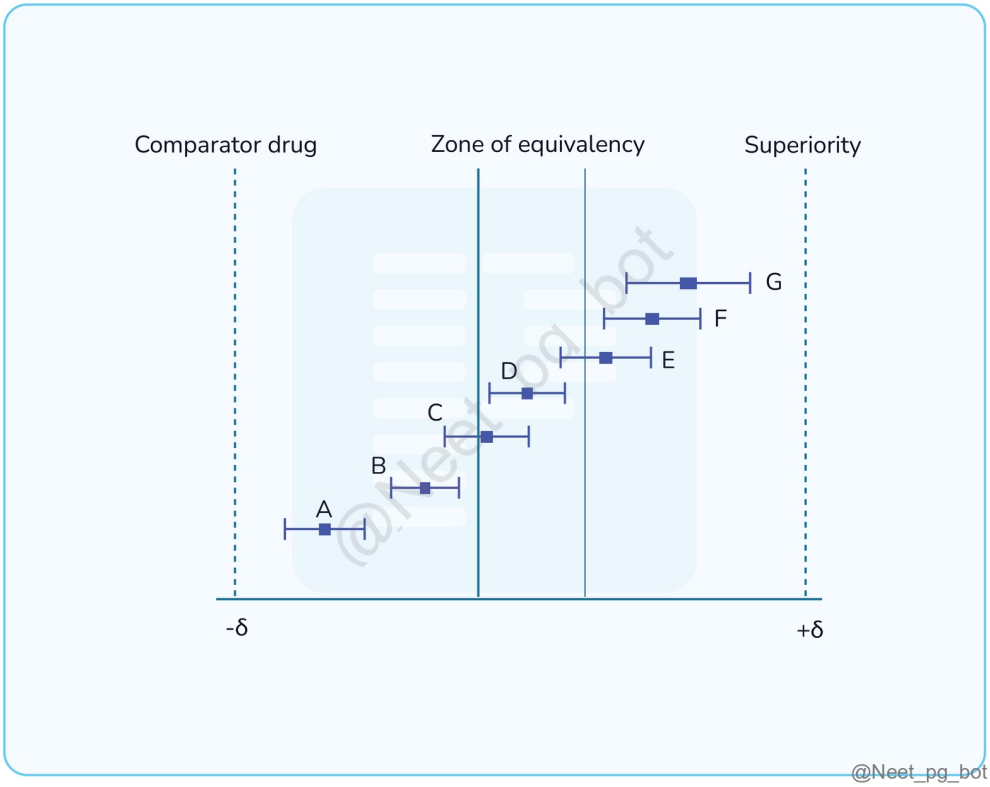
Q11: In the market, there are several new vaccines being researched, and their effectiveness is being evaluated and displayed in the image provided. Which of the recently developed vaccines demonstrate comparable efficacy to the previous vaccine? (Q858172)

A. D only

B. D and E

C. C, D and E

D. A, B, C and D



See Answer in Part B → Q11

@Neet_pg_bot

Q12: When are the three doses of fIPV ideally given as per the National Immunization Schedule? (Q860575)

A. 3 doses at 6 weeks, 14 weeks, and 9 completed months

B. At 10 weeks, 14 weeks, and 9 completed months

C. At 6 weeks, 10 weeks, and 18 completed months

D. 3 doses at 6 weeks, 14 weeks, and 18 completed months

See Answer in Part B → Q12

@Neet_pg_bot

Q13: A 10 year old child is brought to the clinic for his regular immunization. What vaccine is given as a part of the national immunization schedule? (Q860600)

A. TT/Td

B. BCG

C. MMR

D. DPT

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which of the following vaccines is contraindicated in a child with immunodeficiency? (Q865301)

A. Hepatitis B (Hep B)

B. DPT (Diphtheria, Pertussis, Tetanus)

C. MMR (Measles, Mumps, Rubella)

D. Inactivated Polio Vaccine (IPV)

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following vaccines will you use in the clinic? (Q866471)

A. Use 1 only

B. Use 1 and 2

C. Use 1, 2, and 3

D. Use 4 only



See Answer in Part B → Q15

@Neet_pg_bot

Q16: A mother brings her 9-month-old baby, concerned that no BCG scar has appeared, although the baby received the BCG vaccine at birth. What is the next best step? (Q866770)

A. Reassure the mother

B. Give the BCG vaccine immediately

C. Do the Mantoux test & wait for the result

D. Refer the baby for a chest X-ray & further evaluation

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Out of the MR & Pentavalent vaccine, which can be reused, and which one should be discarded when the vial is opened according to the open vial policy? (Q866771)

A. Discard MR, reuse Pentavalent

B. Discard Pentavalent, reuse MR

C. Discard both MR and Pentavalent

D. Reuse both MR and Pentavalent

See Answer in Part B → Q17

@Neet_pg_bot

Q18: A person has recently moved from Nigeria to the United States. Which of the following vaccines is required for international travel from Nigeria to the USA? (Q866776)

A. Yellow Fever (17D) vaccine

B. Japanese Encephalitis (JE) vaccine

C. Measles vaccine

D. Rabies vaccine

See Answer in Part B → Q18

@Neet_pg_bot

Q19: In a 10-year-old school child, which of the following vaccines is given as a part of the school immunization program? (Q855456)

A. Measles vaccine

B. Rotavirus vaccine

C. Td vaccine

D. Hepatitis B vaccine

See Answer in Part B → Q19

@Neet_pg_bot

Q20: Which of the following is not a polysaccharide vaccine? (Q839877)

A. Hep B

B. Pneumococcal

C. Meningococcal

D. Hib

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Which of the following statements about the rotavirus vaccine is incorrect? (Q839888)

A. Given orally

B. Cannot be given after 6 months of age

C. Live vaccine

D. It has monovalent and pentavalent form

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Which of the following vaccine is kept at lowest level in the equipment shown below? (Q844097)

A. OPV

B. DPT

C. Hep B

D. Rota



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See Answer in Part B → Q22

@Neet_pg_bot

Q23: Shanchol vaccine consists of? (Q844099)

A. Monovalent 2 doses

B. Monovalent 1 dose

C. Bivalent 2 doses

D. Bivalent 1 dose

See Answer in Part B → Q23

@Neet_pg_bot

Q24: Which of the following is the schedule of the OPV vaccine? (Q852607)

A. 6th week, 10th week and 14th week

B. 6th week, 10th week & 9th month

C. 6th week, 14th week & 9th month

D. 6 to 12 weeks

See Answer in Part B → Q24

@Neet_pg_bot

Q25: Which of the following is the fIPV dose schedule under the National Immunization Schedule? (Q852673)

A. 6 weeks, 10 weeks, 14 weeks

B. At birth, 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years

C. 6 weeks, 14 weeks, 9 months

D. 6 weeks, 10 weeks, 12 weeks

See Answer in Part B → Q25

@Neet_pg_bot

Q26: Which of the following vaccines is not recommended after 65 years? (Q852856)

A. Influenza

B. Herpes Zoster

C. Pneumococcal

D. Human papilloma virus

See Answer in Part B → Q26

@Neet_pg_bot

Q27: All are live vaccines except: (Q852858)

A. Rota virus

B. Hepatitis B

C. Measles

D. Varicella

See Answer in Part B → Q27

@Neet_pg_bot

Q28: What is the schedule and route of administration of MR vaccine and vitamin A? (Q854773)

A. MR vaccine administered subcutaneously along with oral vitamin A at 8 months

B. MR vaccine administered intramuscularly along oral vitamin A at 8 months

C. MR vaccine administered subcutaneously along with oral vitamin A at 9 months

D. MR vaccine administered intramuscularly along with oral vitamin A at 9 months

See Answer in Part B → Q28

@Neet_pg_bot

Q29: Vaccine protocol followed after Disaster? (Q854861)

A. Everyone is given diphtheria

B. Everyone is given tetanus toxoid

C. Everyone is given cholera vaccine

D. Only the health worker given cholera, typhoid, tetanus toxoid

See Answer in Part B → Q29

@Neet_pg_bot

Q30: A 7-year-old child is bitten on the hand by a neighbor's dog whose vaccination status is unknown. On examination, there are two small puncture wounds with slight bleeding. Which of the following statements is/are correct? The wound is classified as Category III exposure. The wound should be washed with soap and running water for at least 15–20 minutes. The wound should be cleaned thoroughly with spirit. Rabies immunoglobulin (RIG) should be infiltrated into and around the wound as much as anatomically possible. The intradermal anti-rabies vaccine schedule is given on days 0, 3, 7, and 28. (Q855133)

A. 1, 2, 4, 5

B. 1, 2, 3, 5

C. 2, 3, 4, 5

D. 1, 3, 4, 5

See Answer in Part B → Q30

@Neet_pg_bot

Q31: Which of the following statements is false regarding rabies immunoglobulin? (Q855277)

A. It is exclusively given only in the deltoid

B. The dose is 20 IU/kg

C. Administer it immediately after exposure

D. If human RIG is unavailable, equine is preferred

See Answer in Part B → Q31

@Neet_pg_bot

Q32: Which of the following regarding the vaccine vial monitor (VVM) is true? 1. It is used for monitoring heat exposure of the vaccine by healthcare workers in primary healthcare. 2. It shows cumulative exposure of the vaccine to the heat. 3. It can be used to assess the potential efficacy of the vaccine 4. Calculation of the expiry date can be done using VVM. 5. The expiry date of the vaccine can be relaxed if VVM is an acceptable range. 6. If the square and the circle are the same in color, then the vaccine can be safely used. (Q855309)

A. 3, 4

B. 1, 2

C. 1, 2, 3, 4, 5

D. 5, 6

See Answer in Part B → Q32

@Neet_pg_bot

Q33: In how many days should the post exposure Measles vaccine be given? (Q793727)

A. With in 7 days

B. With in 3 days

C. With in 1 days

D. With in 10 days

See Answer in Part B → Q33

@Neet_pg_bot

Q34: Which of the following vaccines are given at birth? (Q793843)

A. Pentavalent, MR, HiB

B. BCG, OPV, MR

C. BCG, OPV, Hepatitis B

D. BCG, IP, Hepatitis B

See Answer in Part B → Q34

@Neet_pg_bot

Q35: At what age is the first dose of hepatitis B vaccine given? (Q793732)

A. Birth

B. 6 weeks

C. 10 weeks

D. 6 months

See Answer in Part B → Q35

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• [04_Screening of Diseases] 013 Screening Of Diseases - I

« Back to Folder Directory

[04_Screening of Diseases] 013 Screening Of Diseases - I — Quick Jump

Q1 (p. 146)	*Q2 (p. 146)*	*Q3 (p. 147)*	*Q4 (p. 147)*	*Q5 (p. 147)*	*Q6 (p. 148)*
Q7 (p. 148)	*Q8 (p. 149)*	*Q9 (p. 149)*	*Q10 (p. 149)*	*Q11 (p. 150)*	*Q12 (p. 151)*
Q13 (p. 151)	*Q14 (p. 152)*	*Q15 (p. 152)*	*Q16 (p. 153)*	*Q17 (p. 153)*	*Q18 (p. 153)*
Q19 (p. 154)	*Q20 (p. 154)*	*Q21 (p. 154)*	*Q22 (p. 155)*	*Q23 (p. 155)*	*Q24 (p. 156)*

Q1: In syphilis screening, the RPR test is performed first. All individuals who test positive on RPR are then subjected to the FTA-ABS test. If multiple tests are conducted in parallel, what pattern of results would be expected? (Q840993)

A. Sensitivity increases, specificity decreases.

B. Sensitivity decreases, specificity increases.

C. PPV increases, NPV decreases.

D. Both specificity and PPV increase

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following is the primary reason for using randomized control trials to assess the effectiveness of a screening program? (Q846617)

A. To determine the cost-effectiveness of the screening program

B. To assess whether early detection through screening reduces disease-specific mortality

C. To evaluate the prevalence of the disease in the population

D. To compare the compliance rates of different screening methods

See Answer in Part B → Q2

@Neet_pg_bot

Q3: All comprise inherent properties of a screening test except? (Q841006)

A. Negative predictive value

B. Accuracy

C. Yield

D. Positive predictive value

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A 45-year-old man presents to the emergency department with chest pain and the doctor suspects myocardial infraction thus orders a blood test to evaluate for a specific cardiac marker for the same which has a sensitivity of 95% and a specificity of 90%. In the general population, the prevalence of acute myocardial infarction is 2%, while in patients presenting to the emergency department with chest pain, the prevalence increases to 30%. Based on this scenario, which of the following statements is true concerning the test? (Q841003)

A. Positive predictive value remains constant when prevalence <25%

B. Negative predictive value increases as prevalence increases

C. Positive predictive value is directly proportional to the prevalence

D. Negative predictive value remains constant when prevalence >75%

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Among the population of 5 million people in a city, 1 in every 200 undergoes sudden cardiac arrest each year. A new government formed recently wanted to know the total number of sudden cardiac arrests in this population during the last 5 years. What will be the estimate per million population? (Q841002)

A. 21000

B. 23500

C. 25000

D. 28500

See Answer in Part B → Q5

@Neet_pg_bot

Q6: In a population of 1000 people who are at high risk of contracting syphilis, 650 were confirmed to be positive by serological studies. A new test that acts by detecting a new biomarker "X" has been introduced and 600 were found to be positive among serology-positive patients. 120 out of the remaining 350 people were also found to be having “X”. What is the positive predictive value of this new test? (Q841001)

A. 71%

B. 94%

C. 83%

D. 68%

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A new imaging test has been introduced to diagnose breast cancer in a sample of 1500 people. Among those 600 people who have biopsy-confirmed breast carcinoma, 480 were found to be positive. 60 were also found positive among the remaining 900 biopsy-negative people. What is the sensitivity and specificity of this new test, respectively? (Q841000)

A. 72%; 90%

B. 88%; 79%

C. 94%; 89%

D. 80%; 93%

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following is incorrect regarding Cronbach's alpha? (Q840998)

A. Cronbach's alpha is a measure of internal consistency reliability.

B. It ranges from 0 to 1, with higher values indicating greater reliability.

C. Cronbach's alpha can be used to assess the validity of a measurement instrument.

D. Cronbach's alpha assumes that all items in the scale measure the same underlying construct.

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Sensitivity/(1-specificity) is the formula to find which among the following? (Q840997)

A. Positive likelihood ratio

B. Negative likelihood ratio

C. Positive predictive value

D. Negative predictive value

See Answer in Part B → Q9

@Neet_pg_bot

Q10: What purpose is Kaplan-Meier analysis used primarily for? (Q840996)

A. Assessing the impact of economic factors on survival rates.

B. Estimating the probability of survival over time.

C. Analysing the correlation between lifestyle choices and health outcomes.

D. Predicting future trends in population demographics.

See Answer in Part B → Q10

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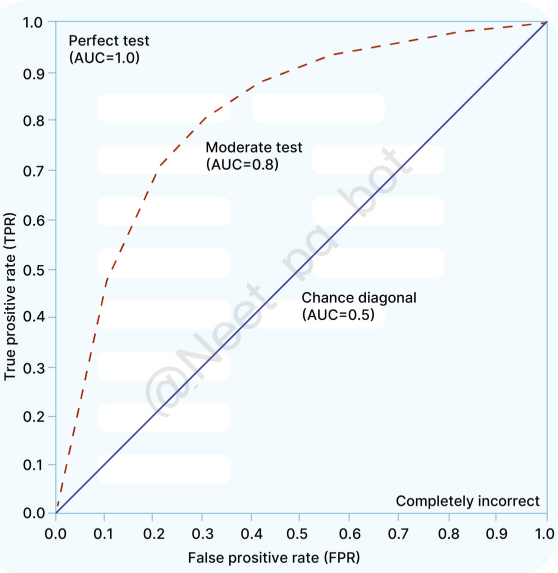
Q11: Given below are a few statements regarding the receiver operating curve. Which among the following is a false statement? (Q840995)

A. The best investigation is the one whose curve is most upward and left

B. The test with the minimum surface area under the cure is the most effective

C. Can be used for comparing two or more diagnostic tests

D. Can be used for deciding optimal cut-off points



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See Answer in Part B → Q11

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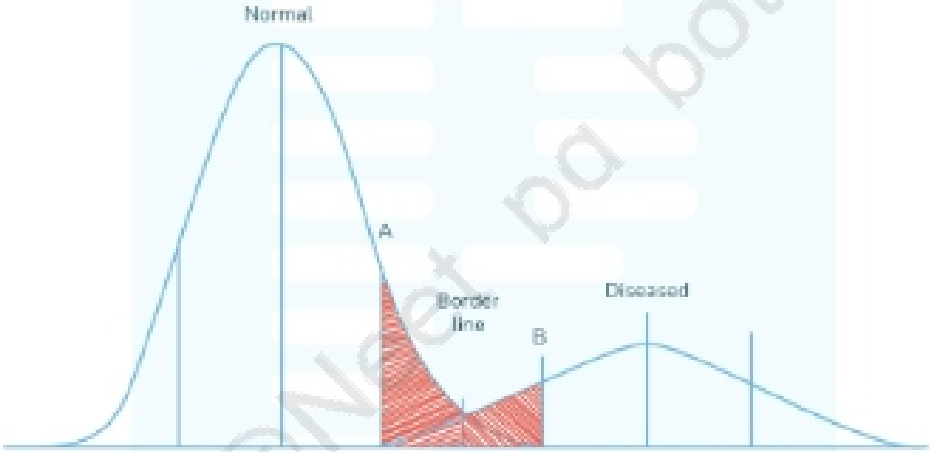
Q12: Below is a graph showing the results of a screening test. If the cut-off point is reduced from point B to A, what will be its effect on this screening test? (Q840994)

A. No effect at all

B. Sensitivity increases

C. Sensitivity decreases

D. Specificity increases



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See Answer in Part B → Q12

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Q13: A 40-year-old healthy man visits his family physician for a routine check-up. His physician recommends a series of tests to identify potential diseases that might be present without causing symptoms. This proactive approach is an example of which of the following? (Q840532)

A. Diagnosis

B. Surveillance

C. Screening

D. Lead time

See Answer in Part B → Q13

@Neet_pg_bot

Q14: The patient's blood pressure is 120/80 mm Hg. Four different sphygmomanometers measure his BP, each with 3 readings. Match the sphygmomanometers with their respective accuracy and precision parameters. Sphygmomanometer readings Accuracy and Precision parameters 1. 120/80, 120/80, 120/80 a. Precise but inaccurate 2. 140/96, 108/62, 96/82 b. Imprecise but accurate 3. 140/96, 140/96, 140/96 c. Precise and accurate 4. 122/82, 120/80, 118/78 d. Imprecise and inaccurate (Q840992)

A. 1-c, 2-b, 3-d, 4-a

B. 1-b, 2-c, 3-d, 4-a

C. 1-c, 2-d, 3-a, 4-b

D. 1-d, 2-a, 3-b, 4-c

See Answer in Part B → Q14

@Neet_pg_bot

Q15: The diagnostic power of a test to correctly exclude the disease is reflected by? (Q840991)

A. Sensitivity

B. Specificity

C. Positive Predictive Value

D. Negative Predictive Value

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Specificity is a property of a screening test .Specificity of a test means all except? (Q840990)

A. Refers to the ability of a test to identify those without a condition as negative.

B. It is calculated as the ratio of true negatives to the sum of true negatives and false positives.

C. A highly specific test will rarely produce false positives.

D. It is related to the condition's prevalence in the population being tested.

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Sensitivity is the ability of a test to detect? (Q840987)

A. Individuals who do not have the disease

B. Individuals who have the disease

C. Individuals who have the disease but test negative

D. Individuals who do not have the disease but test positive

See Answer in Part B → Q17

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Q18: Which of the following is not a test used for assessing accuracy? (Q840986)

A. Mean Chart

B. Levey-Jennings (LJ) Chart

C. Shewhart Control Chart

D. Scatter Plot

See Answer in Part B → Q18

@Neet_pg_bot

Q19: A 45-year-old male patient presents to the emergency department with chest pain. An ECG is performed. Doctor 1 reviews the ECG and reports it as normal. However, Doctor 2 reviewed the same ECG and reported that it was abnormal. What is the most likely explanation for the differing interpretations of the patient's ECG by Doctor 1 and Doctor 2? (Q840985)

A. Intraobserver variation

B. Biological variation

C. Error related to technology

D. Interobserver variation

See Answer in Part B → Q19

@Neet_pg_bot

Q20: During the COVID-19 pandemic, airports implemented temperature screening and rapid antigen tests for passengers. This approach is an example of which type of public health screening? (Q840984)

A. Prospective Screening

B. Prescriptive Screening

C. Diagnostic Screening

D. Opportunistic Screening

See Answer in Part B → Q20

@Neet_pg_bot

Q21: A health camp was organized to conduct cervical cancer screening. Which of the following best explains this type of screening test? (Q840982)

A. High-risk Screening

B. Multiphasic Screening

C. Mass Screening

D. Multipurpose Screening

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Which of the following statements about diseases suitable for screening is true? The disease should have a significant impact on public health. Early detection and treatment should reduce morbidity. The disease should have a short latent period. A reliable, invasive, and cost-effective screening test should be available. The disease should have a high prevalence in the population. (Q840981)

A. 2, 4 and 5

B. 1, 2, and 5

C. 2, 3 and 5

D. 2, 3 and 4

See Answer in Part B → Q22

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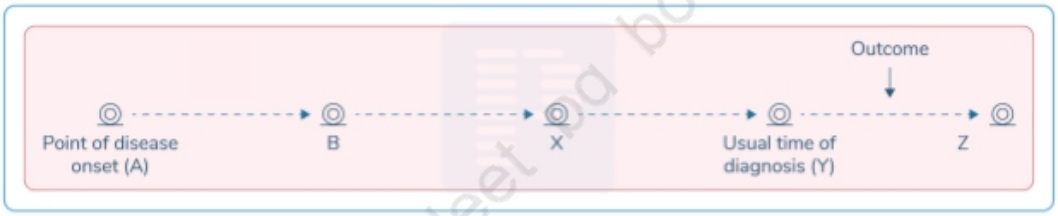
Q23: Which of the following appropriately represents lead time in the given figure (Q840980)

A. C

B. B to Y

C. B to X

D. X to Y



See Answer in Part B → Q23

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Q24: All of the following are features of a screening test except? (Q840979)

A. Aimed at early detection of disease in asymptomatic individuals.

B. High specificity is more important than high sensitivity.

C. Often less accurate and applied to a large population.

D. Typically involves simple, cost-effective and non-invasive procedures.

See Answer in Part B → Q24

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• [04_Screening of Diseases] 014 Previous Year Questions

« Back to Folder Directory

[04_Screening of Diseases] 014 Previous Year Questions — Quick Jump

Q1 (p. 157) *Q2 (p. 157)* *Q3 (p. 157)* *Q4 (p. 158)* *Q5 (p. 158)* *Q6 (p. 159)*
Q7 (p. 159) *Q8 (p. 160)* *Q9 (p. 160)* *Q10 (p. 161)* *Q11 (p. 161)*

Q1: Secondary prevention is most useful in the early detection and treatment of which of the following cancers? (Q866881)

A. Pancreatic cancer

B. Ovarian cancer

C. Glioblastoma

D. Cervical cancer

See Answer in Part B → Q1

@Neet_pg_bot

Q2: You have gone to a village for screening where people have diabetes and hypertension. What type of screening is done for family members of these patients who show up in large numbers? (Q852849)

A. Multiphasic screening

B. Mass screening

C. High-risk screening

D. Anonymous screening

See Answer in Part B → Q2

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Q3: Diabetic screening for the pregnant mother in India is done between: (Q820601)

A. 24-28W

B. 32-36W

C. 18-24W

D. 14-18W

See Answer in Part B → Q3

@Neet_pg_bot

Q4: The current approach for the initial screening of women for cervical cancer at a primary health center is- (Q857104)

A. Visual inspection after application of freshly prepared solution 5% acetic acid solution

B. Colposcopy

C. Cervical biopsy

D. High vaginal biopsy

See Answer in Part B → Q4

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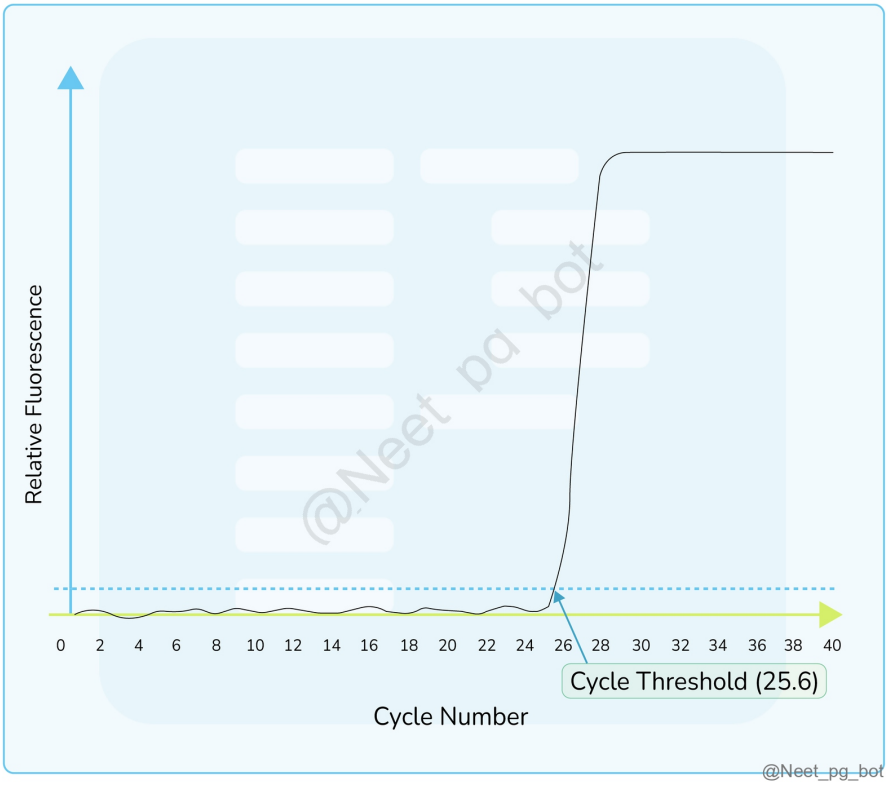
Q5: For assessing the viral load in a test sample, which test utilizes the provided graph? (Q857696)

A. Antigen test

B. Real-time RT PCR

C. CBNAAT

D. TruNat



See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the statements below is correct? (Q856578)

A. In a population with low prevalence of the disease, positive result with a highly sensitive test means true positive

B. Sensitivity depends on prevalence of the disease

C. Positive predictive value depends on prevalence of disease

D. Specificity depends on prevalence of the disease

See Answer in Part B → Q6

@Neet_pg_bot

Q7: What factor is the external validity of a screening test associated with? (Q856603)

A. Stability

B. Objectivity

C. Generalizability

D. Repeatability

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following is an example of prospective screening? (Q854819)

A. Cervical Pap smear in a 40-year-old patient

B. Neonatal screening of a new-born baby for hypothyroidism

C. Screening of immigrants for infectious diseases such as tuberculosis

D. Urine for sugar screening in a 40-year-old man

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A healthy person got in contact with an infected case, and they have to separate him as he is sick now. This is: A person who has become sick after contact with an infected case is separated from healthy individuals to prevent disease spread. This practice is called: (Q859450)

A. Absolute quarantine

B. Isolation

C. Interruption of transmission

D. Serial interval

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which factor has the greatest impact on positive predictive value? (Q859799)

A. Sensitivity

B. Prevalence

C. Specificity

D. Relative risk

See Answer in Part B → Q10

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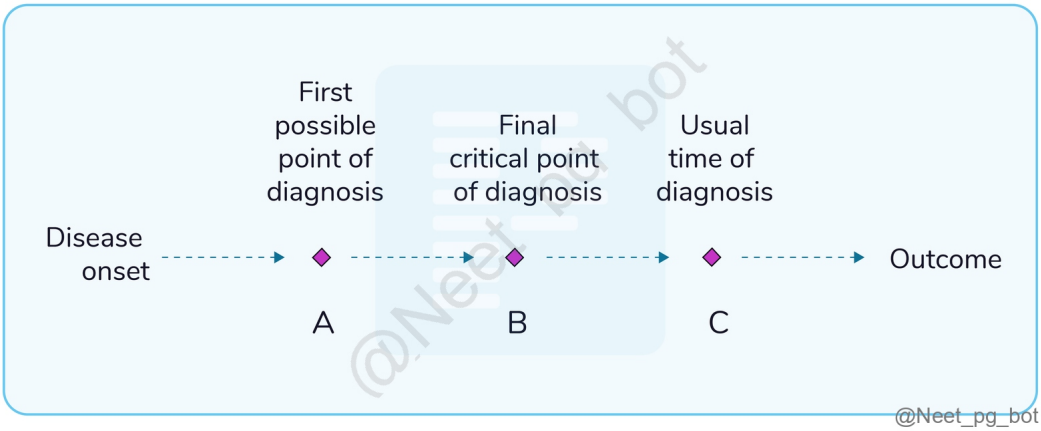
Q11: What is the term used to describe the time interval between points A and B in the flowchart depicting the natural progression of the disease? (Q859821)

A. Lead time

B. Screening time

C. Generation time

D. Lag time



See Answer in Part B → Q11

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• [05_Communicable and Non-communicable Diseases] 015 Infectious Epidemiology

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 015 Infectious Epidemiology — Quick Jump

Q1 (p. 162)	*Q2 (p. 162)*	*Q3 (p. 163)*	*Q4 (p. 164)*	*Q5 (p. 164)*	*Q6 (p. 165)*
Q7 (p. 165)	*Q8 (p. 166)*	*Q9 (p. 166)*	*Q10 (p. 166)*	*Q11 (p. 167)*	*Q12 (p. 167)*
Q13 (p. 168)	*Q14 (p. 168)*	*Q15 (p. 168)*	*Q16 (p. 169)*	*Q17 (p. 169)*	*Q18 (p. 170)*
Q19 (p. 170)	*Q20 (p. 170)*	*Q21 (p. 171)*			

Q1: Match the following terms with their correct definitions: 1. Subclinical case a. The first case of a disease identified in a group or population 2. Primary case b. A person who contracts the disease directly from the primary case. 3. Secondary case c. A person who exhibits mild or no symptoms but is still infected 4. Index case d. The first case that comes to the attention of health authorities (Q841054)

A. 1-b, 2-d, 3-c, 4-a

B. 1-b, 2-a, 3-c, 4-d

C. 1-c, 2-a, 3-b, 4-d

D. 1-d, 2-b, 3-a, 4-c

See Answer in Part B → Q1

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Q2: In the context of infectious disease epidemiology, what does a basic reproduction number (R0) of greater than 1 signify? (Q845076)

A. The infection is in decline.

B. The infection is endemic.

C. The infection has epidemic potential.

D. The infection is eliminated.

See Answer in Part B → Q2

@Neet_pg_bot

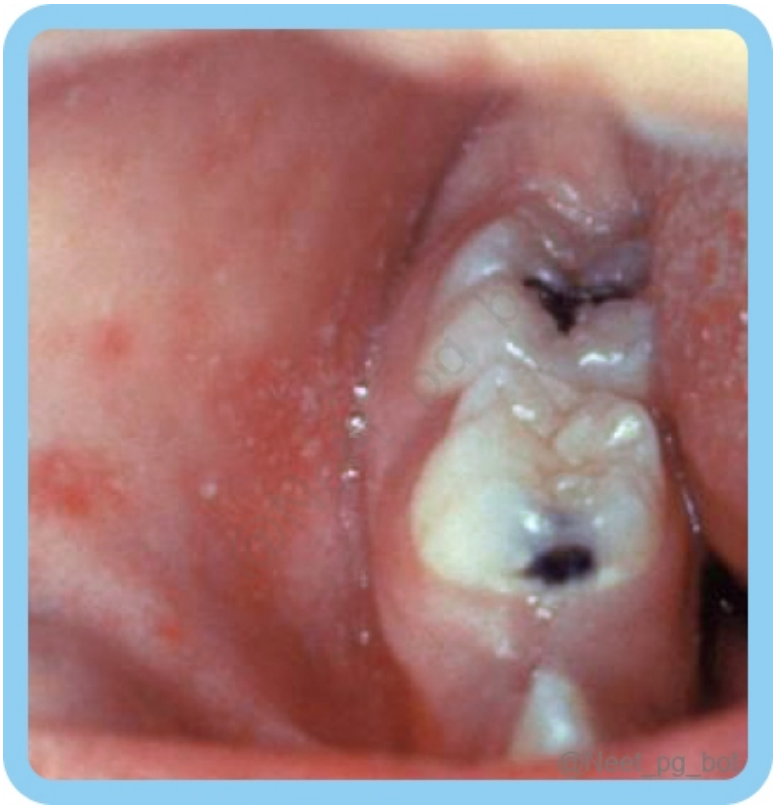
Q3: A 6-year-old child visits the pediatric clinic with a high fever, cough, runny nose, and conjunctivitis. Three days later, the child develops a distinctive maculopapular rash that starts behind the ears and spreads rapidly. The oral pharyngeal examination is shown below. During what period is this child most likely contagious and should be isolated to prevent transmission to others? (Q841250)

A. 1-2 days before to 4-5 days after the appearance of rash

B. 4-6 days before symptoms to 7 days thereafter

C. From 4 days before to 4 days after rash onset.

D. 7 days before symptoms to 7 days after the appearance of the rash



See Answer in Part B → Q3

@Neet_pg_bot

Q4: A 5-year-old child presents to the community health centre with a fever, malaise, and an itchy, vesicular rash (shown in the image below) that began two days ago. The child's mother asks when it will be safe for her child to return to school without posing a risk of spreading the infection to other children. What is the appropriate advice regarding the duration of isolation for this child to prevent the spread of this infection? (Q841249)

A. 7 days after rash onset

B. 48 hours after starting antibiotics

C. Until 3 negative stool cultures

D. Until all lesions are crusted



See Answer in Part B → Q4

@Neet_pg_bot

Q5: Match the following diseases with their typical incubation periods: 1. COVID-19 a. 18-72 hours 2. Typhoid b. 3-21 days 3. Influenza c. 10-14 days (Q841248)

A. 1-b, 2-c, 3-a

B. 1-b, 2-a, 3-c

C. 1-c, 2-a, 3-b

D. 1-a, 2-c, 3-b

See Answer in Part B → Q5

@Neet_pg_bot

Q6: During an outbreak of measles in a small community, a primary case was identified in a household of 6 people. Within the next two weeks, 4 additional household members developed measles. What is the secondary attack rate (SAR) for this household? (Q841247)

A. 50%

B. 60%

C. 66.7%

D. 80%

See Answer in Part B → Q6

@Neet_pg_bot

Q7: What specific measure does the term "secondary attack rate" refer to? (Q841246)

A. The burden of a disease.

B. Communicability of a disease.

C. Number of deaths due to a disease.

D. Carrier status of a disease

See Answer in Part B → Q7

@Neet_pg_bot

Q8: During a local polio outbreak, a routine health check reveals poliovirus in the stool of a 10-year-old boy who shows no symptoms of illness. He has been participating in community sports events. What type of carrier is this boy most likely to be? (Q841064)

A. Convalescent carrier

B. Healthy carrier

C. Incubatory carrier

D. Chronic carrier

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following best describes the median incubation period? (Q841063)

A. Shortest time from exposure to symptom onset in 50% of cases

B. Longest time from exposure to symptom onset in 50% of cases

C. Average time from exposure to recovery in 50% of cases

D. Average time from exposure to symptom onset in 50% of cases

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Match the following terms with their correct definitions: 1.Serial Interval a. The time from infection to the onset of symptoms. 2.Incubation Period b. The time between the onset of symptoms in a primary case and the onset of symptoms in secondary cases. 3.Window Period c. The time between infection and when the pathogen can be

detected by laboratory tests. 4.Generation Time d. The time from infection in a new host to the onset of symptoms in that new host. (Q841060)

A. 1-b, 2-a, 3-c, 4-d

B. 1-a, 2-b, 3-d, 4-c

C. 1-d, 2-c, 3-a, 4-b

D. 1-c, 2-d, 3-b, 4-a

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following statements best describes the difference between a carrier state and a latency period? (Q841057)

A. Carrier state: Symptomatic Latency period: Asymptomatic

B. Carrier state: Pathogen transmissible, even asymptomatic. Latency period: Pathogen dormant, not transmissible

C. Carrier state: Time before initial exposure to the pathogen Latency period: Time before symptoms appear.

D. Carrier state: Occurs when the person is recovering from the disease. Latency period: Occurs after symptoms have resolved

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Match the following: 1) Virulence a) Ability of the pathogen to cause disease by producing toxins and evading host defenses 2) Infectivity b) Ability of the pathogen to enter, survive, and multiply in the host 3) Pathogenicity c) Ability of the pathogen to induce an immune response in the host 4) Antigenicity d) Ability of the pathogen to cause disease by invading tissues and producing toxins (Q840836)

A. 1-b, 2-a, 3-c, 4-d

B. 1-a, 2-b, 3-d, 4-c

C. 1-d, 2-c, 3-a, 4-b

D. 1-c, 2-d, 3-b, 4-a

See Answer in Part B → Q12

@Neet_pg_bot

Q13: The transfer of infectious agents within the vector from one stage of life to the next occurs in which type of transmission? (Q841052)

A. Transovarian transmission

B. Propagative transmission

C. Cyclopropagative transmission

D. Transstadial transmission

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A 38-year-old male has had a fever of 103°F, chills, and severe headaches that have persisted for three days. A blood smear confirms the presence of Plasmodium falciparum trophozoites in erythrocytes. Which type of biological transmission does this parasite undergo within the vector? (Q841048)

A. Propagative transmission

B. Cyclodevelopmental transmission

C. Cyclopropagative transmission

D. Both A and B

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following diseases is spread via droplet nuclei? (Q841045)

A. Whooping cough

B. Diphtheria

C. Common cold

D. Chickenpox

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A 28-year-old pregnant woman was screened for TORCH infections in her third trimester. Which of the following diseases is typically associated with vertical transmission during this trimester of pregnancy? (Q841044)

A. Rubella

B. Parvovirus

C. Varicella

D. Toxoplasmosis

See Answer in Part B → Q16

@Neet_pg_bot

Q17: A 37-year-old male presents with sudden onset fever and a rapidly enlarging tender lymph node in the left axilla. Considering the clinical history of plague, which of the following is true regarding the vector responsible for transmission of this infection? (Q841034)

A. Pathogens undergo multiplication within the vector

B. Pathogen undergoes development within the vector.

C. None of the above

D. All of the above

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which of the following diseases exclusively involves obligate hosts in its transmission cycle? (Q840863)

A. Measles

B. Sleeping sickness

C. Hydatid disease

D. Filaria

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Which of the following diseases are seen in the transmission cycle of dead-end hosts? (Q840859)

A. Tetanus

B. TB

C. Dengue fever

D. Malaria

See Answer in Part B → Q19

@Neet_pg_bot

Q20: Which of the following correctly identifies the primary and secondary hosts? (Q840850)

A. Malaria: Primary Host - Mosquitoes, Secondary Host - Humans

B. Filaria: Primary Host - Mosquitoes(Anopheles), Secondary Host - Humans

C. Dengue: Primary Host - Ticks, Secondary Host - Humans

D. Chikungunya: Primary Host - Humans, Secondary Host - Ticks

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Which of the following correctly pairs the disease with its primary reservoir and source of infection? (Q840842)

A. Disease: Measles, Reservoir: Humans, Source of Infection: Respiratory droplets

B. Disease: Plague, Reservoir: Soil, Source of Infection: Contaminated wounds

C. Disease: Tetanus, Reservoir: Humans, Source of Infection: Mosquito bites

D. Disease: Malaria, Reservoir: Wild rodents, Source of Infection: Flea bites

See Answer in Part B → Q21

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 016 Mumps Measles Rubella Pertussis

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 016 Mumps Measles Rubella Pertussis — Quick Jump

Q1 (p. 172) *Q2 (p. 172)* *Q3 (p. 173)* *Q4 (p. 173)* *Q5 (p. 174)* *Q6 (p. 174)*
Q7 (p. 175) *Q8 (p. 175)* *Q9 (p. 175)* *Q10 (p. 176)*

Q1: A 2-year-old child presents to the clinic with a persistent cough lasting for 2 weeks. The cough consists of rapid, consecutive coughs followed by an inspiratory gasp and post-tussive vomiting. The child's 5-year-old sibling, who attends preschool, developed similar symptoms 10 days ago.Based on the clinical presentation and exposure history described, what is the likelihood that the child's sibling will develop similar symptoms within the next few weeks? (Q840557)

A. 10%

B. 25%

C. 50%

D. >90%

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Match the following pathogen with its incubation period? Pathogen Incubation period A. Mumps 1. 10 - 14days B. Measles 2. 18 days C. Rubella 3. 14 - 18 days D. Pertussis 4. 7-14 days (Q840587)

A. A-3, B-1, C-2, D-4

B. A-1, B-2, C-3, D-4

C. A-2, B-3, C-4, D-1

D. A-4, B-1, C-2, D-3

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A 10-year-old child presents with a low-grade fever for the past 5 days . Upon examination, the child appears as shown below. Which of the following is true about this condition? (Q840598)

A. It is the leading cause of pancreatitis in children

B. Infectious cause of conductive hearing loss

C. 0.5 ml of Jeryl Lynn strain vaccine given intradermally

D. Septic meningitis is a common complication



See Answer in Part B → Q3

@Neet_pg_bot

Q4: A 6-month-old infant is brought to the pediatric clinic to receive the third dose of the DPT (Diphtheria, Pertussis, Tetanus) vaccine. Which of the following is a potential side effect of the pertussis component of the vaccine? (Q840610)

A. Intussusception

B. Toxic shock syndrome

C. Guillain-Barré syndrome

D. Inconsolable cry

See Answer in Part B → Q4

@Neet_pg_bot

Q5: A 4 Y/o girl has been brought to the clinic with a high fever, cough, runny nose, and red eyes for the past three days associated with a red, blotchy rash that started on her face and has now spread to her trunk and limbs. On examination, greyish-white spots on the buccal mucosa are noticed. If this febrile illness is caused by a ssRNA paramyxovirus, which of the following is most specific for making a clinical diagnosis in this child? (Q840620)

A. Coryza and conjunctivitis

B. Grayish white spots on buccal mucosa

C. High fever

D. Rash from face spread to trunk and limbs

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following complications is the most common cause of death in measles? (Q840649)

A. Protein-losing enteropathy

B. Subacute sclerosing panencephalitis

C. Pneumonia

D. Otitis Media

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following statements about the measles vaccine is incorrect? (Q840657)

A. The measles vaccine is available in monovalent and combination forms.

B. The first dose of the measles vaccine is administered at 9 completed months.

C. The MR variant is used under the National Immunisation Schedule

D. The measles vaccine follows the open vial policy and can be used for multiple doses once reconstituted.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following is least likely to be a feature of Congenital Rubella Syndrome (CRS)? (Q840662)

A. Cataracts

B. Sensorineural deafness

C. Patent ductus arteriosus

D. Conductive hearing loss

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following statements about the rubella-containing vaccine (RCV) is incorrect? (Q840682)

A. The live attenuated RA 27/3 strain is used in the rubella vaccine

B. RCVs have a shelf-life of 2-3 years when stored at 4°C

C. The recommended dose of RCV is 1.0 ml injected subcutaneously

D. Recipients of RCV are advised not to become pregnant for 1 month after vaccination

See Answer in Part B → Q9

@Neet_pg_bot

Q10: What is the primary goal of the "Keep up" strategy in the WHO measles and rubella elimination strategy? (Q840687)

A. Conducting a nationwide vaccination campaign targeting all children born after the catch-up campaign

B. Ensuring routine services aimed at vaccinating more than 95% of each successive birth cohort

C. Targeting all children 9 months to 14 years of age, irrespective of history of measles disease

D. Conducting vaccination campaigns every 2-4 years

See Answer in Part B → Q10

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 017 Chicken Pox Small Pox And Diphtheria

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 017 Chicken Pox Small Pox And Diphtheria — Quick Jump

Q1 (p. 177) *Q2 (p. 177)* *Q3 (p. 178)* *Q4 (p. 178)* *Q5 (p. 178)* *Q6 (p. 179)*
Q7 (p. 179) *Q8 (p. 179)* *Q9 (p. 180)* *Q10 (p. 180)*

Q1: A 35-year-old man presents with a fever and a rash that started as small, red spots on his trunk and has now progressed to fluid-filled blisters over the past 3 days. He mentions that he recently returned from a business trip where he attended a conference with participants from various countries. What is the most likely period during which he could have contracted chickenpox? (Q840785)

A. 5 days ago

B. 8 days ago

C. 16 days ago

D. None of the above

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following is transmitted by droplet nuclei? (Q840787)

A. Meningococcal meningitis

B. Chickenpox

C. Diphtheria

D. Herpes simplex virus

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following statements about chicken pox vaccination is true? (Q840788)

A. The chickenpox vaccine is typically administered intravenously.

B. Vaccination is recommended only for adults who have never had chicken pox.

C. Varicella vaccine effectively prevents chickenpox and its complications.

D. Vaccination against chickenpox is only necessary if there is a current outbreak in the community

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following factors was crucial to the successful global eradication of smallpox? (Q840790)

A. The causative agent of smallpox, Variola virus, could only survive in humans.

B. Smallpox eradication was achieved using a single-dose oral vaccine.

C. The Variola virus had multiple animal reservoirs, which made it easier to track and eliminate.

D. Smallpox was eradicated because it could be easily diagnosed only with advanced laboratory tests.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following is most important to emphasize in educating the public about preventing the spread of diphtheria? (Q840791)

A. Diphtheria is primarily spread through contaminated fomites, so good hygiene is crucial.

B. Maintaining high vaccination coverage is essential to prevent the spread of diphtheria.

C. Individuals who recover from diphtheria are immune to becoming carriers.

D. Diphtheria infection primarily affects older adults with weakened immune systems.

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A 5-year-old child presents with sore throat, low-grade fever, a grayish membrane on the tonsils, and swelling of the neck. Which statement about carriers of this infection is true, and how should they be managed? (Q840793)

A. Carriers are asymptomatic and require no treatment.

B. Carriers should receive antibiotics to eliminate bacteria and prevent transmission.

C. Carriers can be identified by the greyish membrane on their tonsils.

D. Carriers are insignificant in disease spread and can be overlooked.

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A patient presents with suspected diphtheria and has a documented history of severe anaphylaxis to horse serum. What is the most appropriate management strategy for this patient? (Q840795)

A. Administer a full dose of diphtheria antitoxin intravenously, as the benefits outweigh the risks.

B. Administer a reduced dose of diphtheria antitoxin intramuscularly with close monitoring.

C. Avoid diphtheria antitoxin and treat with high-dose penicillin or erythromycin for 5-6 days.

D. Perform skin sensitivity testing with a reduced concentration of diphtheria antitoxin before administration.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A child is diagnosed with diphtheria. The child's parent, who is unvaccinated and asymptomatic, is identified as a close contact. What is the MOST appropriate management for the parent? (Q840797)

A. Administer a single booster dose of diphtheria toxoid.

B. Administer diphtheria antitoxin (DAT) and complete the diphtheria toxoid series.

C. Administer prophylactic penicillin or erythromycin only.

D. No action is needed since the parent is asymptomatic.

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A 25-year-old woman presents with a rash that started as small, itchy red bumps on her trunk and has now progressed to fluid-filled blisters over the past 2 days. She reports feeling generally unwell with a mild fever. What is the most common neurological complication associated with this disease? (Q840839)

A. Meningitis

B. Encephalitis

C. Guillain-Barré syndrome

D. Peripheral neuropathy

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A pregnant woman is exposed to chickenpox, but her immune status is unknown. According to the guidelines, what is the recommended course of action? (Q840848)

A. Immediate administration of the varicella vaccine to prevent maternal infection.

B. Test for maternal antibodies to determine immune status.

C. Administration of varicella-zoster immune globulin.

D. Prescription of antiviral medications such as acyclovir to prevent fetal transmission.

See Answer in Part B → Q10

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 018 Acute Respiratory Infection And Tuberculosis

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 018 Acute Respiratory Infection And Tuberculosis — Quick Jump

Q1 (p. 182) *Q2 (p. 182)* *Q3 (p. 183)* *Q4 (p. 183)* *Q5 (p. 183)* *Q6 (p. 184)*
Q7 (p. 184) *Q8 (p. 185)* *Q9 (p. 185)* *Q10 (p. 185)* *Q11 (p. 186)*

Q1: Under which initiative are acute respiratory illness, malnutrition & diarrhea managed in children aged 0 to 5 years? (Q841121)

A. Expanded Program on Immunization (EPI)

B. National Rural Health Mission (NRHM)

C. Integrated Management of Neonatal and Childhood Illness (IMNCI)

D. National Vector Borne Disease Control Program (NVBDCP)

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A 6-month-old infant presents with vomiting, refusal to feed, loose stools for 2 days, and a also had a bout of convulsions an hour ago. On exam, he is lethargic and difficult to wake. According to IMNCI guidelines, which of the following is not a danger sign? (Q841123)

A. Lethargy and difficult to wake

B. Refusal to feed

C. Convulsions

D. Frequent loose stools

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A mother brings her 10-month-old daughter to the clinic with complaints of refusal to feed and vomiting everything for the past 2 days. On examination, she is lethargic and also has fever. According to the IMNCI color coding system, how should this child be classified? (Q841125)

A. Green (Mild illness)

B. Yellow (Moderate illness)

C. Pink (Severe illness)

D. Orange (Moderate illness)

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A child aged 2 months was brought to the PHC by his mother. She reports that he has been very fussy and irritable for the past 3 days. Initially, she noticed that he had a mild cough and a runny nose. Over the past 24 hours, his symptoms worsened and he is breathing rapidly. O/E the child is lethargic and irritable. His respiratory rate was 70/minute, chest drawing was present. The most appropriate line of management for this patient is. (Q841126)

A. Classify as pneumonia and refer urgently to secondary level hospital.

B. Classify as pneumonia, start antibiotic, and advise to report after 2 days

C. Classify as very severe pneumonia, start antibiotics, and refer urgently.

D. Classify as severe pneumonia and keep the baby warm.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: A 3yr old boy was brought to the clinic for complaints of cough and runny nose. He is otherwise healthy and is on schedule with his vaccinations. On examination, he had rapid breathing and was restless. Which of the following is considered to be fast breathing in children of 1 to 5 years of age? (Q841128)

A. Respiratory rate > 30/min

B. Respiratory rate > 40/min

C. Respiratory rate > 50/min

D. Respiratory rate > 60/min

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Match the following : a) M. Kansasii i) Rapid growers b) M. Leprae ii) Scotochromogens c) M. Fortuitum iii) Photochromogens d) M. Scrofulaceum iv) Sensitive to INH (Q841129)

A. a-iii, b-iv, c-i, d-ii

B. a-i, b-iii, c-iv, d-ii

C. a-ii, b-i, c-iv, d-iii

D. a-iv, b-ii, c-i, d-iii

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following statements is true about latent TB? A) 10% people with latent TB can develop active TB B) Individual can spread TB to others C) Alpha interferon test will be positive D) The bacilli are non-dormant (Q841131)

A. A and C

B. B and D

C. A, B and D

D. Only B

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Tuberculin conversion index aka Annual risk of infection (ARI) is a measure of? (Q841132)

A. Incidence of TB Infection

B. Prevalence of TB infection

C. Incidence of TB disease

D. Prevalence of TB disease

See Answer in Part B → Q8

@Neet_pg_bot

Q9: In which of the following is the tuberculin test considered negative? (Q841134)

A. 12 mm induration in a HIV negative drug abuser

B. 10 mm induration in a 2 year old child

C. 8 mm induration in a patient with silicosis

D. 6 mm induration in a person with recent contact with active TB

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A 55-year-old healthcare worker with rheumatoid arthritis is started on immunosuppressive therapy. What is the most appropriate reason to perform a two-step tuberculin skin test (TST) before initiating treatment? (Q841135)

A. To assess the patient's baseline immunity against tuberculosis

B. To confirm a recent positive TST result

C. To differentiate between a boosted reaction and a new infection

D. To monitor the effectiveness of immunosuppressive therapy on latent tuberculosis

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A 2-year-old boy weighing 6 kg was brought to the clinic by his mother. He has been experiencing frequent loose stools and has also had a runny nose, cough, and sore throat for the past two days. Under which initiative are these diseases managed in children aged 0 to 5 years? (Q844338)

A. Expanded Program on Immunization (EPI)

B. National Rural Health Mission (NRHM)

C. Integrated Management of Neonatal and Childhood Illness (IMNCI)

D. National Vector Borne Disease Control Program (NVBDCP)

See Answer in Part B → Q11

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• [05_Communicable and Non-communicable Diseases] 019 Polio Hepatitis Diarrhoea Cholera Typhoid

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 019 Polio Hepatitis Diarrhoea Cholera Typhoid — Quick Jump

Q1 (p. 187)	*Q2 (p. 187)*	*Q3 (p. 188)*	*Q4 (p. 188)*	*Q5 (p. 188)*	*Q6 (p. 189)*
Q7 (p. 189)	*Q8 (p. 190)*	*Q9 (p. 190)*	*Q10 (p. 190)*	*Q11 (p. 191)*	*Q12 (p. 191)*

Q1: In the context of polio in India, which of the following statements is correct regarding the different types of poliovirus (Type 1, Type 2, and Type 3)? (Q841148)

A. India has successfully eradicated Type 1, but Type 2 and Type 3 still remain a threat.

B. Type 2 poliovirus has been eradicated globally, and India is free from both Type 2 and Type 3 poliovirus, with efforts ongoing to eradicate Type 1.

C. All three types of poliovirus are still prevalent in India, requiring continued vaccination efforts.

D. World Health Organization declared India polio-free in 2014, and no Type 1, Type 2, or Type 3 poliovirus cases have been reported.

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following accurately describes the differences between the Oral Polio Vaccine (OPV) and the Inactivated Polio Vaccine (IPV)? (Q841150)

A. OPV is a killed formalized virus vaccine administered subcutaneously, while IPV is a live attenuated virus vaccine taken orally.

B. OPV provides both humoral and intestinal immunity and is effective in controlling epidemics, while IPV provides only humoral immunity and is not useful in controlling epidemics.

C. OPV requires less stringent storage and transport conditions compared to IPV.

D. Both OPV and IPV have the same shelf life and risk of vaccine-associated paralytic poliomyelitis (VAPP).

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following statements accurately differentiates between OPV and IPV in terms of their composition and the measurement of vaccine strength? (Q841151)

A. OPV contains live attenuated poliovirus, and the quantity of antigen per dose measures its strength. IPV contains killed poliovirus, and the potency of the live virus measures its strength.

B. OPV contains killed poliovirus, and its strength is measured by the quantity of antigen per dose. IPV contains live attenuated poliovirus, and the potency of the live virus measures its strength.

C. OPV contains live attenuated poliovirus, and the potency of the live virus measures its strength. IPV contains killed poliovirus, and the quantity of antigen per dose measures its strength.

D. OPV and IPV both contain live attenuated poliovirus, and their strengths are measured by the quantity of antigen per dose.

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following Hepatitis B virus (HBV) markers is correctly paired with its significance? (Q841181)

A. HBsAg + HBeAg + IgM - Indicates acute infection with high infectivity

B. HBsAg + HBeAg + IgG- Indicates acute infection in recovery phase

C. Anti-HBc only - Indicates immunity due to vaccination

D. Anti-HBs + HBeAg + IgG - Indicates recovery from infection in recent past

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following correctly represents the composition of the new reduced osmolarity Oral Rehydration Solution (ORS)? (Q841182)

A. Sodium: 75 mmol/L, Glucose: 75 mmol/L, Potassium: 20 mmol/L, Chloride: 65 mmol/L, Citrate: 10 mmol/L, Total Osmolarity: 245 mOsm/L

B. Sodium: 70 mmol/L, Glucose: 70 mmol/L, Potassium: 25 mmol/L, Chloride: 65 mmol/L, Citrate: 15 mmol/L, Total Osmolarity: 245 mOsm/L

C. Sodium: 75 mmol/L, Glucose: 75 mmol/L, Potassium: 20 mmol/L, Chloride: 60 mmol/L, Citrate: 15 mmol/L, Total Osmolarity: 245 mOsm/L

D. Sodium: 70 mmol/L, Glucose: 70 mmol/L, Potassium: 20 mmol/L, Chloride: 60 mmol/L, Citrate: 10 mmol/L, Total Osmolarity: 230 mOsm/L

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following is an additional ion present in ReSoMal? (Q841183)

A. Sodium

B. Calcium

C. Potassium

D. Magnesium

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following statements is false regarding Super ORS? (Q841184)

A. Super ORS instead of mono sugars, is based on complex sugars such as rice or amino acids like glycine or alanine.

B. It provides more calories (180 kcal/L) and is intended to cause weight gain in the malnourished.

C. Super ORS has a long shelf life and can be prepared once a week.

D. It helps reduce stool output, the frequency of stools, and the duration of diarrhea.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following statements is incorrect regarding the components of Oral Rehydration Solution (ORS)? (Q841185)

A. The glucose dependent sodium and water absorption is the principle behind replacing glucose and sodium in 1:1 molar ratio in the WHO-ORS.

B. Potassium improves the absorption of sodium and water by enhancing concentration gradient for sodium.

C. Trisodium citrate improves the shelf life of ORS, making it more stable.

D. Trisodium citrate reduces stool output by 25% and enhances sodium and water absorption.

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A 2-year-old child presents with 2-3 episodes of diarrhea and on examination for skin returns quickly when pinched, there is no excessive thirst or refusal to drink fluids and the child accepts fluids or food orally without any difficulty. Which of the following management steps is incorrect for treating the child at home concerning the clinical symptoms? (Q841187)

A. Counsel the mother to give extra fluids and continue feeding.

B. Provide frequent small sips of 50-100 ml of fluid after each loose stool.

C. Mandatory administration of ORS solution every 2 hours to prevent signs and symptoms of dehydration.

D. Give zinc supplementation of 20mg for 14 days.

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following statements is incorrect regarding cholera? (Q841188)

A. The predominant serotype of cholera in India is the El Tor biotype of Vibrio cholerae O1.

B. Cholera is no longer a notifiable disease locally and nationally, but remains notifiable internationally.

C. The oral cholera vaccine Dukoral includes a recombinant cholera toxin B subunit and is suitable for children under two years.

D. Shanchol and mORCVAX are oral cholera vaccines based on serogroups O1 and O139, used for individuals over 1 year of age.

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A 7-year-old child presents with fever, abdominal pain, and a rash. Blood cultures confirm typhoid fever. The pediatrician discusses vaccination for family members for future typhoid prevention. Which of the following statements about typhoid vaccines is incorrect? (Q841190)

A. Ty21a is a live vaccine administered orally and recommended for individuals over 5 years old.

B. The Vi polysaccharide vaccine is a killed vaccine given subcutaneously or intramuscularly, suitable for children over 2 years old.

C. Ty21a requires a single dose shot that is repeated every 3 years.

D. The Vi polysaccharide vaccine does not elicit adequate immune responses in children aged less than 2 years.

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following statements is false regarding typhoid? (Q841191)

A. Typhoid is endemic in India.

B. Man is the only reservoir for typhoid infection.

C. Diagnosis of typhoid includes blood culture in the 1st week, Widal test in the 2nd week, and fecal and urine cultures in the 3rd and 4th weeks.

D. Somatic O Antigen is higher in the post-vaccination phase, and Flagellar H Antigen is higher in the post-infection phase.

See Answer in Part B → Q12

• [05_Communicable and Non-communicable Diseases] 020 Dengue Malaria And Rabies

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 020 Dengue Malaria And Rabies — Quick Jump

Q1 (p. 193)	*Q2 (p. 193)*	*Q3 (p. 194)*	*Q4 (p. 194)*	*Q5 (p. 194)*	*Q6 (p. 195)*
Q7 (p. 195)	*Q8 (p. 196)*	*Q9 (p. 196)*	*Q10 (p. 196)*	*Q11 (p. 197)*	*Q12 (p. 197)*
Q13 (p. 197)	*Q14 (p. 198)*	*Q15 (p. 198)*	*Q16 (p. 199)*		

Q1: Which of the following factors is true regarding the spread of dengue infection? (Q841194)

A. Aedes mosquito breeds natural dirty water bodies with a flight range of 100 meters.

B. Aedes survives best between humidity of 40-60% and temperature 19-25 0 C

C. A. aegypti, being a discordant feeder, results in clustering and generation of multiple dengue cases

D. Dengue cases among children report a more severe infection than the adult population

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A 23-year-old woman presents with 3 days of high fever, headache, and joint pain. Examination reveals a maculopapular rash and a positive tourniquet test. Labs show leukopenia, thrombocytopenia, and mildly elevated liver enzymes. What is the most appropriate next step for diagnosis? (Q841195)

A. Rapid antigen detection test

B. Blood culture

C. PCR for parasites

D. IgM ELISA

See Answer in Part B → Q2

@Neet_pg_bot

Q3: All of the following are true about larval surveillance? (Q841196)

A. House or its premises searched for water-holding containers: Sampling unit

B. Number of containers positive/ number of containers checked: Container index

C. Number of containers positive for larvae / number of houses checked: Breteau index

D. All the above

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A 40-year-old male presents with a history of a dog bite he sustained 3 weeks ago and reports tingling at the site of the bite and difficulty swallowing. On examination, he appears anxious and is hypersensitive to stimuli. Which of the following is true regarding this condition? (Q841197)

A. Natural infection is caused by a fixed subtype of bullet-shaped DNA virus

B. Aerosol mode transmission is not reported in India

C. Licks on abraded skin are not considered a route of transmission

D. The highest rabies fatality in India is reported in the Andaman and Nicobar Islands.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: A 30-year-old male was scratched by a cat during a hiking trip. The patient reports mild pain with a healthy wound that appears clean. The cat ran away immediately. What is the most appropriate initial management strategy for this patient? (Q841198)

A. Clean the wound, prescribe antibiotics and tetanus toxoid.

B. Clean the wound, followed by a full course of anti-rabies vaccination

C. Clean the wound followed by anti-rabies vaccination and rabies immunoglobulin

D. Clean the wound with soap and water, followed by surgical debridement

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A 10-year-old boy was bitten on the forearm by a stray dog. The bite wound is superficial with mild bleeding. Based on the Indian rabies management guidelines, which of the following is not recommended for this patient? (Q841199)

A. Intramuscular 0.1 ml vaccination on days 0, 3, 7 and 28 is preferred.

B. 70% of rabies immunoglobulin should be administered around the wound.

C. Deltoid is the recommended site for this patient.

D. Intradermal regimen consists of two doses administered at each of four sessions.

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A 30-year-old man presents after being bitten by a dog. He completed a full rabies vaccination series 5 months ago following a previous bite. What is the appropriate post-exposure prophylaxis? (Q841200)

A. Administer a full course of rabies vaccine again (4 doses).

B. Administer two doses of rabies vaccine on days 0 and 3.

C. No rabies vaccine is needed due to recent vaccination.

D. Administer rabies immunoglobulin (RIG) and a full course of rabies vaccine (4 doses).

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following statements about the rabies vaccine are correct? Rabies vaccine is absolutely contraindicated in pregnant women. Immunocompromised individuals may require a full vaccination series even if previously vaccinated. The rabies vaccine should be administered intramuscularly in the deltoid region for adults. Rabies immunoglobulin (RIG) is required for all re-exposures, regardless of previous vaccination status. When a bite is from a vaccinated pet dog, post-exposure prophylaxis is not required. (Q841201)

A. Statements 1 and 4 are correct

B. Statements 2 and 5 are correct

C. Statements 3 and 5 are correct

D. Statements 2 and 3 are correct

See Answer in Part B → Q8

@Neet_pg_bot

Q9: All are true regarding rabies vaccine except? (Q841202)

A. Can be given both pre-exposure and post-exposure.

B. Contains live attenuated virus.

C. Typically administered as a series of doses for complete protection.

D. Provide long term immunity after the initial series is completed.

See Answer in Part B → Q9

@Neet_pg_bot

Q10: In an urban area with many rabies cases, which measures are most appropriate to control the disease and transmission? (Q841203)

A. Mass vaccination of domestic dogs and cats

B. Culling of stray dogs and cats

C. Quarantine of all suspected rabid animals

D. Public awareness campaigns about avoiding animal bites

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A 35-year-old man returns from a Chennai trip and presents with fever, chills, and sweating. His blood smear shows ring forms in red blood cells. What is the most likely vector for this infection? (Q841204)

A. Anopheles culicifaciens

B. Anopheles stephensi

C. Anopheles fluviatilis

D. Anopheles minimus

See Answer in Part B → Q11

@Neet_pg_bot

Q12: All of the following are true regarding the epidemiology of malaria, except? (Q841205)

A. Anopheles mosquitoes are primarily nocturnal feeders.

B. Incidence is highest in tropical and subtropical regions

C. Quartan malaria is caused by Plasmodium malariae; fever cycles every 48 hours.

D. Can also be transmitted through blood transfusions and organ transplants.

See Answer in Part B → Q12

@Neet_pg_bot

Q13: In a town of 5000 people, approximately 400 people are positive for malaria in a year. What is the annual parasite incidence in this town? (Q841206)

A. 70

B. 80

C. 90

D. 100

See Answer in Part B → Q13

@Neet_pg_bot

Q14: The local governing body of a population, which consists of 7000 people, decides to prepare smears from 700 infants, among which 140 of them were positive for malaria. What is the infant parasite rate in this population? (Q841207)

A. 10%

B. 15%

C. 20%

D. 25%

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A district has a population of 7,50,000, among which 56,000 smears were prepared last year to detect malaria. What is this population's annual blood examination rate (ABER) for last year? (Q841208)

A. 7.5%

B. 8.4%

C. 8.8%

D. 9.5%

See Answer in Part B → Q15

@Neet_pg_bot

Q16: In a town of 4000 people in the last month, malarial smears have been prepared for 600 people who suffered acute febrile illness episodes, among which 85 were found to be positive for vivax, 25 for ovale and 10 for falciparum malaria. What is the updated slide positivity rate in this population? (Q841209)

A. 10%

B. 15%

C. 20%

D. 25%

See Answer in Part B → Q16

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 021 Filariasis Leptospirosis Japanese Encephalitis And Helminthic Infections

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 021 Filariasis Leptospirosis Japanese Encephalitis And Helminthic Infections — Quick Jump

Q1 (p. 200) *Q2 (p. 201)* *Q3 (p. 202)* *Q4 (p. 203)* *Q5 (p. 203)* *Q6 (p. 203)*
Q7 (p. 204) *Q8 (p. 204)* *Q9 (p. 205)* *Q10 (p. 205)* *Q11 (p. 205)* *Q12 (p. 206)*
Q13 (p. 206)

Q1: A 40-year-old man presents with swelling and mild pain in his left leg for several years. Physical examination revealed bulky, stiff skin with inguinal lymphadenopathy in the left lower limb (image). What is the most likely diagnosis based on the clinical findings? (Q840566)

A. Lepromatous leprosy

B. Elephantiasis

C. Cutaneous leishmaniasis

D. African trypanosomiasis



See Answer in Part B → Q1

@Neet_pg_bot

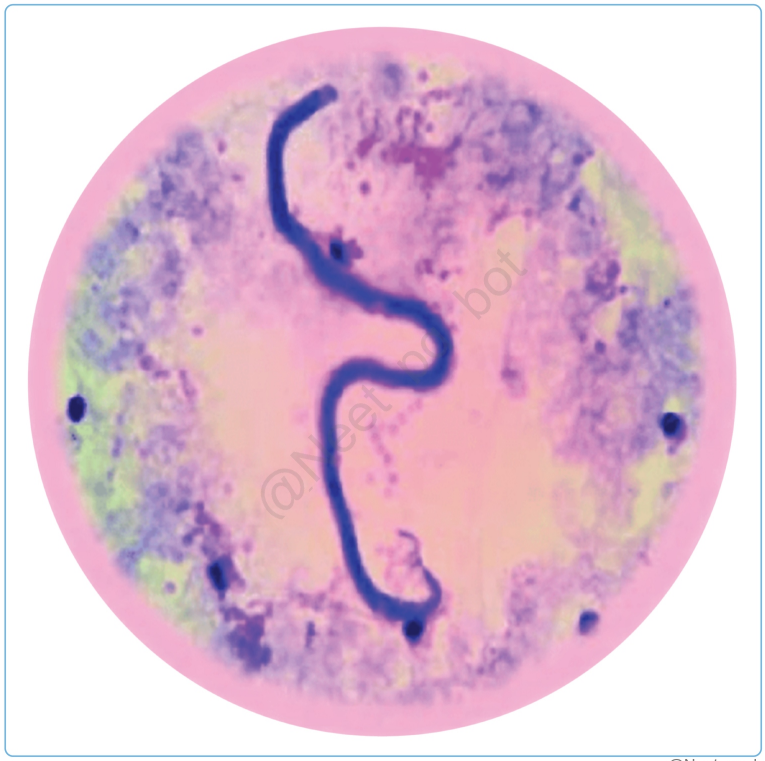
Q2: A 42-year-old man presented to the hospital with swelling and thickening of both legs. A thick blood film revealed the following image. Which of the following statements is correct regarding the diagnosis of this condition? (Q840573)

A. Mass blood surveys with thick blood films are prepared between 10 AM to 2 PM

B. Drug provocation test has the highest specificity

C. Serological tests can differentiate between past and present infections

D. ■■Rapid detection test is used as an investigation of choice for this condition



See Answer in Part B → Q2

@Neet_pg_bot

Q3: A 42-year-old male presents with leg swelling and hydrocele on his left side. Blood tests reveal the presence of microfilariae of W. bancrofti. Which of the following statements regarding the management of the disease are false? Statements: Mass drug administration once in 2 years with triple-drug therapy reduces transmission. Effective MDA coverage should be >30% for 5-6 years. Integrated vector management includes anti-larval and anti-adult measures for preventing filariasis. Ivermectin 150-200 mcg/Kg as a combination treatment is effective in killing microfilariae (Q840580)

A. 1 and 2

B. 1, 2 and 4

C. 2 and 3

D. 1 and 4

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A 30-year-old male farmer presents with worsening fever and weight loss for the last 2 months. Physical examination demonstrated significant hepatosplenomegaly. Laboratory tests show pancytopenia and a positive rk39 test. Which of the following is the treatment of choice for this condition? (Q840588)

A. Liposomal amphotericin B

B. Pentamidine

C. Miltefosine

D. Paromomycin

See Answer in Part B → Q4

@Neet_pg_bot

Q5: A 45-year-old male who works in flooded rice fields presents with a 5-day history of high fever, headache, and yellowing of the eyes. Physical examination demonstrated conjunctival redness and calf tenderness. Laboratory tests reveal elevated liver enzymes. Which of the following is the most likely diagnosis? (Q840592)

A. Dengue hemorrhagic fever

B. Malaria

C. Leptospirosis

D. Hepatitis A

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following antibiotics is not recommended for the treatment of leptospirosis? (Q840603)

A. Doxycycline

B. Penicillin

C. Amoxicillin

D. Ciprofloxacin

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following statements about the epidemiological features of Japanese Encephalitis is incorrect? (Q840608)

A. The virus belongs to the Flaviviridae family

B. Humans are the primary reservoir hosts for the Japanese Encephalitis irus

C. Primary vectors for Japanese Encephalitis are Culex mosquitoes.

D. Horses can show clinical manifestations

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A 10-year-old boy from rural Uttar Pradesh presents with high fever, severe headache, vomiting, altered mental status, neck stiffness, and positive Brudzinski's sign. He is unvaccinated and lives near rice fields and pig farms during the monsoon season. What is the most likely diagnosis and the investigation of choice for confirmation? (Q840615)

A. Bacterial meningitis; Blood culture

B. Herpes Simplex Encephalitis; PCR

C. Japanese Encephalitis; IgM ELISA

D. Dengue fever; NS1 antigen test

See Answer in Part B → Q8

@Neet_pg_bot

Q9: All of the following are true about the Live-attenuated JE vaccine except? (Q840619)

A. Included in the national immunisation schedule in endemic districts

B. Administered via the subcutaneous route.

C. Vaccination schedules include a primary series followed by a booster dose.

D. It can be administered to children as young as 6 months old.

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A 30-year-old non-immunized traveler returns from a trip to a tropical region and presents with a high fever, chills, severe headache, muscle pain, nausea, vomiting, and jaundice. Which of the following parameters is unsuitable for transmitting the suspected disease? (Q840626)

A. Humidity in environment >60%

B. Temperature of climate ranging 18-24°C

C. Aedes mosquito in the area

D. Presence of monkeys in the area

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following statements about the yellow fever vaccine are correct? Intradermal administration The recommended age for administration is 7 months or

older. A booster dose is required every 10 years for continued immunity. The vaccine contains a live-attenuated virus. A yellow card is issued for travel. (Q840633)

A. 1 and 3

B. 2 and 4

C. 1 and 5

D. 4 and 5

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following are the intermediate hosts of dracunculiasis? (Q840642)

A. Sandflies

B. Hard ticks

C. Soft ticks

D. Cyclops

See Answer in Part B → Q12

@Neet_pg_bot

Q13: A 35-year-old farmer from a tropical region presented with chronic fatigue and pallor. There is a history of barefoot farming practices and frequent contact with soil contaminated by human feces. Laboratory tests revealed severe iron deficiency anemia. What number of eggs per gram of stool of this farmer makes this disease a major public health problem? (Q840650)

A. >100

B. >150

C. >250

D. >300

See Answer in Part B → Q13

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 022 Plague Tetanus Hiv Aids Rickettsial Disease Ebola Nipah And Zika Virus

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 022 Plague Tetanus Hiv Aids Rickettsial Disease Ebola Nipah And Zika Virus — Quick Jump

Q1 (p. 208)	*Q2 (p. 208)*	*Q3 (p. 209)*	*Q4 (p. 209)*	*Q5 (p. 209)*	*Q6 (p. 210)*
Q7 (p. 210)	*Q8 (p. 211)*	*Q9 (p. 211)*	*Q10 (p. 211)*	*Q11 (p. 212)*	*Q12 (p. 212)*
Q13 (p. 213)	*Q14 (p. 213)*	*Q15 (p. 213)*	*Q16 (p. 214)*		

Q1: Which of the following is the primary vector for transmitting the plague to humans? (Q841097)

A. Anopheles spp.

B. Ixodes spp.

C. Xenopsylla cheopis

D. Pediculus humanus

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which flea indices are considered the most significant for predicting plague outbreaks? (Q841099)

A. Total flea index

B. Specific flea index

C. Cheopis index

D. Burrow index

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is considered the most effective method to break the transmission cycle of plague? (Q841100)

A. Mass vaccination

B. Widespread use of antibiotics

C. Vector control

D. Quarantine of infected individuals

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A 28-year-old pregnant woman at 20 weeks of gestation visits a PHC for her antenatal check-up. Her last tetanus vaccination was 12 years ago. According to the National Immunization Schedule of India, what is the most appropriate tetanus vaccination recommendation for this patient ? (Q841101)

A. No vaccination is required as she received a TT dose 12 years ago

B. Administer one dose of Td vaccine immediately

C. Administer two doses of Td vaccine, 4 weeks apart

D. Administer three doses of TT vaccine at 0, 1, and 6 months

See Answer in Part B → Q4

@Neet_pg_bot

Q5: What is the most effective and efficient measure for preventing neonatal tetanus during delivery? (Q841102)

A. Administering tetanus toxoid vaccine to the mother during pregnancy

B. Ensuring clean delivery practices, including the use of sterile instruments

C. Providing antibiotics to the newborn immediately after birth

D. Applying an antiseptic solution to the umbilical cord stump

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A 35-year-old construction worker sustained a deep puncture wound on his foot while working at a site. He stepped on a rusty nail. He was immediately taken to the nearest clinic. He does not recall his last tetanus vaccination. Which of the following is the most appropriate immediate action to prevent tetanus in this patient ? (Q841104)

A. Clean the wound with soap and water and administer the tetanus toxoid (TT) vaccine.

B. Clean the wound thoroughly, administer tetanus immunoglobulin (TIG), and give a tetanus toxoid (TT) booster.

C. Administer a course of antibiotics and advise him to keep the wound clean.

D. Clean the wound thoroughly, provide a tetanus toxoid (TT) booster

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A 30-year-old woman visits the health clinic for a routine check-up. During the consultation, she mentioned her concern about HIV infection, as she recently learned that a close friend was diagnosed with HIV. She wants to understand the most efficient and most common routes of HIV transmission to protect herself better. Which of the following methods is the most efficient route of HIV transmission? (Q841111)

A. Sexual route

B. Blood transfusion

C. Transplacental

D. Needle prick injury

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following diseases cannot be prevented by both active and passive immunization? (Q841105)

A. Rabies

B. Diphtheria

C. Tetanus

D. Plague

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following is not considered a high-risk group for HIV infection? (Q841113)

A. Pregnant female

B. Men who have sex with men (MSM)

C. Injection drug users (IDUs)

D. Multiple transfusion recipients

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A 28-year-old man presents to the clinic with a fever, sore throat, rash, and generalised lymphadenopathy. He mentions that he has multiple sexual partners, and he uses condoms inconsistently. Based on the scenario, in which clinical stage of HIV infection is this patient most likely? (Q841114)

A. Asymptomatic carrier state

B. Acute infection

C. AIDS-related complex

D. AIDS

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Match the following rickettsial diseases with their vector Rickettsial disease Vector 1. Scrub typhus a. Rat flea 2. Epidemic typhus b. Trombiculid mite 3. Endemic typhus c. Tick 4. Rocky Mountain spotted fever d. Louse (Q841115)

A. 1-c, 2-a, 3-b, 4-d

B. 1-b, 2-d, 3-a, 4-c

C. 1-b, 2-a, 3-d, 4-c

D. 1-c, 2-d, 3-a, 4-b

See Answer in Part B → Q11

@Neet_pg_bot

Q12: A public health team is investigating an outbreak of a viral hemorrhagic fever in a remote village. Several villagers are experiencing severe symptoms, including fever, vomiting, diarrhoea, and unexplained bleeding. The investigation reveals that the initial patients had contact with wild animals in the nearby forest. What is the primary natural reservoir for this virus in this scenario? (Q841116)

A. Monkey

B. Cattle

C. Bats

D. Pigs

See Answer in Part B → Q12

@Neet_pg_bot

Q13: All of the following pathogens are category A bioterrorism agents, except? (Q841117)

A. Ebola virus

B. Bacillus anthracis

C. Nipah virus

D. Francisella tularensis

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A 35-year-old man from a rural area in Kerala visits the clinic with symptoms of fever, headache, dizziness, and respiratory problems. He mentions that he has also been experiencing muscle pain and nausea for the past few days. On examination, the patient exhibits signs of encephalitis. Based on the scenario, what is the likely incubation period for this viral infection? (Q841119)

A. 2 to 7 days

B. 2 to 21 days

C. 10 to 12 days

D. 4 to 14 days

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A public health officer is investigating an outbreak of a viral illness in a tropical region. The affected individuals present with symptoms such as fever, maculopapular skin rash, conjunctivitis, and joint pain. The officer needs to identify the primary vector responsible for the transmission of the virus to implement effective control measures. Which vector is primarily responsible for transmitting the virus? (Q841120)

A. Anopheles mosquito

B. Culex mosquito

C. Aedes aegypti mosquito

D. Ixodes tick

See Answer in Part B → Q15

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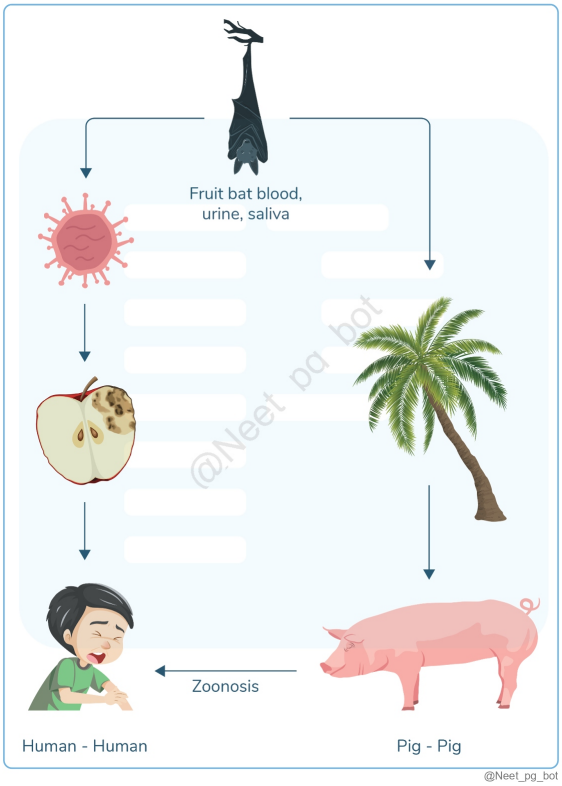
Q16: The diagram illustrates characteristics of which viral disease? (Q844348)

A. Ebola virus

B. Zika virus

C. Rickettsial

D. Nipah virus



See Answer in Part B → Q16

• [05_Communicable and Non-communicable Diseases] 023 Previous Year Questions

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 023 Previous Year Questions — Quick Jump

Q1 (p. 216)	*Q2 (p. 217)*	*Q3 (p. 217)*	*Q4 (p. 217)*	*Q5 (p. 218)*	*Q6 (p. 218)*
Q7 (p. 219)	*Q8 (p. 219)*	*Q9 (p. 219)*	*Q10 (p. 220)*	*Q11 (p. 220)*	*Q12 (p. 220)*
Q13 (p. 221)	*Q14 (p. 221)*	*Q15 (p. 222)*	*Q16 (p. 222)*	*Q17 (p. 223)*	*Q18 (p. 224)*
Q19 (p. 224)	*Q20 (p. 224)*	*Q21 (p. 225)*	*Q22 (p. 225)*	*Q23 (p. 226)*	*Q24 (p. 226)*
Q25 (p. 226)	*Q26 (p. 227)*	*Q27 (p. 227)*	*Q28 (p. 228)*	*Q29 (p. 228)*	*Q30 (p. 228)*
Q31 (p. 229)	*Q32 (p. 229)*	*Q33 (p. 229)*	*Q34 (p. 230)*	*Q35 (p. 231)*	*Q36 (p. 231)*
Q37 (p. 232)	*Q38 (p. 232)*	*Q39 (p. 233)*	*Q40 (p. 233)*	*Q41 (p. 233)*	*Q42 (p. 234)*
Q43 (p. 234)	*Q44 (p. 234)*	*Q45 (p. 235)*	*Q46 (p. 235)*	*Q47 (p. 236)*	*Q48 (p. 236)*
Q49 (p. 236)	*Q50 (p. 237)*	*Q51 (p. 237)*	*Q52 (p. 237)*	*Q53 (p. 238)*	*Q54 (p. 238)*
Q55 (p. 239)	*Q56 (p. 239)*	*Q57 (p. 239)*	*Q58 (p. 240)*	*Q59 (p. 240)*	*Q60 (p. 240)*
Q61 (p. 241)	*Q62 (p. 241)*	*Q63 (p. 242)*	*Q64 (p. 242)*	*Q65 (p. 242)*	*Q66 (p. 243)*
Q67 (p. 243)	*Q68 (p. 243)*	*Q69 (p. 244)*	*Q70 (p. 245)*	*Q71 (p. 245)*	*Q72 (p. 246)*
Q73 (p. 246)	*Q74 (p. 247)*	*Q75 (p. 247)*	*Q76 (p. 247)*	*Q77 (p. 248)*	*Q78 (p. 248)*
Q79 (p. 248)	*Q80 (p. 249)*	*Q81 (p. 249)*	*Q82 (p. 250)*	*Q83 (p. 250)*	*Q84 (p. 250)*
Q85 (p. 251)	*Q86 (p. 251)*	*Q87 (p. 252)*	*Q88 (p. 252)*	*Q89 (p. 252)*	*Q90 (p. 253)*
Q91 (p. 253)	*Q92 (p. 254)*	*Q93 (p. 254)*	*Q94 (p. 255)*	*Q95 (p. 255)*	*Q96 (p. 255)*
Q97 (p. 256)	*Q98 (p. 256)*	*Q99 (p. 256)*	*Q100 (p. 257)*		

Q1: Zika virus is transmitted by: (Q859950)

A. Aedes aegypti

B. Culex

C. Anopheles

D. Phlebotomus papatasii

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following is the schedule of the OPV vaccine? (Q852607)

A. 6th week, 10th week and 14th week

B. 6th week, 10th week & 9th month

C. 6th week, 14th week & 9th month

D. 6 to 12 weeks

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is the fIPV dose schedule under the National Immunization Schedule? (Q852673)

A. 6 weeks, 10 weeks, 14 weeks

B. At birth, 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years

C. 6 weeks, 14 weeks, 9 months

D. 6 weeks, 10 weeks, 12 weeks

See Answer in Part B → Q3

@Neet_pg_bot

Q4: All are live vaccines except: (Q852858)

A. Rota virus

B. Hepatitis B

C. Measles

D. Varicella

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following vaccines is not recommended after 65 years? (Q852856)

A. Influenza

B. Herpes Zoster

C. Pneumococcal

D. Human papilloma virus

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following vaccines will you use in the clinic? (Q866471)

A. Use 1 only

B. Use 1 and 2

C. Use 1, 2, and 3

D. Use 4 only



See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following vaccines is contraindicated in a child with immunodeficiency? (Q865301)

A. Hepatitis B (Hep B)

B. DPT (Diphtheria, Pertussis, Tetanus)

C. MMR (Measles, Mumps, Rubella)

D. Inactivated Polio Vaccine (IPV)

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A person has recently moved from Nigeria to the United States. Which of the following vaccines is required for international travel from Nigeria to the USA? (Q866776)

A. Yellow Fever (17D) vaccine

B. Japanese Encephalitis (JE) vaccine

C. Measles vaccine

D. Rabies vaccine

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Out of the MR & Pentavalent vaccine, which can be reused, and which one should be discarded when the vial is opened according to the open vial policy? (Q866771)

A. Discard MR, reuse Pentavalent

B. Discard Pentavalent, reuse MR

C. Discard both MR and Pentavalent

D. Reuse both MR and Pentavalent

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A mother brings her 9-month-old baby, concerned that no BCG scar has appeared, although the baby received the BCG vaccine at birth. What is the next best step? (Q866770)

A. Reassure the mother

B. Give the BCG vaccine immediately

C. Do the Mantoux test & wait for the result

D. Refer the baby for a chest X-ray & further evaluation

See Answer in Part B → Q10

@Neet_pg_bot

Q11: After undergoing full treatment for tuberculosis, a male patient received sputum examination at the end of both the intensive and continuation phases. The results revealed a negative outcome. What can be concluded about the patient's condition? (Q855627)

A. Cured

B. Treatment completed

C. Lost to follow up

D. Treatment failed

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Although many animals are implicated in the spread of rabies, dogs are the most common ones. Also, it usually affects children in developing countries. Knowing this, what is the most cost-effective and logical way to reduce the incidence of rabies? (Q855625)

A. Testing all the dogs for rabies

B. Reduce stray dog population and vaccinate all dogs

C. Increase the laboratory facilities

D. Increase capacity of healthcare workers for surveillance

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which among the following regions is free from rabies? (Q859985)

A. Sikkim

B. Kerala

C. Lakshadweep

D. Jammu and Kashmir

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which of the following vaccine is kept at lowest level in the equipment shown below? (Q844097)

A. OPV

B. DPT

C. Hep B

D. Rota



See Answer in Part B → Q14

@Neet_pg_bot

Q15: Within what time frame should Cholera, a disease that requires notification, be reported to the World Health Organization? (Q859474)

A. 72 hours

B. 24 hours

C. 12 hours

D. 2 days

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Komal, a 2-year-old girl is brought to the clinic with a high fever, cough, red eyes, and rash. Parents say that the rash started on the forehead and behind the ears, then subsequently spread to the neck and body. On examination, a confluent maculopapular rash is noted as shown below. Which of the following is false regarding this child's condition? (Q859471)

A. The period of infectivity is 4 days before and 5 days after the appearance of rash

B. The most common complication is subacute sclerosing panencephalitis

C. Warthin-Finkeldey giant cells are associated with the disease

D. Koplik spots are pathognomonic



See Answer in Part B → Q16

@Neet_pg_bot

Q17: What is the duration after which the polymorphic rash of Varicella is no longer contagious? (Q859466)

A. 4 days after appearance of lesions

B. 7 days after appearance of lesions

C. 14 days after appearance of lesions

D. After crust formation over lesions

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which influenza virus caused the pandemic that took place in 2009? (Q858446)

A. H1N1

B. H5N1

C. H5N7

D. H3N2

See Answer in Part B → Q18

@Neet_pg_bot

Q19: What is the association of Project MONICA? (Q858440)

A. Cardiovascular diseases

B. Cervical Cancer

C. Breast Cancer

D. Road Traffic Accidents

See Answer in Part B → Q19

@Neet_pg_bot

Q20: The patient presents with a clean-cut injury that is not torn. He mentions receiving a tetanus vaccination approximately 10 years ago. What is the appropriate

course of action? (Q854840)

A. Full course of tetanus vaccination

B. Single dose tetanus toxoid

C. Tetanus toxoid + immunoglobulin

D. Non vaccination needed

See Answer in Part B → Q20

@Neet_pg_bot

Q21: According to NCEP-ATP III guidelines, which of the following does not meet the criteria for metabolic syndrome? (Q854839)

A. Hypertriglyceridemia

B. High LDL

C. Central obesity

D. Hypertension

See Answer in Part B → Q21

@Neet_pg_bot

Q22: What is the next course of action in managing a 28-month-old child weighing 11 kg who was presented to the pediatric OPD with a respiratory rate of 38/min and chest indrawing observed during examination? (Q854828)

A. Oral amoxicillin for five days

B. Urgent referral to the tertiary care centre immediately

C. Administer IV antibiotics and ask the patient to be brought after 24 hours

D. Start antipyretics urgently

See Answer in Part B → Q22

@Neet_pg_bot

Q23: Which one of the following methods does not effectively prevent the transmission of COVID-19? (Q856457)

A. Face mask

B. 1% glutaraldehyde

C. 70% alcohol

D. Hand washing

See Answer in Part B → Q23

@Neet_pg_bot

Q24: Match the following: Vector/agent Diseases caused 1. Louse a. Rocky Mounted Spotted Fever (RMSF) 2. Tick b. Scrub typhus 3. Mite c. Epidemic typhus 4. Poxvirus d. Molluscum contagiosum (Q865291)

A. 1-C, 2-B, 3-A, 4-D

B. 1-C, 2-A, 3-B, 4-D

C. 1-A, 2-C, 3-B, 4-D

D. 1-D, 2-B, 3-C, 4-A

See Answer in Part B → Q24

@Neet_pg_bot

Q25: What is the recommended treatment for a resident doctor who experiences a needlestick injury while attending to an HIV positive patient? (Q856442)

A. Zidovudine + Lamivudine

B. Zidovudine + Lamivudine + Nevirapine

C. Zidovudine + Lamivudine + Indinavir

D. Zidovudine + Nevirapine

See Answer in Part B → Q25

@Neet_pg_bot

Q26: A 7-year-old child is bitten on the hand by a neighbor's dog whose vaccination status is unknown. On examination, there are two small puncture wounds with slight bleeding. Which of the following statements is/are correct? The wound is classified as Category III exposure. The wound should be washed with soap and running water for at least 15–20 minutes. The wound should be cleaned thoroughly with spirit. Rabies immunoglobulin (RIG) should be infiltrated into and around the wound as much as anatomically possible. The intradermal anti-rabies vaccine schedule is given on days 0, 3, 7, and 28. (Q855133)

A. 1, 2, 4, 5

B. 1, 2, 3, 5

C. 2, 3, 4, 5

D. 1, 3, 4, 5

See Answer in Part B → Q26

@Neet_pg_bot

Q27: Dr. Sarah made a presentation on Infectious diseases. She spoke about prevention and treatment of Zika virus. Which of the following is true with respect to the prevention of Zika virus? (Q852855)

A. Symptomatic treatment with NSAIDs

B. Purified, inactivated FDA approved vaccine is found to be helpful in prevention

C. Sexual abstinence, using condoms, delaying pregnancy is helpful in controlling the disease

D. Immunoglobulin and plasmapheresis is used in the treatment of Zika

See Answer in Part B → Q27

@Neet_pg_bot

Q28: Open vial policy is accepted for? (Q855881)

A. BCG

B. Measles

C. Live JE

D. IPV

See Answer in Part B → Q28

@Neet_pg_bot

Q29: Vaccine protocol followed after Disaster? (Q854861)

A. Everyone is given diphtheria

B. Everyone is given tetanus toxoid

C. Everyone is given cholera vaccine

D. Only the health worker given cholera, typhoid, tetanus toxoid

See Answer in Part B → Q29

@Neet_pg_bot

Q30: Which of the options listed below indicates the degree of heat resistance exhibited by vaccines? (Q856467)

A. VMV

B. VVM

C. MVV

D. VMM

See Answer in Part B → Q30

@Neet_pg_bot

Q31: There is an outbreak of acute encephalitis in the community and a vaccination drive is launched. Which of the following is true about the vaccine given in this condition? (Q856088)

A. Killed and intramuscular

B. Live and subcutaneous

C. Live and intramuscular

D. Killed and subcutaneous

See Answer in Part B → Q31

@Neet_pg_bot

Q32: Considering the immune status of a girl child who has been experiencing repeated yeast infections and respiratory virus infections since the age of 3 months, which vaccine should be avoided? (Q856082)

A. Killed IPV

B. Measles/MMR

C. DPT

D. TT/Td

See Answer in Part B → Q32

@Neet_pg_bot

Q33: Which vaccine is administered as part of the immunization program for a 10-year-old student in school? (Q856039)

A. BCG

B. MMR

C. TT/ Td

D. DPT

See Answer in Part B → Q33

@Neet_pg_bot

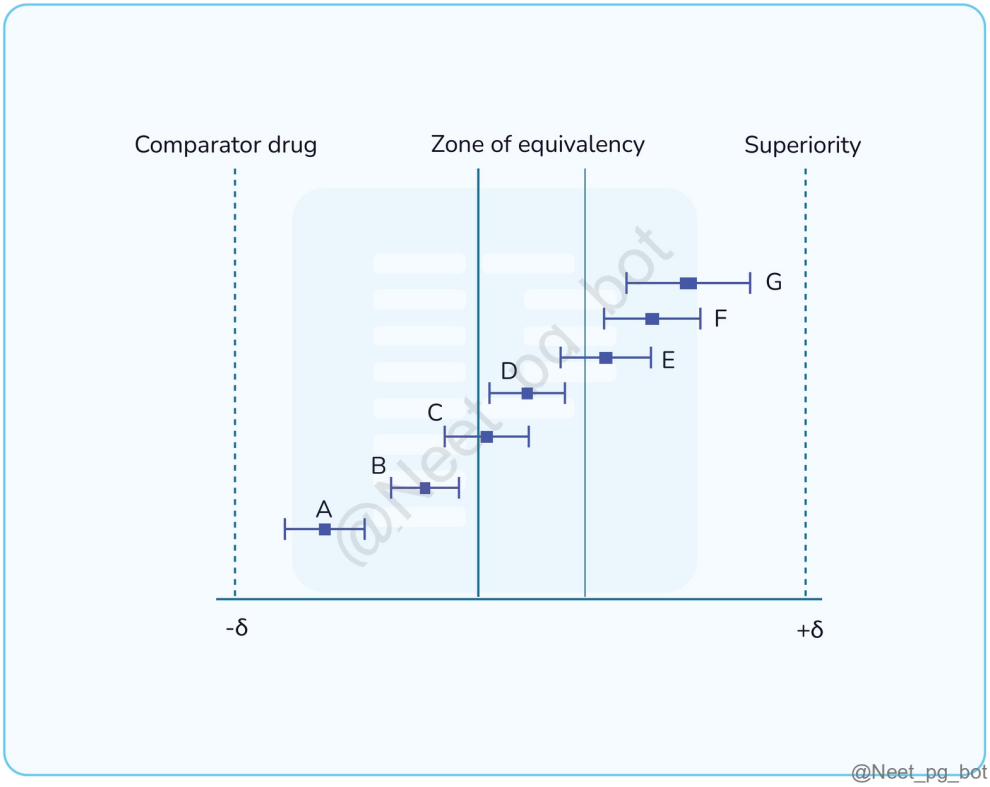
Q34: In the market, there are several new vaccines being researched, and their effectiveness is being evaluated and displayed in the image provided. Which of the recently developed vaccines demonstrate comparable efficacy to the previous vaccine? (Q858172)

A. D only

B. D and E

C. C, D and E

D. A, B, C and D



See Answer in Part B → Q34

@Neet_pg_bot

Q35: Which vaccine among the options exhibits a seroconversion rate that is quicker than the incubation period of the corresponding disease? (Q857698)

A. Coronavirus

B. Measles

C. Polio

D. Mumps

See Answer in Part B → Q35

@Neet_pg_bot

Q36: Which of the following is the initial step when an immunization survey is being conducted? (Q857697)

A. Cluster identification

B. Conducting the survey

C. Completing the cluster and summary forms

D. Calculating the total fertility rate of the area

See Answer in Part B → Q36

@Neet_pg_bot

Q37: Which of these vaccines do not follow open vial policy? (Q857086)

A. OPV

B. DPT

C. TT

D. Measles

See Answer in Part B → Q37

@Neet_pg_bot

Q38: What type of vaccine is the Diphtheria vaccine? (Q856447)

A. Polysaccharide vaccine

B. Toxoid

C. Killed vaccine

D. Live attenuated vaccine

See Answer in Part B → Q38

@Neet_pg_bot

Q39: Which of the following regarding the vaccine vial monitor (VVM) is true? 1. It is used for monitoring heat exposure of the vaccine by healthcare workers in primary healthcare. 2. It shows cumulative exposure of the vaccine to the heat. 3. It can be used to assess the potential efficacy of the vaccine 4. Calculation of the expiry date can be done using VVM. 5. The expiry date of the vaccine can be relaxed if VVM is an acceptable range. 6. If the square and the circle are the same in color, then the vaccine can be safely used. (Q855309)

A. 3, 4

B. 1, 2

C. 1, 2, 3, 4, 5

D. 5, 6

See Answer in Part B → Q39

@Neet_pg_bot

Q40: Which of the following statements is false regarding rabies immunoglobulin? (Q855277)

A. It is exclusively given only in the deltoid

B. The dose is 20 IU/kg

C. Administer it immediately after exposure

D. If human RIG is unavailable, equine is preferred

See Answer in Part B → Q40

@Neet_pg_bot

Q41: What would be the most appropriate approach to managing a young male patient who has presented at the hospital with a clean-cut wound that is not bleeding, and who received a complete tetanus vaccination 10 years ago? (Q855529)

A. Human tetanus immunoglobulin and full course of vaccine

B. Human tetanus immunoglobulin

C. Single-dose tetanus toxoid

D. Full course tetanus toxoid

See Answer in Part B → Q41

@Neet_pg_bot

Q42: In a 10-year-old school child, which of the following vaccines is given as a part of the school immunization program? (Q855456)

A. Measles vaccine

B. Rotavirus vaccine

C. Td vaccine

D. Hepatitis B vaccine

See Answer in Part B → Q42

@Neet_pg_bot

Q43: What is the schedule and route of administration of MR vaccine and vitamin A? (Q854773)

A. MR vaccine administered subcutaneously along with oral vitamin A at 8 months

B. MR vaccine administered intramuscularly along oral vitamin A at 8 months

C. MR vaccine administered subcutaneously along with oral vitamin A at 9 months

D. MR vaccine administered intramuscularly along with oral vitamin A at 9 months

See Answer in Part B → Q43

@Neet_pg_bot

Q44: A 10-week-old infant comes for routine vaccination. The baby had a history of inconsolable crying following vaccination at 6 weeks. What should be the next step regarding vaccination? (Q857357)

A. Don't give DT

B. Give DPT

C. Don't give DPT

D. Defer for 1 month

See Answer in Part B → Q44

@Neet_pg_bot

Q45: Which of the following statements about the rotavirus vaccine is incorrect? (Q839888)

A. Given orally

B. Cannot be given after 6 months of age

C. Live vaccine

D. It has monovalent and pentavalent form

See Answer in Part B → Q45

@Neet_pg_bot

Q46: Which of the following is not a polysaccharide vaccine? (Q839877)

A. Hep B

B. Pneumococcal

C. Meningococcal

D. Hib

See Answer in Part B → Q46

@Neet_pg_bot

Q47: A 10 year old child is brought to the clinic for his regular immunization. What vaccine is given as a part of the national immunization schedule? (Q860600)

A. TT/Td

B. BCG

C. MMR

D. DPT

See Answer in Part B → Q47

@Neet_pg_bot

Q48: When are the three doses of fIPV ideally given as per the National Immunization Schedule? (Q860575)

A. 3 doses at 6 weeks, 14 weeks, and 9 completed months

B. At 10 weeks, 14 weeks, and 9 completed months

C. At 6 weeks, 10 weeks, and 18 completed months

D. 3 doses at 6 weeks, 14 weeks, and 18 completed months

See Answer in Part B → Q48

@Neet_pg_bot

Q49: Shanchol vaccine consists of? (Q844099)

A. Monovalent 2 doses

B. Monovalent 1 dose

C. Bivalent 2 doses

D. Bivalent 1 dose

See Answer in Part B → Q49

@Neet_pg_bot

Q50: A 32 year old male presented to emergency department with crush injury to the hand. He had a TT injection when he was 25 years old. The wound has been cleaned. What is the recommended next step of management? (Q820614)

A. TT only

B. Td only

C. TT with Ig

D. Td with Ig

See Answer in Part B → Q50

@Neet_pg_bot

Q51: What is the serum level of tetanus antitoxin required for clinical protection? (Q856875)

A. >0.1 IU/ml

B. >0. 01 IU/ml

C. >0.001 IU/ml

D. >0.0001 IU/ml

See Answer in Part B → Q51

@Neet_pg_bot

Q52: Match the following diseases with their respective incubation period: 1. Measles a. 15-50 days 2. Mumps b. 2-3 weeks 3. Chickenpox c. 10-12 days 4. Syphilis d. 14-16 days 5. Hepatitis A e. 9-90 days (Q854772)

A. 1-d, 2-b, 3-c, 4-■, 5-■

B. 1-c, 2-b, 3-d, 4-e, 5-a

C. 1-b, 2-d, 3-c, 4-e, 5-a

D. 1-d, 2-b, 3-c, 4-0, 5-■

See Answer in Part B → Q52

@Neet_pg_bot

Q53: Which vaccines should healthcare workers receive? (Q830723)

A. Cholera

B. HPV

C. Hepatitis

D. Rabies

See Answer in Part B → Q53

@Neet_pg_bot

Q54: A 30-year-old patient presenting with hypopigmented patches, loss of cold sensation followed by hot, touch and pain along with a palpable ulnar nerve. What is the likely diagnosis? (Q820713)

A. TB

B. Leprosy

C. HIV

D. Candida

See Answer in Part B → Q54

@Neet_pg_bot

Q55: A 5-year-old child presenting to a clinic with a history of cough, runny nose, conjunctivitis, fever, and a rash that initially arises behind the ears and then spreads to the chest, back, and abdomen. What is the likely diagnosis? (Q820707)

A. Measles

B. Dengue

C. Rubella

D. Chickengunya

See Answer in Part B → Q55

@Neet_pg_bot

Q56: A 40-year-old male with a known case of HIV infection and a CD4 count less than 50 cells/μL. Which of the following infections is he at risk of developing? (Q820703)

A. Candida

B. Staph. aureus

C. Disseminated MAC Infection

D. Pneumocystis jirovecii

See Answer in Part B → Q56

@Neet_pg_bot

Q57: A 35-year-old patient with known HIV infection and presenting with persistent cough, fever, and weight loss, which diagnostic test is considered the investigation of choice for detecting tuberculosis (TB)? (Q820690)

A. Culture

B. Chest x-ray

C. CBNAAT

D. PCR

See Answer in Part B → Q57

@Neet_pg_bot

Q58: A 5-year-old child came to ER presenting with fever, cough, runny nose, and a characteristic red rash.Which of the following statements about measles disease is incorrect? (Q820668)

A. Incubation period of 14 days

B. Strain used is Edmonston Zagreb

C. Period of communicability is 14 days after rash

D. Transmitted primarily through respiratory droplets.

See Answer in Part B → Q58

@Neet_pg_bot

Q59: Which of the following is not included in STEP approach? (Q820643)

A. Blood group

B. Blood pressure

C. Blood sugar

D. Blood lipid

See Answer in Part B → Q59

@Neet_pg_bot

Q60: In which category of bioterrorism, does Anthrax belong? (Q820626)

A. CAT A

B. CAT B

C. CAT C

D. CAT D

See Answer in Part B → Q60

@Neet_pg_bot

Q61: A patient has developed hepatitis A for more than 15 days. What is the correct statement ? (Q820618)

A. Early Acute

B. Acute

C. Chronic

D. Severe

See Answer in Part B → Q61

@Neet_pg_bot

Q62: The blood pressure of a population was tracked from childhood to adulthood. It was observed that those who had lower BP in childhood had low BP in adulthood, while those who had higher BP in childhood had high BP in adulthood. This can be best described as: (Q855408)

A. Rule of halves

B. Tracking of blood pressure

C. Stepwise approach

D. Primordial approach

See Answer in Part B → Q62

@Neet_pg_bot

Q63: Match the following diseases with their respective incubation period: a. Chicken pox 1. 10-12 days b. Mumps 2. 14-16 days c. Measles 3. 16-18 days d. Syphilis 4. 2-4 weeks (average 21 days) (Q857360)

A. a-2, b-3, c-1, d-4

B. a-1, b-3, c-2, d-4

C. a-2, b-4, c-1, d-3

D. a-3, b-2, c-4, d-1

See Answer in Part B → Q63

@Neet_pg_bot

Q64: Mark the incorrect statement regarding Nipah virus: (Q860571)

A. It is transmitted through bat urine

B. It causes hemorrhagic fever

C. It is present in India

D. It is an emerging infection

See Answer in Part B → Q64

@Neet_pg_bot

Q65: A 35-year-old male soldier presents with a painful, erosive lesion near his earlobe that developed after returning from duty in a desert area. He is otherwise clinically stable, and general physical examination is unremarkable. A punch biopsy from the leading edge of the lesion shows epidermal ulceration with dense dermal infiltrate of macrophages containing small intracellular amastigotes. Which of the following is the most likely diagnosis? (Q860568)

A. Sporotrichosis

B. Bacterial abscess

C. Leishmaniasis

D. Tuberculous ulcer

See Answer in Part B → Q65

@Neet_pg_bot

Q66: The period between the entry of an organism into the host and the time when the host becomes maximally infectious is referred to as? (Q844130)

A. Generation time

B. Median incubation period

C. Window period

D. Latent period

See Answer in Part B → Q66

@Neet_pg_bot

Q67: If the incubation period of a disease is 5-14 days, what should be the recommended quarantine period? (Q844126)

A. 5 days

B. 10 days

C. 14 days

D. 20 days

See Answer in Part B → Q67

@Neet_pg_bot

Q68: A man occasionally eats outside due to traveling reasons. He presents to a physician with abdominal pain for 4 days, along with a history of fever and bradycardia. Which test is used to confirm the diagnosis? (Q844043)

A. Blood culture

B. Widal test

C. Stool culture

D. Urine culture

See Answer in Part B → Q68

@Neet_pg_bot

Q69: A fruit farmer presents with fever, respiratory difficulties, and neurological complications. What is the most likely diagnosis? (Q844035)

A. Ebola

B. Meningitis

C. Nipah

D. Zika



See Answer in Part B → Q69

@Neet_pg_bot

Q70: Malaria detection on the field is done by which of the following? (Q852852)

A. Thick smear

B. Thin smear

C. HRP2 antigen / Rapid diagnostic test

D. Quantitative Buffy coat

See Answer in Part B → Q70

@Neet_pg_bot

Q71: Which of the following groups is not included in the high-risk core population for HIV transmission? (Q852850)

A. IV drug users

B. Female sex workers

C. Men who have sex with men

D. Long distance truck drivers

See Answer in Part B → Q71

@Neet_pg_bot

Q72: Which mosquito larva has no siphon and rests parallel to the water surface? (Q866443)

A. Anopheles

B. Culex

C. Aedes

D. Mansonia

See Answer in Part B → Q72

@Neet_pg_bot

Q73: Which of the following infections is most commonly transmitted during the third trimester of pregnancy? (Q865304)

A. Rubella

B. Parvovirus B19

C. Toxoplasmosis

D. Herpes Simplex Virus

See Answer in Part B → Q73

@Neet_pg_bot

Q74: A child is brought to a PHC with acute diarrhoea. Based on history, the doctor suspects Shigella infection rather than cholera and starts ciprofloxacin. Apart from bloody stools, which of the following historical features most strongly supports Shigella infection over cholera? (Q857079)

A. Absence of rectal pain

B. Presence of abdominal cramps

C. Presence of vomiting

D. Presence of fever

See Answer in Part B → Q74

@Neet_pg_bot

Q75: Which of the following does not require precautions for airborne transmission? (Q856871)

A. Tuberculosis

B. Herpes Zoster

C. Measles

D. Chicken Pox

See Answer in Part B → Q75

@Neet_pg_bot

Q76: What is the term used to describe the rise in the occurrence of non-communicable diseases observed in recent years? (Q856606)

A. Seasonal

B. Cyclical

C. Periodic

D. Secular

See Answer in Part B → Q76

@Neet_pg_bot

Q77: Please match the following colors of STI kits with their corresponding use: A. Lower abdominal pain B. Urethral discharge C. Non herpetic genital ulcer D. Vaginal discharge 1. Grey, Kit 1 2. Green, Kit 2 3. White, Kit 3 4. Yellow, Kit 6 (Q856580)

A. A-4, B-3, C-2, D-1

B. A-4, B-1, C-3, D-2

C. A-1, B-4, C-3, D-2

D. A-3, B-2, C-4, D-1

See Answer in Part B → Q77

@Neet_pg_bot

Q78: A diabetic patient comes to you for advice regarding his diet. You advise him to include foods with a low glycemic index in the diet. Which of the following would you advise him for the same? (Q857761)

A. Cornflakes

B. Brown rice

C. Sucrose

D. Papaya

See Answer in Part B → Q78

@Neet_pg_bot

Q79: What type of resistance is exhibited by the patient who is unresponsive to Isoniazid, Rifampicin, Ofloxacin, and Kanamycin? (Q857759)

A. Multidrug resistance

B. Extensively drug-resistant

C. Rifampicin resistant

D. Extremely drug-resistant

See Answer in Part B → Q79

@Neet_pg_bot

Q80: You are a doctor in a village. A 1-year-old child presents with fever and cough for 2 days and is refusing to feed. On examination, the child is calm, has a respiratory rate of 51 breaths/min, and stridor is audible while at rest. According to IMNCI guidelines, how should this child be classified? (Q857747)

A. Pneumonia

B. Cough and cold

C. Severe pneumonia

D. ARDS

See Answer in Part B → Q80

@Neet_pg_bot

Q81: Which kit would you recommend for the treatment of a 20-year-old female who has recently engaged in sexual intercourse and is experiencing vaginal discharge and lower abdominal pain when following the syndromic management approach for sexually transmitted infections at the Suraksha clinic in the local primary health center? (Q857737)

A. Blue

B. Red

C. Black

D. Yellow

See Answer in Part B → Q81

@Neet_pg_bot

Q82: Re-infection with which of the following will lead to catastrophic symptoms even in the presence of antibodies? (Q857706)

A. Dengue

B. Yellow fever

C. Japanese encephalitis

D. Zika

See Answer in Part B → Q82

@Neet_pg_bot

Q83: What treatment should be administered to a patient diagnosed with P. Falciparum malaria from a North-Eastern state? (Q857149)

A. Artemether plus lumefantrine

B. Sulfadoxine plus pyrimethamine

C. Chloroquine

D. Mefloquine

See Answer in Part B → Q83

@Neet_pg_bot

Q84: A pregnant woman arrived at the emergency department following an incident where she was scratched by a stray dog while walking on the streets one hour ago. She has only suffered minor abrasions without any bleeding. What course of treatment should be provided to her? (Q857131)

A. No treatment as she is pregnant now

B. Only local wound cleaning

C. Local wound cleaning and rabies vaccine

D. Local wound cleaning, Rabies vaccines and immunoglobulins

See Answer in Part B → Q84

@Neet_pg_bot

Q85: Based on Globocan 2020 data, which cancer type is the most prevalent among males in India? (Q857129)

A. Lung

B. Lip and oral cavity

C. Colorectal

D. Liver

See Answer in Part B → Q85

@Neet_pg_bot

Q86: What is the likely diagnosis for a 50-year-old male who worked in the dye industry and had exposure to aniline dyes, and is now experiencing bladder problems? (Q857128)

A. Squamous cell carcinoma

B. Basal cell carcinoma

C. Transitional cell carcinoma

D. Adenocarcinoma

See Answer in Part B → Q86

@Neet_pg_bot

Q87: What is the most reliable indicator of recent malaria transmission? (Q857096)

A. Spleen rate

B. Infant parasite rate

C. Parasite density index

D. Slide positivity rate

See Answer in Part B → Q87

@Neet_pg_bot

Q88: According to the Colombo plan, which of the following statements regarding cancer treatment is correct? (Q855523)

A. Help with PET scan units for diagnosis of cancer

B. Human resource strengthening

C. Setting up chemotherapy units

D. Setting up cobalt therapy units

See Answer in Part B → Q88

@Neet_pg_bot

Q89: Which of the following statements regarding drugs used in anti-tubercular treatment are true? A. Isoniazid inhibits mycolic acid synthesis B. Pyrazinamide is an enzyme inducer C. Rifampicin is used only in the treatment of tuberculosis D. Bedaquiline inhibits ATP synthase (Q855136)

A. A, B, C, D

B. B, C

C. A, C

D. A, D

See Answer in Part B → Q89

@Neet_pg_bot

Q90: The drug shown in the image below is administered for: (Q855131)

A. Malaria

B. Dengue

C. Sexually transmitted infections

D. AIDS



@Neet_pg_bot

See Answer in Part B → Q90

@Neet_pg_bot

Q91: What is the accurate statement concerning preventive measures for typhoid transmission in the community? (Q855327)

A. Typhoid vaccine administration is the best method of preventing transmission.

B. Hygiene practice and clean sanitation control is more important than the typhoid vaccine.

C. In 10% of cases, person-to-person transmission occurs.

D. Drug resistance in typhoid is not as big a problem as in TB.

See Answer in Part B → Q91

@Neet_pg_bot

Q92: Which aspect is not included in the features of the Leprosy Mukt Bharat 2027 initiative? (Q855303)

A. Providing free treatment to prevent disability progression

B. Implementing measures for early detection through secondary prevention

C. Ensuring medical rehabilitation for individuals with existing deformities

D. Offering financial support for medical research on leprosy

See Answer in Part B → Q92

@Neet_pg_bot

Q93: For which of the following airborne infections is it necessary to isolate patients in a separate room? (Q855286)

A. Measles

B. Rabies

C. Nipah

D. Aseptic meningitis

See Answer in Part B → Q93

@Neet_pg_bot

Q94: Which of the following medications is typically prescribed as the initial treatment for tuberculosis during the first 2 months? (Q858109)

A. Streptomycin

B. Ethambutol

C. Linezolide

D. Levofloxacin

See Answer in Part B → Q94

@Neet_pg_bot

Q95: A patient presents with a Category III dog bite. He has a history of receiving rabies prophylaxis for a monkey bite 6 months ago. What is the next step in management? (Q857999)

A. Wound cleaning only

B. Wound cleaning + rabies vaccine on day 0 & 3

C. Rabies immunoglobulin (RIG) only

D. Wound cleaning+IM vaccine +RIG

See Answer in Part B → Q95

@Neet_pg_bot

Q96: A 35-year-old homeless man presented with a 1-month history of fever, cough, and weight loss. Both sputum smears turned out to be negative, but the chest x-ray ordered was suggestive of tuberculosis. According to the recent NTEP guidelines, which is the next best line of management? (Q855540)

A. Repeat sputum smears

B. Ask for CBNAAT

C. Ask for line probe assay

D. Wait until TB culture results to start ATT

See Answer in Part B → Q96

@Neet_pg_bot

Q97: Which of the following is the next appropriate step for a varicella infected pregnant women with no documentation of natural infection? (Q855535)

A. Administer prophylaxis with Varicella Zoster immunoglobulin

B. Prescribe acyclovir/valacyclovir for prophylaxis

C. Evaluate the baby with ultrasound for signs of infections

D. Obtain varicella zoster IgG serology in the women

See Answer in Part B → Q97

@Neet_pg_bot

Q98: Which of the following vaccines are given at birth? (Q793843)

A. Pentavalent, MR, HiB

B. BCG, OPV, MR

C. BCG, OPV, Hepatitis B

D. BCG, IP, Hepatitis B

See Answer in Part B → Q98

@Neet_pg_bot

Q99: At what age is the first dose of hepatitis B vaccine given? (Q793732)

A. Birth

B. 6 weeks

C. 10 weeks

D. 6 months

See Answer in Part B → Q99

@Neet_pg_bot

Q100: In how many days should the post exposure Measles vaccine be given? (Q793727)

A. With in 7 days

B. With in 3 days

C. With in 1 days

D. With in 10 days

See Answer in Part B → Q100

@Neet_pg_bot

• [06_National Health Programs] 024 National Health Mission Rmnch - A Maternal Initiatives Child And Adolescents Health Initiatives

« Back to Folder Directory

[06_National Health Programs] 024 National Health Mission Rmnch - A Maternal Initiatives Child And Adolescents Health Initiatives — Quick Jump

Q1 (p. 258)	*Q2 (p. 258)*	*Q3 (p. 259)*	*Q4 (p. 259)*	*Q5 (p. 260)*	*Q6 (p. 260)*
Q7 (p. 261)	*Q8 (p. 261)*	*Q9 (p. 262)*	*Q10 (p. 262)*	*Q11 (p. 262)*	*Q12 (p. 263)*
Q13 (p. 263)	*Q14 (p. 263)*	*Q15 (p. 264)*	*Q16 (p. 264)*		

Q1: Which of the following is/are the components of the National Health Mission (NHM)? (Q840923)

A. Communicable & Non-communicable Disease

B. NUHM & NRHM

C. RMNCAH+ N

D. All the above

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following is not a component of RMNCAH+N? (Q840928)

A. Adolescent health

B. Newborn health

C. Geriatric health

D. Maternal health

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is not true regarding Janani Suraksha Yojana? (Q840931)

A. Launched in 2005

B. Promotes Institutional deliveries

C. Incentives are provided only to pregnant females delivering in institutions

D. It subsidizes the cost of C-sections up to Rs.1500.

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following health programmes does the logo below represent? {{caption_text}} (Q840935)

A. Maa Programme (Mother’s Absolute Affection)

B. LAQSHYA

C. Pradhan Mantri Matru Vandana Yojana

D. Janani Shishu Suraksha Karyakram



See Answer in Part B → Q4

@Neet_pg_bot

Q5: Under the LaQshya scheme, what is the focus area for improving infrastructure in healthcare facilities? (Q840943)

A. Emergency services

B. Immunization services

C. Primary health centres

D. Labour rooms and maternity operation theatres

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which maternal health initiative is not under the Ministry of Health and Family Welfare? (Q840946)

A. Pradhan Mantri Matru Vandana Yojana

B. Pradhan Mantri Surakshit Matritva Abhiyan

C. SUMAN scheme

D. MAA program

See Answer in Part B → Q6

@Neet_pg_bot

Q7: 6x6x6 strategy is related to? (Q840950)

A. Anemia mukt bharat

B. Pradhan mantri poshan shakti nirman

C. RMNCH + A

D. Kishori shakti yojana

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which international organization collaborated with the Government of India to implement IMNCI? (Q840951)

A. World Health Organization (WHO)

B. United Nations Children's Fund (UNICEF)

C. International Red Cross

D. Médecins Sans Frontières (MSF)

See Answer in Part B → Q8

@Neet_pg_bot

Q9: At what age are children screened under the RBSK program? (Q840952)

A. 0-5 years

B. 0-10 years

C. 0-15 years

D. 0-18 years

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following is a specific objective of Navjaat Shishu Suraksha Karyakram (NSSK)? (Q840953)

A. To promote exclusive breastfeeding practices.

B. To increase access to prenatal care for expecting mothers.

C. To improve sanitation facilities in rural healthcare centers.

D. To prevent Perinatal Asphyxia-Related mortality.

See Answer in Part B → Q10

@Neet_pg_bot

Q11: What is the primary objective of the India Newborn Action Plan (INAP)? (Q840954)

A. To achieve universal healthcare coverage by 2030.

B. To reduce neonatal mortality rate to single digits by 2030.

C. To eliminate maternal mortality completely by 2030.

D. To increase vaccination coverage for children under 5 years old.

See Answer in Part B → Q11

@Neet_pg_bot

Q12: What is the primary focus area of the Rashtriya Kishor Swasthya Karyakram? (Q840955)

A. Reproductive and sexual health education only.

B. Comprehensive health care along with reproductive and sexual health.

C. Exclusive focus on non-communicable disease prevention.

D. Augmentation of facility-based services for maternal health.

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following is the comprehensive program the Ministry of Women and Child Development launched to combat trafficking? (Q840957)

A. Ujjawala scheme

B. Ujjwala Yojana

C. UJALA scheme

D. Saubhagya Scheme

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which of the following is NOT a key activity under the Menstrual Hygiene Scheme? (Q840959)

A. Community-based health education and outreach to promote menstrual health.

B. Providing free school uniforms to adolescent girls.

C. Ensuring regular availability of sanitary napkins to adolescents.

D. Training of ASHA and nodal teachers in menstrual health.

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following statements is false regarding the Surakshit Matritva Aashwasan (SUMAN) scheme? (Q844361)

A. This program is under the Ministry of women and child development.

B. The scheme guarantees 18 specific services to its target groups.

C. The beneficiaries also include all sick neonates.

D. It is an initiative for zero preventable maternal and newborn deaths.

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which of the following is a false statement regarding Home-Based Newborn Care (HBNC) and Facility-Based Newborn Care (FBNC)? (Q846675)

A. HBNC involves home visits by ASHAs to identify complications and provide counseling, while FBNC provides specialized care for newborns at risk in healthcare facilities.

B. HBNC involves community-based interventions, including neonatal resuscitation and infection management, to stabilize newborns in the home before referral to higher facilities.

C. FBNC includes care for preterm infants and newborns requiring specialized services such as resuscitation and thermal protection in NICUs and SCBUs.

D. HBNC includes regular follow-up visits for sick newborns after hospital discharge to monitor recovery and ensure proper care.

See Answer in Part B → Q16

@Neet_pg_bot

• [06_National Health Programs] 025 Nacp Global Initiatives

« Back to Folder Directory

[06_National Health Programs] 025 Nacp Global Initiatives — Quick Jump

Q1 (p. 265) *Q2 (p. 265)* *Q3 (p. 265)* *Q4 (p. 266)* *Q5 (p. 266)* *Q6 (p. 267)*
Q7 (p. 267) *Q8 (p. 267)* *Q9 (p. 268)* *Q10 (p. 268)* *Q11 (p. 269)* *Q12 (p. 269)*
Q13 (p. 270) *Q14 (p. 270)* *Q15 (p. 270)*

Q1: Which of the following is NOT a part of the target adopted by UNAIDS to end the AIDS epidemic? (Q840692)

A. 95% of people living with HIV know their status.

B. 95% of people living with HIV receive antiretroviral therapy (ART).

C. 95% of people receiving ART show decreased viral load.

D. 95% of people living with HIV have access to experimental treatments

See Answer in Part B → Q1

@Neet_pg_bot

Q2: According to the Sustainable Development Goals (SDGs), the aim is to end the HIV/AIDS epidemic by what year? (Q840693)

A. 2024

B. 2025

C. 2040

D. 2030

See Answer in Part B → Q2

@Neet_pg_bot

Q3: By 2024, what percentage reduction in new HIV infections does the National Strategic Plan for HIV/AIDS in India aim to achieve, using a 2010 baseline? (Q840696)

A. 75%

B. 90%

C. 80%

D. 95%

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following types of surveillance is NOT used in India's National AIDS Control Programme to track and understand the HIV/AIDS epidemic? (Q840699)

A. Environmental Surveillance

B. Sentinel Surveillance

C. Behavioral Surveillance

D. Passive Surveillance

See Answer in Part B → Q4

@Neet_pg_bot

Q5: How frequently is Sentinel Surveillance for HIV conducted under the National AIDS Control Programme in India? (Q840701)

A. Annually

B. Biennial

C. Twice a year

D. Three times a year

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following laboratory markers may be positive during the window period of HIV infection? (Q840704)

A. Gp41 antigen

B. P24 antigen

C. Beta-2 microglobulin (B2M)

D. Gp120 antigen

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Match the following STI/RTI kits available at Suraksha clinics with their corresponding contents. Kit Color Contents 1. Grey A. Genital ulcers 2. Green B. Inguinal bubo 3. White C. Urethral discharge, anorectal discharge, and cervicitis 4. Yellow D. Lower abdominal pain 5. Black E. Vaginitis (Q840711)

A. 1-C, 2-E, 3-A, 4-D, 5-B

B. 1-D, 2-A, 3-B, 4-C, 5-E

C. 1-E, 2-D, 3-C, 4-B, 5-A

D. 1-B, 2-C, 3-D, 4-A, 5-E

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following correctly describes the HIV diagnosis strategy for symptomatic and asymptomatic individuals? A. A single rapid test confirms HIV for both groups. B. Asymptomatic individuals need three reactive rapid tests at an

SA-ICTC. C. Symptomatic individuals with discordant tests (1st + ve,2nd - ve) are retested after 14–28 days. D. Asymptomatic individuals with a reactive test are immediately considered HIV-positive. (Q840713)

A. A and C

B. B and D

C. B and C

D. A and B

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A 32-year-old woman comes to her primary care physician for a routine check-up. As part of preventive care, the physician recommends several health screenings, including HIV testing. Which of the following describes the standard approach to HIV testing in this setting? (Q840719)

A. Opt-in testing.

B. Opt-out testing.

C. Both opt-in and opt-out testing.

D. Compulsory testing

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A 32 Y/o HIV-positive woman has just delivered a healthy baby girl. The mother has been on ART throughout her pregnancy and has maintained an undetectable viral load. Which of the following medications should the newborn be started on? (Q840914)

A. Zidovudine

B. Tenofovir

C. Nevirapine

D. Efavirenz

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A 30 Y/o HIV-positive woman has just given birth to a healthy baby girl. She is currently on antiretroviral therapy (ART) and has maintained an undetectable viral load throughout her pregnancy. Which of the following advice is given by her healthcare provider on the breastfeeding protocol? (Q840917)

A. Breastfeeding is contraindicated as the risk of transmission is high.

B. Breastfeeding is continued till 2 years of age if the newborn is positive for HIV.

C. If the mother forgets to take ART, formula feeds can be given.

D. Breastfeeding should only be initiated if the newborn is positive for HIV.

See Answer in Part B → Q11

@Neet_pg_bot

Q12: A 30 Y/o healthcare worker accidentally suffers a needlestick injury while drawing blood from a patient known to be HIV-positive. Which of the following medications should be immediately started for the healthcare worker? (Q840919)

A. Sulfamethoxazole + Trimethoprim

B. Isoniazid + Pyridoxine

C. Zidovudine

D. Tenofovir + Lamivudine + Dolutegravir

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following statements regarding the prophylaxis of Pneumocystis jirovecii in people living with HIV (PLHIV) is false? (Q844360)

A. Cotrimoxazole Preventive Therapy is started when a patient's CD4 count < 350/mm³.

B. Administer one double strength tablet, containing 800 mg Sulfamethoxazole and 160 mg Trimethoprim.

C. Cotrimoxazole Preventive Therapy is initiated based on the presence of clinical symptoms of Pneumocystis pneumonia, regardless of the patient's CD4 count.

D. The therapy is stopped when CD4 count >350/mm³ on 2 separate measurements taken 6 months apart

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A 26-year-old male presents with anorectal pain, itching, and discharge. On further enquiry, there is history of receptive anal intercourse and use of sex toys with his partner. Examination showed mucoid discharge. Which of the following kits will be used in the management of this condition? (Q849240)

A. Black

B. Grey

C. Brown

D. Yellow

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Regarding HIV pre-exposure prophylaxis (PrEP), which of the following statements are correct? The recommended drug combination is Tenofovir + Emtricitabine. PrEP is indicated for HIV-positive individuals to prevent disease progression. PrEP is recommended for men who have sex with men (MSM), sex workers, and injection drug users at high risk. PrEP should be considered for

HIV-negative individuals with an HIV-positive sexual partner. (Q876250)

A. 1, 2, and 3

B. 1, 3, and 4

C. 2 and 3

D. 1 and 2

See Answer in Part B → Q15

@Neet_pg_bot

• [06_National Health Programs] 026 National Tb Elimination Program Ntep

« Back to Folder Directory

[06_National Health Programs] 026 National Tb Elimination Program Ntep — Quick Jump

Q1 (p. 272)	*Q2 (p. 272)*	*Q3 (p. 273)*	*Q4 (p. 273)*	*Q5 (p. 274)*	*Q6 (p. 274)*
Q7 (p. 274)	*Q8 (p. 275)*	*Q9 (p. 275)*	*Q10 (p. 275)*	*Q11 (p. 276)*	*Q12 (p. 276)*
Q13 (p. 277)	*Q14 (p. 277)*	*Q15 (p. 277)*	*Q16 (p. 278)*	*Q17 (p. 278)*	*Q18 (p. 279)*
Q19 (p. 279)	*Q20 (p. 280)*	*Q21 (p. 280)*	*Q22 (p. 280)*		

Q1: A 30 year old female came with complaints of evening rise of temperature, night sweats, cough and blood in sputum for the past 5 weeks. The doctor suspects TB and orders Sputum AFB, CBNAAT, and chest X-ray for the patient. All of the tests come out positive confirming her diagnosis of TB. The CBNAAT shows she is resistant to rifampicin but sensitive to isoniazid on first-line LPA. Which of the following would be the most appropriate treatment regimen for her? (Q840545)

A. 18 months:BDQC■L■ (Bdq-Bedaquiline, C-Cycloserine, C-Clofazimine, L-Linezolid, L-Levofloxacin).

B. 6■month all-oral regimen for RR-TB: Bedaquiline + Delamanid + Linezolid + Levofloxacin + Clofazimine (BDLLfxC)

C. 2 months : HRZE (H-Isoniazide, R- Rifampicin, Z-Pyrazinamide, E-Ethambutol) 4 months: HRE (H-Isoniazide, R- Rifampicin, E-Ethambutol)

D. 6 months: ZERO (Z-Pyrazinamide, E-Ethambutol, R-Rifampicin, O-Levofloxacin).

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A 35 year old HIV-positive patient presents with clinical features of persistent cough, night sweats, fever, and weight loss. A chest X-ray shows upper lobe infiltrates and sputum tests are positive for acid-fast bacilli (AFB). What is the next step in management? (Q845078)

A. Start antitubercular therapy (ATT) immediately and antiretroviral therapy (ART) 2 weeks later.

B. Start ART immediately and defer ATT until HIV is controlled.

C. Start ATT and ART simultaneously.

D. Delay ATT and ART until the CD4 count is above 200 cells/mm³.

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Match the following based on the correct explanation given Category Description 1. Monoresistant TB A. Resistant to both Rifampicin (R) & Isoniazid (H). 2. Multidrug resistant TB B. Resistant to 2 drugs other than Rifampicin (R) & Isoniazid (H). 3. Extensive drug resistant TB C. Any MDR patient (H+R) resistant to any fluoroquinolone and Group 4 drugs (Bedaquiline, Linezolid, Levo/Moxifloxacin). 4. Polydrug resistant TB D. Resistant to one 1st line anti-TB drug only (Q844358)

A. 1-A , 2-B , 3-C , 4-D

B. 1-D , 2-A , 3-B , 4-C

C. 1-D , 2-A , 3-C , 4-B

D. 1-C , 2-B , 3-A , 4-D

See Answer in Part B → Q3

@Neet_pg_bot

Q4: According to the NTEP guidelines, what population size does each Tuberculosis Unit (TU) cover? (Q840575)

A. 1 per 50,000 in rural/urban areas and 1 per 25,000 in hilly/tribal areas

B. 1 per 100,000 in rural/urban areas and 1 per 50,000 in hilly/tribal areas

C. 1 per 200,000 in rural/urban areas and 1 per 100,000 in hilly/tribal areas

D. 1 per 300,000 in rural/urban areas and 1 per 150,000 in hilly/tribal areas

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which initiative in India focuses on supporting District Drug Resistant TB Centres (DDR -TC) in management of drug-resistant tuberculosis (TB)? (Q840571)

A. Indian TB Genomic Surveillance Consortium

B. DT3 Centers

C. Dare2eraD TB (2022)

D. TRACE-TB Project

See Answer in Part B → Q5

@Neet_pg_bot

Q6: When is World Tuberculosis (TB) Day observed, and what is the theme for 2024? (Q840570)

A. March 24; "Invest to End TB. Save Lives."

B. March 24; "Yes! We Can End TB."

C. April 24; "The Clock is Ticking."

D. April 24; "Unite to End TB."

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which technology-based initiative has been implemented by the Indian government to track and manage tuberculosis (TB) cases? (Q840567)

A. Swasthya Sathi

B. eVIN

C. Nikshay

D. Aarogya Setu

See Answer in Part B → Q7

@Neet_pg_bot

Q8: What is the monthly financial incentive provided under the Nikshay Poshan Yojana for TB patients to support their nutritional needs? (Q840564)

A. Rs 300

B. Rs 500

C. Rs 750

D. Rs 1000

See Answer in Part B → Q8

@Neet_pg_bot

Q9: You diagnose a 35 year old man with tuberculosis. Further questioning his social history reveals that he lives with his elderly parents and wife in a seemingly small apartment. Which of the following would you recommend as prophylactic treatment for his family members? (Q840561)

A. Isoniazid (600mg OD) for 6 months

B. Shorter TPT (TB Preventive Therapy) - Rifapentine + Isoniazid weekly for 3 months

C. Pyrizinamide (800mg OD) for 3 months.

D. Rifampicin (1500mg OD) for 9 months.

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A 25 year old woman, who is 18 weeks pregnant, is diagnosed with MDR-TB. She comes to you for advice on how to proceed with her pregnancy and treatment. What is the most appropriate management plan for this patient? (Q840560)

A. Start the Shorter oral Bedaquiline regimen immediately and continue the pregnancy.

B. Advise Medical Termination of Pregnancy (MTP) and if done, start the Shorter oral Bedaquiline regimen.

C. Start the Longer oral Bedaquiline regimen immediately and continue the pregnancy.

D. Continue the pregnancy without initiating any TB treatment until the second trimester.

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following is false regarding the BPaL regimen used in the treatment of tuberculosis? (Q840548)

A. It was first studied clinically in the Nix-TB trial conducted by WHO

B. It can be used in patients with XDR-TB

C. It is used to treat MDR-TB patients who are unresponsive to treatment

D. It is used only in Rifampicin-resistant TB

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following statements is true regarding global initiative to control TB ? (Q840533)

A. To eliminate TB by 2050 under the End TB initiative.

B. To reduce mortality of TB by 80% under Sustainable Development Goals

C. To reduce mortality & incidence of TB by 30% under the Stop TB initiative

D. To reduce incidence of TB by 80% under Sustainable Development Goals

See Answer in Part B → Q12

@Neet_pg_bot

Q13: How many weight band categories are present in the Daily Drug Regimen (DDR) for the treatment of tuberculosis in adults? (Q840543)

A. Five

B. Six

C. Three

D. Four

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A 45 year old woman presents to a Community Health Center (CHC) with a persistent cough, fever, and night sweats for the past three weeks. She has significant weight loss and a known history of contact with a TB patient. The clinician suspects TB and aims to confirm the diagnosis. According to NTEP guidelines, which of the following diagnostic modalities is not typically used for the initial diagnosis of TB? (Q840542)

A. Sputum smear microscopy

B. Chest X-ray

C. F/S Line Probe Assay

D. TruNAAT/CBNAAT

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A 50 year old man diagnosed with TB has undergone drug susceptibility testing (DST). The results show that he is resistant to both isoniazid and rifampicin but susceptible to all fluoroquinolones and second-line injectable drugs. According to the classification based on drug resistance in the NTEP guidelines, how should this patient's case be categorized? (Q840541)

A. Monoresistant TB

B. Polydrug-resistant TB

C. Multidrug-resistant TB (MDR-TB)

D. Extensively drug-resistant TB (XDR-TB)

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A 40 year old woman has been diagnosed with TB. Her medical records indicate she completed a full course of TB treatment and was declared cured two years ago. However, she is now presenting with symptoms of TB again and has a positive sputum test. According to the classification based on the history of previous TB treatment under the NTEP, how should this patient's case be categorized? (Q840540)

A. New case

B. Treatment after failure

C. Treatment after loss to follow-up

D. Recurrent TB case

See Answer in Part B → Q16

@Neet_pg_bot

Q17: A 35 year old man visits the clinic with a persistent cough and fever lasting for more than 2 weeks. He also reports experiencing night sweats and significant weight loss over the past month. Sputum smear tests or radiological tests are not yet done. According to the new terminologies in NTEP, how should this patient's case be

categorized? (Q840539)

A. Clinically diagnosed TB case

B. TB suspect

C. Sputum negative TB case

D. Presumptive TB case

See Answer in Part B → Q17

@Neet_pg_bot

Q18: According to the latest NTEP guidelines, which of the following statements is TRUE regarding the new 6 month BPaLM regimen for MDR-TB treatment? (Q840538)

A. It includes Bedaquiline, Pretomanid, Linezolid, and Moxifloxacin

B. It is contraindicated in patients with drug-resistant TB

C. The regimen duration has been extended to 12 months

D. It is recommended only for extensively drug-resistant (XDR) TB

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Match the following: a. Active case Detection i) Hospital reports are used for case detection b. Intensified case finding ii) ASHA workers receive incentive of Rs. 500 for finding a presumptive case c. Community based screening iii) Initiates screening of TB symptoms d. Passive case detection iv) ASHA workers collect details of risk factors of TB and diabetes. (Q840537)

A. a-ii, b-iii, c-iv, d-i

B. a-iii, b-ii, c-i, d-iv

C. a-iv, b-iii, c-ii, d-i

D. a-i, b-iii, c-ii, d-iv

See Answer in Part B → Q19

@Neet_pg_bot

Q20: Which of the following is the main component of the JEET strategy to control TB ? (Q840536)

A. To increase the notification rates of TB by private practitioners.

B. To open various testing centers for TB

C. Latest pharmaceutical innovation for early detection

D. Improved infrastructure for better isolation facilities to control TB

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Which of the following is not the strategy of NTEP ? (Q840535)

A. CB-NAAT done for Anyone with cough > 2 weeks

B. TRUENAT gives result of rifampicin resistance within 1 hour

C. Shorter & Longer oral MDR/XDR regimens are introduced.

D. Aim is to Prevent, Detect and Treat

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Which of the following statements is true? (Q840534)

A. To eliminate TB by 2025 under National Tuberculosis Elimination Programme

B. Eliminate malaria throughout the entire country by 2050 under National Framework for Malaria Elimination in India

C. To achieve zero new infection and AIDS-related deaths by 2035

D. None of the above

See Answer in Part B → Q22

@Neet_pg_bot

• [06_National Health Programs] 027 Nvbdcp

« Back to Folder Directory

[06_National Health Programs] 027 Nvbdcp — Quick Jump

Q1 (p. 282) *Q2 (p. 283)* *Q3 (p. 283)* *Q4 (p. 283)* *Q5 (p. 284)* *Q6 (p. 284)*
Q7 (p. 284) *Q8 (p. 285)* *Q9 (p. 285)* *Q10 (p. 286)* *Q11 (p. 286)* *Q12 (p. 286)*
Q13 (p. 287) *Q14 (p. 287)* *Q15 (p. 288)*

Q1: Which of the following diseases is not included under the program mentioned in the logo? (Q841223)

A. Malaria

B. Japanese Encephalitis

C. Kala-azar

D. Leprosy



See Answer in Part B → Q1

@Neet_pg_bot

Q2: All of the following are objectives of the National Vector Borne Disease Control Programme (NVBDCP) except? (Q841224)

A. To reduce annual parasite incidence < 1/1000 population

B. To reduce annual blood examination rate < 10%

C. To control and prevent outbreaks of dengue and chikungunya.

D. To eliminate kala-azar, lymphatic filariasis and Malaria

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following methods are classified as anti-larval techniques for mosquito control? Malathion Bacillus thuringiensis Temephos Gambusia affinis (Q841225)

A. 1,2,3

B. 2,3,4

C. Only 3,4

D. Only 4

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A state has an Annual Parasite Incidence (API) of less than 1, but some of its districts have an API greater than 1. Which of the following options correctly matches its categorisation? 1. Category 0 a. Prevention of re-establishment phase. 2. Category 1 b. Pre-elimination phase 3. Category 2 c. Intensified control phase 4. Category 3 d. Elimination phase (Q841226)

A. 3 and b

B. 4 and c

C. 3 and d

D. 1 and a

See Answer in Part B → Q4

@Neet_pg_bot

Q5: In areas with an API greater than 2, what is the spray of choice for vector control if the vector is refractory to DDT? (Q841227)

A. Two rounds of DDT six weekly during the transmission season

B. Three rounds of malathion six weekly during the transmission season

C. A single round of deltamethrin during the transmission season

D. All of the above

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following statements is true about Long-Lasting Insecticidal Nets (LLINs)? (Q841228)

A. Need to be re-treated with insecticide every six months to remain effective.

B. Provide insecticidal action against mosquitoes only.

C. Insecticide used is ‘N,N-Diethyl-meta-toluamide’

D. Can be washed without losing their insecticidal properties for up to 3 years.

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following are a part of the organization of NVBDCP? 1. Multipurpose Workers (MPWs) 2. District Malaria Officer 3. Directorate General of Health Services 4. ASHA (Accredited Social Health Activist) (Q841229)

A. 1, 2 and 4

B. 2, 3 and 4

C. 1, 2 and 3

D. 1, 2, 3 and 4

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following statements about the Enhanced Malaria Control programme is incorrect? (Q841231)

A. Aims to completely eradicate malaria globally by 2025.

B. The programme integrates vector control measures such as insecticide-treated nets and indoor residual spraying.

C. The programme is being aided by the World Bank.

D. Primarily targets rural and urban areas where malaria transmission rates are highest.

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A 28-year-old traveller returning from a malaria-endemic region presents with high fever, chills, and sweating. A physician orders thick and thin blood smears as part of the diagnostic workup for malaria. What is the primary purpose of the thin smear in malaria diagnosis? (Q841232)

A. To detect the presence of malaria parasites.

B. To determine the species of malaria parasite.

C. To assess the degree of anaemia.

D. To measure the parasite load.

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which principle is utilised in the Optimal test within the NVBDCP? (Q841233)

A. Detects the HRP2 antigen produced by Plasmodium falciparum.

B. Detects the aldolase enzyme.

C. Detects the pLDH enzyme produced by live parasites.

D. All of the above

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following is true regarding “link workers” in malaria control? (Q841234)

A. 1 per 500 people involved in the active detection of P. vivax

B. 1 per 2000 people involved in the active detection of P. falciparum

C. 1 per 500 people involved in active detection of P. falciparum

D. 1 per 2000 people involved in active detection of P. vivax

See Answer in Part B → Q11

@Neet_pg_bot

Q12: A 30-year-old male presents with intermittent fever, chills, and sweats. He recently returned from a trip to a malaria-endemic region. Laboratory tests confirm the diagnosis of Plasmodium vivax malaria. What is the drug of choice for the treatment of Plasmodium vivax malaria? (Q841235)

A. Chloroquine

B. Artesunate

C. Mefloquine

D. Quinine

See Answer in Part B → Q12

@Neet_pg_bot

Q13: A 10-year-old child from Assam who weighs 32 kg is diagnosed with falciparum malaria. What is the recommended dose of Artemether and Lumefantrine for this child respectively? (Q841236)

A. 20mg; 120 mg

B. 40 mg; 240 mg

C. 60 mg; 360 mg

D. 80 mg; 480 mg

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A patient was admitted with severe fever, neck stiffness, photophobia and confusion. Lumbar puncture done was unremarkable but rapid diagnostic test done shows falciparum malarial infection. All of the following drugs can be used in this patient except? (Q841238)

A. Mefloquine

B. Arteether

C. Quinine

D. Clindamycin

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A 30-year-old man is planning a 3-month trip to a malaria-endemic area in Sub-Saharan Africa. He visits his healthcare provider to discuss options for malaria prophylaxis. Considering the need for long-term prophylaxis, which of the following is the most appropriate drug of choice? (Q841239)

A. Chloroquine 300 mg once a week, on the same day each week

B. Proguanil 100 mg, 2 tablets once a day

C. Mefloquine 250 mg, one tablet once a week, on the same day each week

D. Mefloquine 250 mg, one tablet once a day each week

See Answer in Part B → Q15

@Neet_pg_bot

• [06_National Health Programs] 028 Endgame Strategy And National Polio Surveillance Program

« Back to Folder Directory

[06_National Health Programs] 028 Endgame Strategy And National Polio Surveillance Program — Quick Jump

Q1 (p. 289) *Q2 (p. 289)* *Q3 (p. 290)* *Q4 (p. 290)* *Q5 (p. 290)* *Q6 (p. 291)*

Q1: Which statement best describes the necessity of switching from trivalent oral polio vaccine (tOPV) to bivalent oral polio vaccine (bOPV) as part of the Polio Eradication and Endgame Strategic Plan? (Q841240)

A. tOPV was associated with a high incidence of wild poliovirus type 2 (WPV2).

B. bOPV was more cost-effective than tOPV for routine immunisation systems.

C. The risk of cVDPV-circulatory vaccine derived polio virus linked to the type 2 component of OPV outweighed its benefits.

D. bOPV was more effective in providing immunity against all three poliovirus types than tOPV.

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following is NOT an objective of The Polio Eradication Strategy 2022-2026? (Q841241)

A. Permanent interruption of polio transmission in Pakistan and Afghanistan

B. Preventing outbreaks in non-endemic countries

C. Stop circulation of vaccine-derived poliovirus

D. Rehabilitation of the ones affected

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A 10-year-old boy presented with sudden onset paralysis of the right leg for 2 weeks with loss of tone and deep tendon reflexes; the leg appeared floppy with no sensory loss. Which of the following is NOT a diagnosis? (Q841242)

A. Guillian-Barre Syndrome

B. Transverse myelitis

C. Poliomyelitis

D. Duchenne Muscular Dystrophy

See Answer in Part B → Q3

@Neet_pg_bot

Q4: The stool specimen for investigation of an acute flaccid paralysis case is transported using which method? (Q841243)

A. Ambient temperature chain

B. Reverse cold chain

C. Traditional cold chain

D. Real-time temperature monitoring

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following statements regarding polio surveillance indicators is correct? At least 80% of expected routine AFP surveillance reports should be received on time, including zero reports where no AFP cases are seen. The sensitivity of surveillance requires detecting at least two cases of non-polio AFP annually per 100,000 population aged less than 15 years in endemic regions. Completeness of case investigation mandates that all AFP cases must have three stool specimens collected within 7 days of paralysis onset. Laboratory performance standards dictate that AFP case specimens must be processed in any accredited clinical laboratory within the

country. (Q841244)

A. All are wrong

B. All are correct

C. 1 and 2 are correct

D. 1 and 4 are correct

See Answer in Part B → Q5

@Neet_pg_bot

Q6: What best describes the "mopping up" strategy in polio eradication efforts? (Q841245)

A. It involves routine immunization activities in all districts to maintain high population immunity.

B. It focuses on mass vaccination campaigns conducted in areas where wild poliovirus is known or suspected to be circulating.

C. It refers to surveillance activities aimed at detecting cases of acute flaccid paralysis (AFP) for prompt response.

D. It involves educational campaigns to raise awareness about the importance of polio vaccination among healthcare workers.

See Answer in Part B → Q6

@Neet_pg_bot

• [06_National Health Programs] 029 Ncds Npcds

« Back to Folder Directory

[06_National Health Programs] 029 Ncds Npcds — Quick Jump

Q1 (p. 292) *Q2 (p. 292)* *Q3 (p. 292)* *Q4 (p. 293)* *Q5 (p. 293)* *Q6 (p. 294)*
Q7 (p. 294) *Q8 (p. 294)* *Q9 (p. 295)* *Q10 (p. 295)* *Q11 (p. 295)* *Q12 (p. 296)*

Q1: Which statement regarding non-communicable diseases (NCDs) is correct? (Q840604)

A. NCDs are responsible for the least number of deaths worldwide.

B. Primordial prevention of NCDs involves early diagnosis and treatment of disease.

C. According to the WHO, chronic NCDs have a duration of over three months

D. Cardiovascular diseases contribute the least to the global DALY.

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following statements accurately reflects the healthcare services provided at various levels within the National Programme for Healthcare of the Elderly (NPHCE)? (Q840616)

A. Sub-centers manage the treatment of minor ailments and provide rehabilitation equipment.

B. Primary Health Centers (PHCs) offer dedicated health clinics for the elderly three times a week.

C. Community Health Centers (CHCs) conduct research and development in addition to providing referral treatment.

D. District hospitals are responsible for training health professionals in geriatrics.

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is the role of an ASHA worker in the NP-NCD? (Q840627)

A. Diagnose and initiate treatment for NCDs like diabetes and hypertension at the village level.

B. Perform ECGs and other lab investigations at monthly village clinics to screen for NCDs

C. Conduct opportunistic screenings for NCDs and refer suspected cases to community health centers.

D. Provide specialized care and treatment for cancer patients and refer complicated cases to district hospitals.

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following is NOT a target outlined in the WHO's global monitoring framework for the prevention and control of non-communicable diseases (NCDs) in India? (Q840637)

A. A 5% relative reduction in the prevalence of insufficient physical activity by 2025.

B. A 25% relative reduction in premature mortality from NCDs by 2025.

C. A 30% relative reduction in the prevalence of current tobacco use by 2025.

D. An 80% availability of essential NCD medicines in public and private facilities by 2025.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following is the correct sequence of steps in conducting a non-communicable disease risk factor survey? (Q840644)

A. Questionnaire, biochemical investigations, physical measurements.

B. Physical measurement, biochemical investigations, questionnaire

C. Questionnaire, physical measurement, biochemical investigations.

D. Biochemical investigations, physical measurements, questionnaire.

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following logos represents the Rashtriya Bal Swasthya Karyakram (RBSK)? (Q840664)

A. None of the above

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following obesity indicators is considered the most useful single measurement for assessing central obesity? (Q840670)

A. BMI

B. Skinfold thickness

C. Waist-to-hip ratio

D. Waist circumference

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Match the following research trials/programs with their respective objectives: i) MRFIT a. Surveillance and assessment of trends in cardiovascular events ii) Jai vigyan mission b. Decreasing serum cholesterol, diastolic BP, smoking cessation in lowering coronary heart disease mortality iii) MONICA c. Dietary approaches to stop HTN iv) MPOWER d. To control rheumatic heart disease v) DASH e. To control consumption of Tobacco (Q840808)

A. i-d, ii-a, iii-b, iv-e, v-c

B. i-c, ii-e, iii-a, iv-d, v-b

C. i-b, ii-d, iii-a, iv-e, v-c

D. i-a, ii-c, iii-b, iv-e, v-d

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following is true regarding diabetes mellitus? (Q840818)

A. Fasting plasma glucose should be ≥6 mmol/L

B. 2 hour post load capillary plasma glucose should be ≥200 mg/dL

C. Random plasma glucose should be ≥11.1 mmol/L

D. HbA1c should be >6%

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following is not true regarding HTN? (Q840823)

A. A BP of 146/92 is considered a Grade I HTN.

B. On tracking of HTN, a person who is hypotensive in childhood then remains hypotensive in adulthood.

C. Only half of all hypertensive patients need lifelong medication; others manage with lifestyle changes alone.

D. Weight loss is the single most beneficial lifestyle modification done to manage HTN.

See Answer in Part B → Q10

@Neet_pg_bot

Q11: According to the Global Cancer Observatory, what type of cancer is most common worldwide, and what is its designated ribbon colour? (Q840828)

A. Lung Cancer & Dark Blue Ribbon

B. Breast Cancer & Pink Ribbon

C. Lung Cancer & White Ribbon

D. Colon Cancer & Dark Blue Ribbon

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following is correct regarding tracking phenomenon of blood pressure? (Q844346)

A. Blood pressure of an individual increases with age.

B. BP levels of individuals are followed up from early childhood to adult life.

C. Checking BP at regular intervals once hypertension is diagnosed.

D. Keeping a track of BP of a person with hypertension/hypotension from early childhood to adult life.

See Answer in Part B → Q12

@Neet_pg_bot

• [06_National Health Programs] 030 Blindness Control Program Nlep Health Programs Misc

« Back to Folder Directory

[06_National Health Programs] 030 Blindness Control Program Nlep Health Programs Misc — Quick Jump

Q1 (p. 297) *Q2 (p. 298)* *Q3 (p. 298)* *Q4 (p. 298)* *Q5 (p. 299)* *Q6 (p. 299)*
Q7 (p. 299) *Q8 (p. 300)* *Q9 (p. 300)* *Q10 (p. 301)* *Q11 (p. 302)*

Q1: The logo below represents which of the following health programs? (Q840894)

A. Anemia Mukt Bharat

B. National program for control of blindness and visual impairment

C. National health mission

D. NLEP



See Answer in Part B → Q1

@Neet_pg_bot

Q2: In the National Leprosy Eradication Programme (NLEP), which level of prevention involves early diagnosis and prompt treatment of leprosy cases to prevent disabilities and deformities? (Q840897)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Quaternary prevention

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is a primary indicator of leprosy cases? (Q840899)

A. Proportion of new cases correctly diagnosed

B. Treatment completion rate

C. Number of relapses during a year

D. Proportion of MB cases among new cases

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following defines Grade 2 disability in leprosy according to the WHO Disability Grading System? (Q840901)

A. Grade 2 disability involves no impairment of hand or foot function.

B. Grade 2 disability includes severe visible deformities and impairment of hand or foot function.

C. Grade 2 disability refers to mild visible deformities without any functional impairment.

D. Grade 2 disability indicates moderately visible deformities with slight impairment of hand or foot function.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: What is the primary goal of the initiative "Leprosy Mukt Bharat"? (Q840902)

A. To eradicate leprosy from India completely by 2027.

B. To reduce the prevalence of leprosy cases in India by 50% by 2025.

C. To provide free treatment and rehabilitation services to all leprosy patients in India until 2030

D. To raise awareness about leprosy and reduce the stigma associated with the disease in India before 2025.

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Match the type of visual impairment with the corresponding visual acuity criteria based on the NPCB classification: Type of Visual Impairment Visual Acuity Criteria 1. Low Vision A. Visual acuity of less than 3/60 to 1/60 2. Economic Blindness B. No perception of light 3. Social Blindness C. Visual acuity of less than 6/18 to 6/60 4. Manifest Blindness D. Visual acuity of less than 6/60 to 3/60 5. Absolute Blindness E. Visual acuity of less than 1/60 to the perception of light (Q841318)

A. 1-C, 2-D, 3-A, 4-E, 5-B

B. 1-D, 2-C, 3-E, 4-F, 5-B

C. 1-C, 2-F, 3-D, 4-E, 5-B

D. 1-F, 2-D, 3-A, 4-B, 5-C

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A 45-year-old woman presents to the ophthalmology clinic with a history of progressively worsening vision over the past few years. On examination, she is found to have significant scarring of the inner eyelids, leading to an inward turning of the eyelashes that scrapes against the cornea. What is the most likely cause of her preventable blindness? (Q841319)

A. Cataract

B. Glaucoma

C. Trachoma

D. Vitamin A deficiency

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Match the following Tier against the corresponding number of units in accordance with the proposed four-tier structure under Vision 2020. Tier Number of Units A. Apex 1. 20,000 B. Centres of Excellence 2. 200 C. Training Centres 3. 2 D. Service Centres 4. 2000 E. Vision Centres 5. 20 (Q841320)

A. A-3, B-5, C-2, D-4, E-1

B. A-1, B-3, C-4, D-5, E-2

C. A-4, B-2, C-5, D-3, E-1

D. A-4, B-2, C-5, D-1, E-3

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which is true regarding the health programme in the logo below? (Q841321)

A. It provides health insurance coverage only for rural populations.

B. Benefits under PM-JAY are restricted to government hospitals.

C. PM-JAY covers up to Rs. 5,00,000 per family per year for hospitalisation.

D. The scheme primarily focuses on providing primary healthcare services.



See Answer in Part B → Q9

@Neet_pg_bot

Q10: A senior physician working at a government medical college in a rural area has observed a significant lack of advanced medical facilities and infrastructure in her institution. As a result, many patients are referred to urban centres for specialised care. Which government program addresses these disparities? (Q841322)

A. Pradhan Mantri Swasthya Suraksha Yojana

B. Pradhan Mantri Jan Dhan Yojana

C. Pradhan Mantri Swasthya Suraksha Nidhi

D. Jan Aushadhi scheme

See Answer in Part B → Q10

@Neet_pg_bot

Q11: What level of prevention strategy does the concept of SAPNA come under in the prevention of leprosy? (Q844347)

A. Primary level of prevention

B. Secondary level of prevention

C. Tertiary level of prevention

D. Quaternary level of prevention

See Answer in Part B → Q11

@Neet_pg_bot

• [06_National Health Programs] 031 Previous Year Questions

« Back to Folder Directory

[06_National Health Programs] 031 Previous Year Questions — Quick Jump

Q1 (p. 303)	*Q2 (p. 304)*	*Q3 (p. 304)*	*Q4 (p. 305)*	*Q5 (p. 306)*	*Q6 (p. 306)*
Q7 (p. 307)	*Q8 (p. 307)*	*Q9 (p. 308)*	*Q10 (p. 308)*	*Q11 (p. 308)*	*Q12 (p. 309)*
Q13 (p. 309)	*Q14 (p. 309)*	*Q15 (p. 310)*	*Q16 (p. 310)*	*Q17 (p. 311)*	*Q18 (p. 311)*
Q19 (p. 312)	*Q20 (p. 313)*	*Q21 (p. 313)*	*Q22 (p. 314)*	*Q23 (p. 315)*	*Q24 (p. 315)*
Q25 (p. 315)	*Q26 (p. 316)*	*Q27 (p. 316)*	*Q28 (p. 316)*	*Q29 (p. 317)*	*Q30 (p. 317)*
Q31 (p. 317)	*Q32 (p. 318)*	*Q33 (p. 318)*	*Q34 (p. 319)*	*Q35 (p. 319)*	*Q36 (p. 320)*
Q37 (p. 321)	*Q38 (p. 321)*	*Q39 (p. 322)*	*Q40 (p. 322)*	*Q41 (p. 323)*	*Q42 (p. 323)*
Q43 (p. 323)	*Q44 (p. 324)*	*Q45 (p. 324)*	*Q46 (p. 324)*	*Q47 (p. 325)*	*Q48 (p. 325)*
Q49 (p. 325)	*Q50 (p. 326)*	*Q51 (p. 326)*	*Q52 (p. 327)*	*Q53 (p. 327)*	*Q54 (p. 327)*
Q55 (p. 328)	*Q56 (p. 328)*				

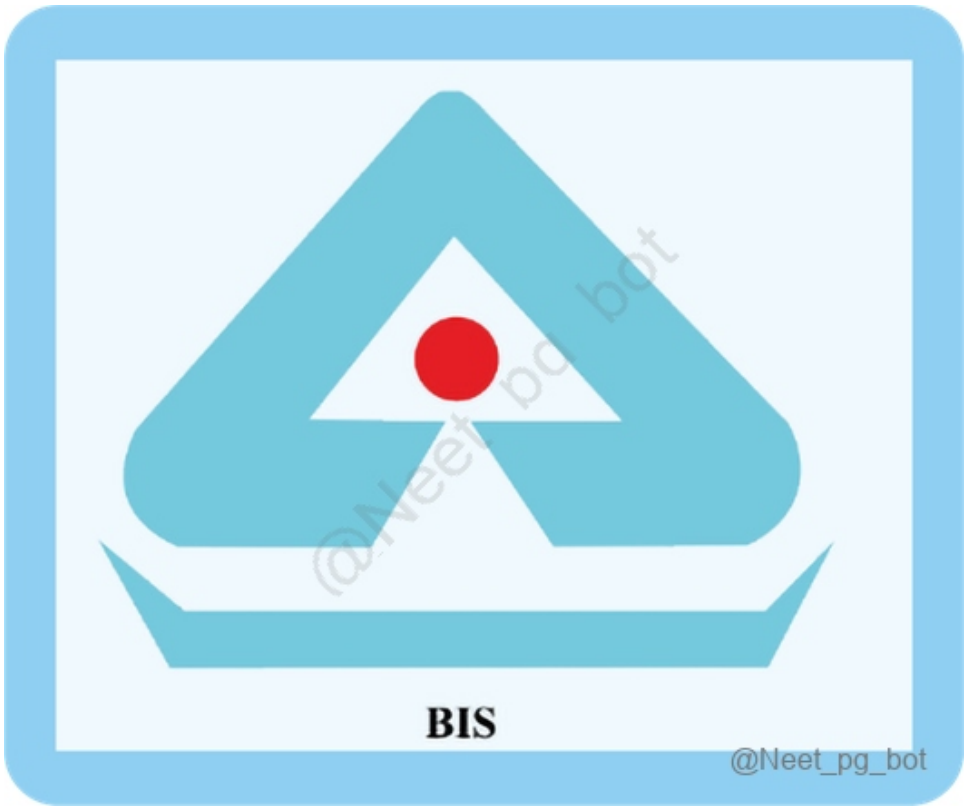
Q1: Identify the given logo below? (Q859448)

A. AGMARK

B. Bureau of Indian standards

C. Food corporation of India

D. GST



See Answer in Part B → Q1

@Neet_pg_bot

Q2: As part of the Anemia Mukt Bharat program, pregnant women with mild to moderate anemia who are less than 34 weeks pregnant are managed with the following treatment approach: (Q855129)

A. 2 iron and folic acid (IFA) tablets OD

B. IV iron sucrose for noncompliance with oral tablets

C. 2 iron and folic acid tablets OD + IV iron sucrose

D. IM ferric carboxy maltose (FCM)

See Answer in Part B → Q2

@Neet_pg_bot

Q3: According to the guidelines of the National Tuberculosis Elimination Program (NTEP), what would be the criteria to designate a district as a high priority district based on the prevalence of HIV TB? (Q855132)

A. >10%

B. >12%

C. >15%

D. >20%

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which disease is targeted under the National Vector Borne Disease Control Program, with the insect depicted below acting as the vector? (Q857081)

A. Chikungunya

B. Visceral leishmaniasis

C. Malayan filariasis

D. Japanese encephalitis



See Answer in Part B → Q4

@Neet_pg_bot

Q5: In the Ayushman Bharat scheme, what is the annual health insurance coverage offered to a qualifying family? (Q857099)

A. 5 lakhs per family per year

B. 4 lakhs per family per year

C. 6 lakhs per family per year

D. 3 lakhs per family per year

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which organization is not involved in providing funding for India's national TB program? (Q857145)

A. Government of India

B. World Bank

C. Global Fund

D. UNICEF

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which antigen is present in the Hepatitis B subunit vaccine? (Q855336)

A. HbeAg

B. HbsAg

C. HbcAg

D. HBV DNA

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following is included in the Pentavalent vaccine? (Q856593)

A. Diphtheria, Pertussis, Tetanus, HBV, Injectable Polio

B. Diphtheria, Pertussis, Typhoid, HBV, Hib

C. Diphtheria, Pertussis, Tetanus, Haemophilus influenza B, Pneumococcal vaccine

D. Diphtheria, Tetanus, HBV, Haemophilus influenza B, Pertussis

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which vaccine is linked to the risk of intussusception when administered? (Q856596)

A. Rotavirus vaccine

B. Oral Polio vaccine

C. Adenovirus vaccine

D. Measles vaccine

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following diseases is not included in the RBSK screening? (Q856872)

A. Congenital cataract

B. Congenital glaucoma

C. ROP

D. Vitamin A deficiency

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following populations is not included in the HIV sentinel surveillance? (Q856885)

A. Single male migrants

B. Truck drivers

C. STD clinic attendees

D. Antenatal woman

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which statement accurately describes the Nikshay Poshan Yojana program? (Q856444)

A. Rs 500 is given per week

B. Rs 1000 is given per month

C. Mid day meals are given

D. Dietary advice is given

See Answer in Part B → Q12

@Neet_pg_bot

Q13: As a medical officer at a Primary Health Center (PHC), what would be your recommendation for mass prophylaxis/treatment of anemia? (Q856463)

A. FeS04 + Vit C + Folate + Vit B12

B. Iron (Ill) hydroxide polymaltose

C. Ferrous fumarate

D. Inj. iron sucrose

See Answer in Part B → Q13

@Neet_pg_bot

Q14: The World Health Organization (WHO) has defined blindness as a condition where the level of visual acuity is below (Q859426)

A. 6/60

B. 3/60

C. 1/60

D. 6/18

See Answer in Part B → Q14

@Neet_pg_bot

Q15: The RMNCH+A strategy by the Ministry of Health and Family Welfare, Government of India, aims to provide comprehensive healthcare across various life stages. Which of the following population groups is not a target of the RMNCAH+N strategy? (Q865258)

A. Infant population

B. Family planning services

C. Geriatric population

D. Adolescent population

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A researcher who was studying on plasmodium species decided to visit the malaria-endemic place in Odisha after 2 days to do his clinical study for 5 weeks. Which of the following drugs need to be taken as prophylaxis before visiting the malaria-endemic place? (Q859451)

A. Artesunate

B. Mefloquine

C. Doxycycline

D. Chloramphenicol

See Answer in Part B → Q16

@Neet_pg_bot

Q17: What is the quickest method for laboratory diagnosis of pulmonary tuberculosis? (Q859453)

A. CB-NAAT

B. Sputum microscopy

C. Sputum culture

D. Radiometric BACTEC method

See Answer in Part B → Q17

@Neet_pg_bot

Q18: As a medical officer posted in rural service, you have been asked to supervise the various preventive measures being taken in your region against malaria. According to the program whose logo is shown below, you would be correct to advise all of the following except: (Q859460)

A. Two rounds of spraying with DDT should be done to provide protection during the entire transmission season.

B. Long lasting insecticide nest (LLIN) should be provided in areas with annual parasite Index 25.

C. Indoor residual sprays are not suitable for vector control in rural areas.

D. In case of DDT resistance, 3 rounds of spraying with Malathion should be done to provide protection during the entire transmission season.



See Answer in Part B → Q18

@Neet_pg_bot

Q19: Which of the following diseases are included in the scheme, which has the logo as given below? (Q859933)

A. CVD, Diabetes, Bronchial asthma

B. Diabetes, Hypertension, Bronchial asthma

C. CVD, Cancer, Diabetes, Stroke

D. Bronchial asthma, Hypertension, CVD



See Answer in Part B → Q19

@Neet_pg_bot

Q20: Which organization is involved in intersectoral coordination in the integrated child development services (ICDS)? (Q859971)

A. NHM

B. NACO

C. NLEP

D. UNDP

See Answer in Part B → Q20

@Neet_pg_bot

Q21: The full form of the Urban HEART programme is: (Q859978)

A. Urban health equity assessment and response tool

B. Urban health evaluation assessment and response tool

C. Urban health equity assessment and response technique

D. Urban health evaluation assessment and response technique

See Answer in Part B → Q21

@Neet_pg_bot

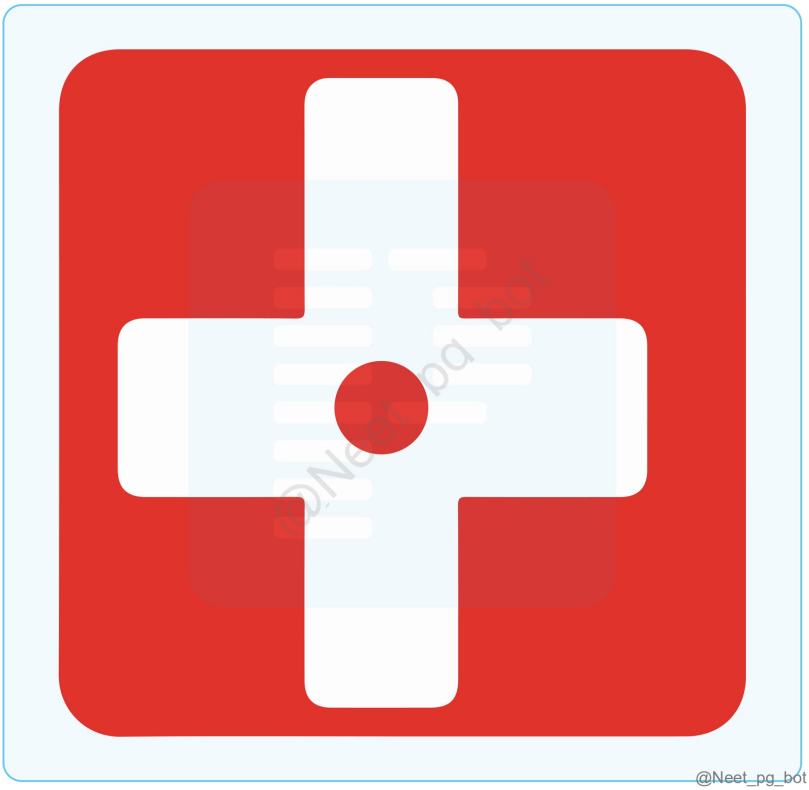
Q22: Please recognize the logo displayed in the provided image (Q860027)

A. International red cross

B. Suraksha Clinic

C. National AIDS control programme

D. Family planning campaign



See Answer in Part B → Q22

@Neet_pg_bot

Q23: Which of the following is true for DOTS? (Q860033)

A. Treatment under supervision

B. Every patient is given the same treatment

C. Streptomycin is given to all the patients

D. Dots stands for dosage

See Answer in Part B → Q23

@Neet_pg_bot

Q24: A' Bacteriologically Confirmed Case' in TB is defined as: (Q860035)

A. X-ray positive

B. Sputum positive

C. Mantoux positive

D. History of cough

See Answer in Part B → Q24

@Neet_pg_bot

Q25: A patient diagnosed with HIV presents with cough and fever for the past 3 months and later diagnosed with miliary TB. What is the next best step in management? (Q879033)

A. ATT followed by ART 2 weeks later with an increased dose of dolutegravir with dexamethasone

B. ART followed by ATT 2 weeks later with an increased dose of dolutegravir

C. Increased dose of dolutegravir stat

D. ART followed by ATT 2 weeks later with dexamethasone and increased dose of dolutegravir

See Answer in Part B → Q25

@Neet_pg_bot

Q26: A previously vaccinated healthcare worker (HCW) sustains a needle stick injury from a hepatitis B surface antigen (HBsAg) positive patient. The HCW is a known non-responder. What is the next step in management? (Q879037)

A. Give 2 doses of Hepatitis B immunoglobulin (HBIG) immediately at separate sites

B. Give 2 doses of HBIG – one immediately and another after 4 weeks

C. Give 1 dose of HBIG + start a complete hepatitis B vaccination series

D. No further action is required

See Answer in Part B → Q26

@Neet_pg_bot

Q27: According to NP- NCD which out of the following screening are not done: (Q879042)

A. VIA for cervical cancer screening

B. Visual inspection for oral cancer

C. Mammography for screening at primary level

D. Screening starts beyond 30 years

See Answer in Part B → Q27

@Neet_pg_bot

Q28: What is the WHO definition of blindness? (Q860000)

A. 6/60

B. 3/60

C. 6/18

D. 1/60

See Answer in Part B → Q28

@Neet_pg_bot

Q29: What is the name of the technical platform developed under India's National Tele Mental Health Programme (NTMHP) to deliver mental healthcare services through a multi-tiered system via telephone, digital platforms, and online portals? (Q866797)

A. NIKSHAY

B. Tele-MANAS

C. Quinidine

D. e-Sanjeevani

See Answer in Part B → Q29

@Neet_pg_bot

Q30: According to the World Health Organization (WHO), which of the following best defines blindness? (Q865264)

A. Best corrected visual acuity <6/60 in the better eye

B. Best corrected visual acuity <3/60 in the better eye

C. Uncorrected visual acuity <6/60 in any eye

D. Uncorrected visual acuity <3/60 in any eye

See Answer in Part B → Q30

@Neet_pg_bot

Q31: According to recent NACO guidelines, which of the following groups is no longer classified as a high-risk group (HRG) for HIV transmission? (Q865337)

A. Men who have sex with men (MSM)

B. Female sex workers (FSWs)

C. Truck drivers

D. Intravenous drug users (IDUs)

See Answer in Part B → Q31

@Neet_pg_bot

Q32: A 3-year-old child presents with difficulty in walking, bowing of legs, is underweight, and has minimal sun exposure. Which of the following government schemes addresses nutritional deficiencies in children under 6 years of age? (Q866448)

A. Mid-Day Meal Scheme

B. Anemia Mukt Bharat

C. Integrated Child Development Services (ICDS)

D. National Nutritional Deficiency Control Programme

See Answer in Part B → Q32

@Neet_pg_bot

Q33: Under the Weekly Iron and Folic Acid Supplementation (WIFS) scheme, what is the composition of IFA tablets given to children aged 10–19 years? (Q866455)

A. 60 mg elemental iron + 100 µg folic acid

B. 100 mg elemental iron + 500 µg folic acid

C. 100 mg elemental iron + 100 µg folic acid

D. 60 mg elemental iron + 500 µg folic acid

See Answer in Part B → Q33

@Neet_pg_bot

Q34: What does JSSK stand for? (Q844073)

A. Janani Shishu Suraksha Karyakram

B. Janani Shishu Swasthya Karyakram

C. Janani Shishu Suraksha Kendra]

D. Janani Shishu Swasthya Kendra

See Answer in Part B → Q34

@Neet_pg_bot

Q35: Identify the logo? (Q844075)

A. Leprosy

B. TB

C. Malaria

D. HIV



See Answer in Part B → Q35

@Neet_pg_bot

Q36: Identify the image given? (Q844094)

A. Arohi from HIV

B. Sapna Leprosy

C. Meena Unicef

D. None of the above



See Answer in Part B → Q36

@Neet_pg_bot

Q37: Which one of the following is included in Ayushman Bharat under school health services? (Q844120)

A. Providing sanitary pads

B. Health check-up/screening

C. Albendazole provision

D. All the above

See Answer in Part B → Q37

@Neet_pg_bot

Q38: How much mg of iron and mcg of folic acid should a pregnant woman be given? (Q860521)

A. 60mg/500mcg biweekly

B. 60mg/500mcg weekly

C. 60mg/500mcg daily

D. 60mg/500mcg once a month

See Answer in Part B → Q38

@Neet_pg_bot

Q39: The biological method for Mosquito Larva control is done by? (Q860592)

A. Spray 3 times a month

B. Nets to be distributed

C. Gambusia fish

D. Repellents

See Answer in Part B → Q39

@Neet_pg_bot

Q40: What is the primary objective of the Rashtriya Bal Swasthya Karyakram (RBSK)? (Q860594)

A. Prophylactic Iron and folic acid Supplementation

B. Healthful School Environment

C. Immunization

D. Screening for child health issues

See Answer in Part B → Q40

@Neet_pg_bot

Q41: A 49-year-old man came for a follow-up after recently receiving a new diagnosis and treatment initiation. He is counseled about the Axshya project. Which of the following diseases was this patient diagnosed with? (Q860599)

A. Tuberculosis

B. Diabetes

C. Malaria

D. Zika infection

See Answer in Part B → Q41

@Neet_pg_bot

Q42: The Anemia Mukt Bharat program aims to address anemia across India through targeted interventions. Which statement accurately describes its administration of Iron and Folic Acid (IFA) supplementation? (Q859994)

A. IFA is provided during the 2nd trimester of pregnancy and continues during lactation for up to 6 months

B. IFA supplementation is administered solely during pregnancy

C. A 100-day course of IFA supplementation is sufficient

D. Administering IFA during the 1st trimester is adequate.

See Answer in Part B → Q42

@Neet_pg_bot

Q43: A 10-year-old school-going girl came for a health checkup. Her Hb is 9 g/dL. Which of the following government programs is likely to provide significant benefit to her health? (Q858103)

A. Rashtriya bal swasthya karyakram

B. Janani suraksha Yojana

C. Pradhan Mantri Matru Vandana Yojana

D. Navjat Shishu Karyakram Yojana

See Answer in Part B → Q43

@Neet_pg_bot

Q44: Paris green dust is commonly used to kill which of the following? (Q860038)

A. Anopheles larva

B. Houseflies

C. Bedbugs

D. Cockroaches

See Answer in Part B → Q44

@Neet_pg_bot

Q45: Which of the following is correct regarding Ayushman Bharat scheme? (Q820571)

A. Rs 5 lakh/per family per year is given

B. Rs 10 lakh/per family per year is given

C. Rs 6 lakh/per family per year is given

D. Rs 2 lakh/per family per year is given

See Answer in Part B → Q45

@Neet_pg_bot

Q46: Which of the following is not true about the National Program for Control Blindness and Visual Impairment (NPCB and VI)? (Q854775)

A. Patients requiring cataract surgeries are selected and asked to report to the base hospital

B. To perform more small incision cataract surgeries

C. To perform surgeries in rural areas with makeshift hospitals/OTs

D. To perform surgeries in fixed facilities by shifting patients from rural areas.

See Answer in Part B → Q46

@Neet_pg_bot

Q47: School health program is under: (Q857987)

A. PHC

B. CHC

C. DH

D. Health and wellness centres

See Answer in Part B → Q47

@Neet_pg_bot

Q48: In the context of a national public health initiative aimed at addressing anemia, which of the following programs follows the "6x6x6 strategy"? (Q857997)

A. Anemia mukt bharat

B. Poshan Abhiyan

C. Kishori Shakti Yojana

D. None of these

See Answer in Part B → Q48

@Neet_pg_bot

Q49: Which government program aims to provide health checkups and services for children aged 0-18, including a focus on those not attending school? (Q858057)

A. Rashtriya Bal Swasthya Karyakaram

B. Janani Suraksha Yojna

C. Navjaat Shishu Suraksha Karyakaram

D. Mid day meal program

See Answer in Part B → Q49

@Neet_pg_bot

Q50: Which of the following is not a part of Urban health care delivery system? (Q820575)

A. PHC

B. CHC

C. Swasthya chowki

D. Subcenter

See Answer in Part B → Q50

@Neet_pg_bot

Q51: A 10-year-old school-going girl came for a health checkup. Her Hb is 9 g/dL. Which of the following government programs is likely to provide significant benefit to her health? (Q820604)

A. Rashtriya bal swasthya karyakram

B. Janani suraksha yojana

C. Pradhan Mantri Matru Vandana Yojana

D. Navjat Shishu Karyakram yojna

See Answer in Part B → Q51

@Neet_pg_bot

Q52: In the context of a national public health initiative aimed at addressing anemia, which of the following program follows the "6x6x6 strategy" ? (Q820674)

A. Anemia mukt bharat

B. Poshan Abhiyan

C. Kishori Shakti Yojana

D. None of these

See Answer in Part B → Q52

@Neet_pg_bot

Q53: School health program is under (Q820686)

A. PHC

B. CHC

C. DH

D. Health and wellness centres

See Answer in Part B → Q53

@Neet_pg_bot

Q54: Which government program aims to provide health checkups and services for children aged 0-18, including a focus on those not attending school? (Q830809)

A. Rashtriya Bal Swasthya Karyakaram

B. Janani Suraksha Yojna

C. Navjaat Shishu Suraksha Karyakaram

D. Mid day meal program

See Answer in Part B → Q54

@Neet_pg_bot

Q55: A baby presents for a routine examination in the outpatient department. A growth chart is utilized to record the baby's weight, which falls within the 85th - 95th percentile range. What is the present condition of the child? (Q793839)

A. Obesity

B. SAM

C. Overweight

D. Interpretation cannot be made without BMI

See Answer in Part B → Q55

@Neet_pg_bot

Q56: Which of the following healthcare providers is not working at the village level ? (Q793787)

A. ANM

B. AWW

C. TBA

D. ASHA

See Answer in Part B → Q56

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• [07_Demography and Health] 032 Demography And Health

« Back to Folder Directory

[07_Demography and Health] 032 Demography And Health — Quick Jump

Q1 (p. 329)	*Q2 (p. 329)*	*Q3 (p. 329)*	*Q4 (p. 330)*	*Q5 (p. 331)*	*Q6 (p. 331)*
Q7 (p. 332)	*Q8 (p. 332)*	*Q9 (p. 333)*	*Q10 (p. 333)*	*Q11 (p. 333)*	*Q12 (p. 334)*
Q13 (p. 334)	*Q14 (p. 334)*	*Q15 (p. 335)*	*Q16 (p. 336)*	*Q17 (p. 336)*	*Q18 (p. 336)*
Q19 (p. 337)	*Q20 (p. 337)*	*Q21 (p. 338)*	*Q22 (p. 338)*	*Q23 (p. 338)*	*Q24 (p. 339)*
Q25 (p. 339)	*Q26 (p. 339)*				

Q1: Which of the following best defines the crude birth rate? (Q840776)

A. Live births per 1,000 people in mid-year population per year

B. Live births per 1,000 people in annual population per year

C. Live births and stillbirths per 100,000 people in the mid-year population per year

D. Live births and stillbirths per 100,000 people in annual population per year

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Late expanding stage of population in India due to ? (Q844339)

A. Birth rate stationary death rate continues to fall

B. Death rate declines faster than birth rate

C. Birth rate declines, death rate same

D. Birth rate is less than death rate

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following topics was NOT included in the NFHS-5 conducted in 2019-21? (Q840815)

A. Blood pressure

B. Access to toilet facility

C. HIV status

D. Methods used for termination of pregnancy

See Answer in Part B → Q3

@Neet_pg_bot

Q4: According to the system, which has the logo below and under the Central Birth and Death Registration Act, 1969, what is the time limit for registering for birth and death events in India? (Q840811)

A. 28 days

B. 21 days

C. 30 days

D. 60 days



See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following statements are true regarding the Sample registration system? (Q840805)

A. An independent survey is conducted by an investigator-supervisor every 6 months.

B. Key data components of SRS are the number of births and death

C. An enumerator continuously keeps track of the birth and death count

D. All of the above

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following data components are provided by the census? Population size and distribution HIV status and reproductive health status Education and employment status Nutritional status (Q840796)

A. 2, 3 and 4

B. 2 and 4

C. 1, 3 and 4

D. 1 and 3

See Answer in Part B → Q6

@Neet_pg_bot

Q7: What does the De facto method of data collection refer to? (Q840792)

A. Information is collected only from a certain subset of the population.

B. Information is based on where people are found during the census.

C. Information is based on the individual's legal proof of permanent residency.

D. Information is only from institutional households.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following is also known as the final impact indicator in the National family planning program? (Q840789)

A. Total Fertility Rate (TFR)

B. Net Reproductive Rate (NRR)

C. Couples protection rate (CPR)

D. Gross Reproductive Rate (GRR)

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following indicators helps to achieve the target of the national family planning program? (Q840786)

A. Age-specific fertility rate (ASFR)

B. Total fertility rate (TFR)

C. General fertility rate (GFR)

D. Couple protection rate (CPR)

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following is NOT true regarding the Net reproductive rate (NRR)? (Q840783)

A. Indicator of complete family size

B. Defined as the no. of daughters or girls a newborn girl will bear or will have throughout her reproductive lifespan, considering the current age-specific fertility patterns and mortality rates

C. The most sensitive indicator to evaluate the National family planning program

D. Mortality-dependent fertility indicator

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following statements about GRR is correct? (Q840781)

A. It is the total no. of girls a woman will have throughout her reproductive lifespan, considering current age-specific fertility rates

B. It is the total no. of daughters a woman will have throughout her reproductive lifespan, considering current age-specific fertility rates and current age-specific death /mortality rates

C. It is the total no.of children a woman will have throughout her reproductive life span (15-49 yrs), considering current age-specific fertility rates

D. None of the above

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following best defines the total fertility rate (TFR)? (Q840780)

A. Total live births per 1000 women in a specific age group per year.

B. Average live births per 1000 women of reproductive age (15-49 years) per year.

C. Average number of children per woman based on current fertility rates throughout her reproductive life (15-49 years).

D. Number of live births in a given year divided by the mid-year population, multiplied by 1,000.

See Answer in Part B → Q12

@Neet_pg_bot

Q13: A research team compares fertility patterns between two urban regions. Which fertility measure gives the most detailed insight into fertility behavior? (Q840778)

A. Live births per 1000 women of childbearing age, 15-49 years

B. Live births per 1000 total population

C. Live births per 1000 women in specific age groups

D. Total number of births in the population

See Answer in Part B → Q13

@Neet_pg_bot

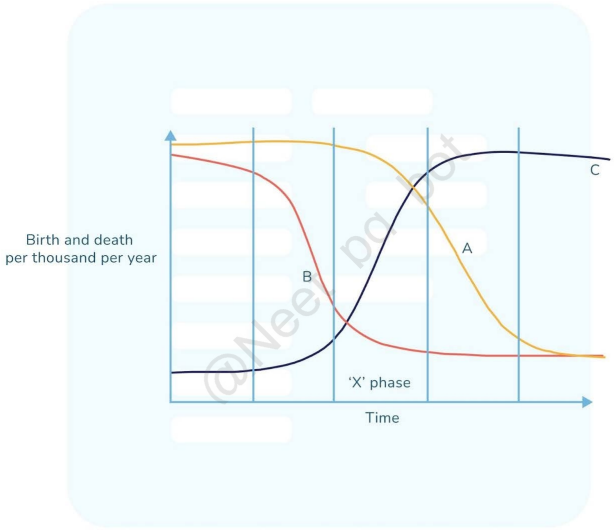
Q14: In the graph of a demographic transition model given below, identify the following. (Q840762)

A. A- Death rate, B- Population, C- Birth rate, X- Late expanding

B. A- Birth rate, B- Death rate, C- Population, X- Late expanding

C. A- Death rate, B- Birth rate, C- Population, X- Early expanding

D. A- Birth rate, B- Death rate, C- Population, X- Early expanding



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See Answer in Part B → Q14

@Neet_pg_bot

Q15: In a recent census survey conducted in a developing country, the government aims to measure the literacy levels among its population accurately. The survey team decides to calculate both the crude literacy rate and the effective literacy rate to gain a comprehensive understanding. What distinguishes the effective literacy rate from the crude literacy rate? (Q840775)

A. It provides a broad measure of literacy across all age groups.

B. It focuses on the population aged 7 years and above.

C. The literacy rate is calculated using the total population as the denominator.

D. It includes the entire population.

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which of the following is a positive mortality indicator? (Q840774)

A. Life expectancy

B. Infant mortality rate

C. Crude death rate

D. Under 5 mortality rate

See Answer in Part B → Q16

@Neet_pg_bot

Q17: A country has 40 million people under 15, 30 million aged 65 and over, and 150 million aged 15-64. What is the dependency ratio? (Q840773)

A. 46.7%

B. 50.7%

C. 56.7%

D. 60.7%

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which of the following statements about female deficit syndrome are true? (Q840772)

A. Increased maternal mortality.

B. Male-biased population ratio

C. Gender inequities in society

D. All of the above

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Match the following terms and definitions with Terms Definitions 1. Demographic Burden a) Period of decrease in the dependency ratio 2. Demographic Bonus b) Indicates a rise in the total dependency ratio 3. Demographic Window c) Increase in economic growth rate 4. Demographic Dividend d) Peak working-age population phase (Q840770)

A. 1-b, 2-a, 3-d, 4-c

B. 1-d, 2-a, 3-c, 4-b

C. 1-c, 2-b, 3-a, 4-d

D. 1-a, 2-c, 3-b, 4-d

See Answer in Part B → Q19

@Neet_pg_bot

Q20: Which of the following is NOT true regarding demographic gifts? (Q840769)

A. It occurs when there is a significant increase in the working-age population.

B. It involves a higher proportion of elderly individuals.

C. It leads to a demographic dividend for economic development.

D. It is associated with a decline in dependency ratios.

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Population pyramid represents the age and sex composition of a population. All of the following statements about a Population Pyramid are false except? (Q840768)

A. A broad base and narrow apex indicate a high fertility rate and low life expectancy.

B. The width of the base of a population pyramid represents the elderly population.

C. They always have a symmetrical shape across all countries.

D. Population pyramids are static and do not change over time.

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Population and Vital statistics represent the demography of a population. Which of the following is not considered a vital statistic in demography? (Q840767)

A. Birth rate

B. Death rate

C. Life expectancy at birth

D. Sex ratio

See Answer in Part B → Q22

@Neet_pg_bot

Q23: Assuming a population follows the Malthusian growth model and doubles in number in 20 years, what is its annual growth rate? (Q840766)

A. 2.8%

B. 3.5 %

C. 0.28

D. 35%

See Answer in Part B → Q23

@Neet_pg_bot

Q24: Demographic transition refers to a change of demographic parameters like birth rate and death rate along with the dynamic process of socio- economic scenario. Which of the following scenarios best describes the demographic trap of a country? (Q840765)

A. High birth rate (CBR) and declining death rate (CDR) lead to outpaced economic growth and resources.

B. Declining birth rate (CBR), which falls below the death rate (CDR), thus leading to shrinkage of the population.

C. High birth rate (CBR) and high death rate (CDR) leading to a stable population without growth

D. Both B and C

See Answer in Part B → Q24

@Neet_pg_bot

Q25: Based on the demographic transition model, which transition phase does India belong to? (Q840764)

A. Early expanding

B. Late expanding

C. Low stationery

D. Declining

See Answer in Part B → Q25

@Neet_pg_bot

Q26: Which of the following is associated with the term demographic gap? (Q840763)

A. People entering and people leaving the country

B. Crude birth rate and crude death rate

C. Male population and female population

D. Age group of males and females

See Answer in Part B → Q26

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• [07_Demography and Health] 033 Previous Year Questions

« Back to Folder Directory

[07_Demography and Health] 033 Previous Year Questions — Quick Jump

Q1 (p. 341)	*Q2 (p. 341)*	*Q3 (p. 342)*	*Q4 (p. 342)*	*Q5 (p. 342)*	*Q6 (p. 343)*
Q7 (p. 343)	*Q8 (p. 343)*	*Q9 (p. 344)*	*Q10 (p. 344)*	*Q11 (p. 344)*	*Q12 (p. 345)*
Q13 (p. 345)	*Q14 (p. 345)*	*Q15 (p. 346)*	*Q16 (p. 346)*	*Q17 (p. 346)*	*Q18 (p. 347)*
Q19 (p. 347)	*Q20 (p. 348)*	*Q21 (p. 348)*	*Q22 (p. 348)*	*Q23 (p. 349)*	*Q24 (p. 349)*
Q25 (p. 349)	*Q26 (p. 350)*				

Q1: In the “de facto” method of census data collection, individuals are enumerated based on which of the following? (Q866429)

A. Place of birth

B. Location at time of enumeration

C. Usual residence

D. Place of employment

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Number of live births per 1000 women in the reproductive age group in a year refers to: (Q859826)

A. Gross reproduction rate

B. Total fertility rate

C. Net reproduction rate

D. General fertility rate

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following fertility indicator can change with changes in age-specific mortality rates? (Q859809)

A. General fertility rate

B. Total fertility rate

C. Gross reproduction rate

D. Net reproductive rate

See Answer in Part B → Q3

@Neet_pg_bot

Q4: What is the formula of crude birth rate? (Q859789)

A. (Total number of births in a year / Estimated midyear Population) x 100

B. (Number of live births and stillbirths /Mid-year population) x 1000

C. (Number of live births in a year/ Mid-year Population) x 1000

D. (Number of live births / Estimated midyear Population) x 10000

See Answer in Part B → Q4

@Neet_pg_bot

Q5: When is the population evaluated to calculate the crude death rate? (Q859433)

A. 1st July

B. 1st January

C. 31st December

D. 1st may

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following indicators is not included in the Global Hunger Index (GHI) ? (Q856076)

A. Infant mortality rate

B. Under-5 mortality rate

C. Percentage of undernourished population

D. Child wasting

See Answer in Part B → Q6

@Neet_pg_bot

Q7: For a population of 10,000, what does a sex ratio of more than 1000 mean? (Q857700)

A. Males are less than 500

B. Females are less than 500

C. Males are less than 5000

D. Females are less than 5000

See Answer in Part B → Q7

@Neet_pg_bot

Q8: The number of maternal deaths per 100,000 live births is called- (Q857695)

A. Maternal mortality ratio

B. Under 5 Mortality Rate

C. Infant mortality rate

D. Perinatal mortality rate

See Answer in Part B → Q8

@Neet_pg_bot

Q9: The term demographic bonus is due to: (Q857136)

A. Decline in dependency ratio

B. Increase in dependency ratio

C. Increase in population

D. Decrease in population

See Answer in Part B → Q9

@Neet_pg_bot

Q10: What is the current ideal total fertility rate in India? (Q857107)

A. 2.3

B. 2.2

C. 2.1

D. 2.0

See Answer in Part B → Q10

@Neet_pg_bot

Q11: The average number of children a woman would have if she were to pass through her reproductive years bearing children at the same rates as the women in her age group is called as: (Q857092)

A. General fertility rate

B. Total fertility rate

C. Gross reproduction rate

D. Net reproduction rate

See Answer in Part B → Q11

@Neet_pg_bot

Q12: What phase of the demographic cycle is the low stationary phase of demographic cycle? (Q857090)

A. Phase 1

B. Phase 2

C. Phase 3

D. Phase 4

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which stage of the demographic cycle has the highest birth and death rates? (Q858026)

A. Stage I

B. Stage II

C. Stage III

D. Stage IV

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Infant mortality rate is typically stated as a rate per how many live births.? (Q857970)

A. 100

B. 1000

C. 10,000

D. 1,00,000

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following is the sensitive indicator to assess the availability, utilization, and effectiveness of healthcare in a community? (Q855543)

A. Infant mortality rate

B. Maternal mortality rate

C. Immunization coverage

D. Disability-adjusted life years

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Stages of the demographic cycle with the same birth rate but variable death rate are? (Q860057)

A. Stage 1 + stage 2

B. Stage 2 + stage 3

C. Stage 3 + stage 5

D. Stage 4 + stage 5

See Answer in Part B → Q16

@Neet_pg_bot

Q17: In a family, Mr. X is 69 years old, and his wife, Mrs. X, is 58 years old. They have a 30-year-old son, his 28-year-old wife, and a 5-year-old grandchild. Calculate the dependency ratio for this family. (Q860021)

A. 33

B. 66.6

C. 22.4

D. 44.6

See Answer in Part B → Q17

@Neet_pg_bot

Q18: What is the growth rate if the crude birth rate is 19 and the crude death rate is 7? (Q860005)

A. 1.2%

B. 0.7%

C. 1.1%

D. 1.5%

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Which of the following provides valuable information about the reproductive behavior of couples within a population? (Q860584)

A. TFR

B. NRR

C. GFR

D. GRR

See Answer in Part B → Q19

@Neet_pg_bot

Q20: Which of the following is not included in MMR? (Q860574)

A. Death due to RTA

B. Death due to preeclampsia

C. Death due to ectopic pregnancy

D. Death on the 14th day postpartum

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Calculate the maternal mortality ratio in a population of 2 lakhs, with 4000 live births, and 5 stillbirths where 2 died due to ectopic, 2 by abortion, 2 by electrocution, 2 deaths by sepsis and 4 by PPH? (Q860563)

A. 25 per one lakh

B. 250 per lakh

C. 500 per lakh

D. 100 per lakh

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Marriage and mortality belong under? (Q860519)

A. Demographic process

B. Demographic dividend

C. Demographic bonus

D. Demographic window

See Answer in Part B → Q22

@Neet_pg_bot

Q23: Arrange the following stages of the demographic cycle in the correct order: Early expanding High stationary Late expanding Low stationary (Q844101)

A. 1, 2, 3, 4

B. 2, 1, 3, 4

C. 1, 3, 2, 4

D. 3, 2, 4, 1

See Answer in Part B → Q23

@Neet_pg_bot

Q24: In a given population, The number of individuals aged 0-14 years = 6,000 The number of individuals aged 15-59 years = 12,000 The number of individuals aged 60 years and above = 2,000 What is the dependency ratio of this population? (Q865308)

A. 0.33

B. 0.50

C. 0.66

D. 1.00

See Answer in Part B → Q24

@Neet_pg_bot

Q25: Which of the following statements accurately describes the fifth stage of the demographic cycle? (Q793600)

A. Birth rate remains unchanged

B. Death rate increases

C. Demographic gap is positive

D. Birth rate falls below death rate

See Answer in Part B → Q25

@Neet_pg_bot

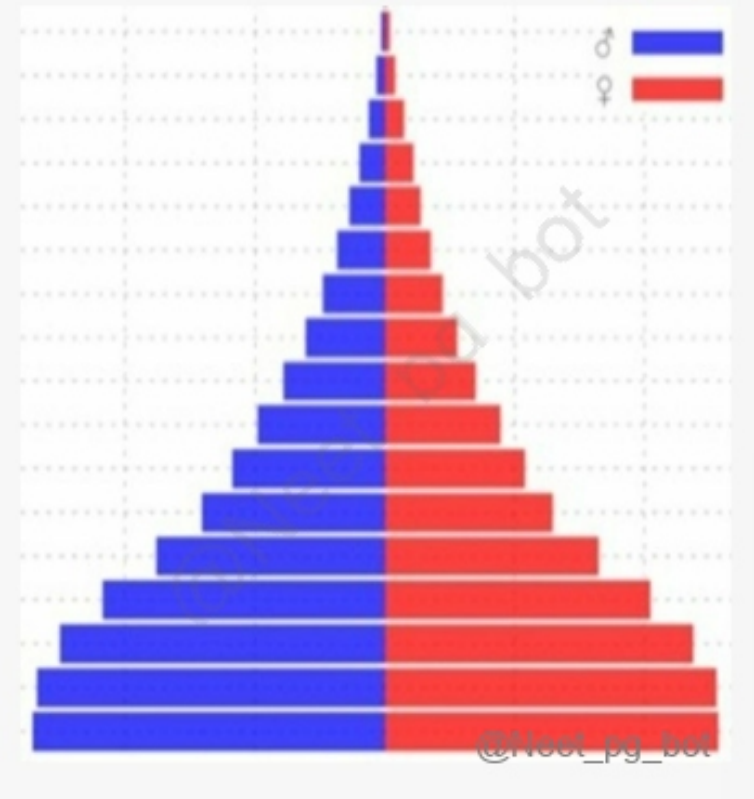
Q26: What does the provided population pyramid indicate, with the exception of? (Q793628)

A. Developing countries

B. Developed countries

C. Increasing population

D. More young population



See Answer in Part B → Q26

• [08_Family Planning and Contraceptives] 034 Family Planning And Contraceptives

« Back to Folder Directory

[08_Family Planning and Contraceptives] 034 Family Planning And Contraceptives — Quick Jump

Q1 (p. 352)	*Q2 (p. 352)*	*Q3 (p. 353)*	*Q4 (p. 353)*	*Q5 (p. 353)*	*Q6 (p. 354)*
Q7 (p. 354)	*Q8 (p. 355)*	*Q9 (p. 355)*	*Q10 (p. 356)*	*Q11 (p. 356)*	*Q12 (p. 357)*
Q13 (p. 357)	*Q14 (p. 357)*	*Q15 (p. 358)*	*Q16 (p. 358)*	*Q17 (p. 358)*	*Q18 (p. 359)*
Q19 (p. 359)	*Q20 (p. 360)*	*Q21 (p. 360)*	*Q22 (p. 361)*	*Q23 (p. 361)*	*Q24 (p. 361)*
Q25 (p. 362)	*Q26 (p. 363)*	*Q27 (p. 363)*	*Q28 (p. 364)*		

Q1: A 30 Y/o woman has been taking oral contraceptive pills (OCPs) for the past five years, not just for contraception but also for managing her menstrual cramps and acne. Which of the following are additional long-term health benefits of OCPs, aside from birth control and symptomatic relief? (Q840838)

A. Reduced risk of hypertension

B. Decreased risk of thrombosis

C. Reduced risk of ovarian cancer

D. Reduced risk of cervical cancer

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A contraceptive “X” is used by 100 couples for a continuous period of 2 years. During this period 20 women become pregnant despite using contraceptive “X”. What is the pearl index of contraceptive “X”? (Q882189)

A. 0.1 per HWY

B. 1 per HWY

C. 10 per HWY

D. 1000 per HWY

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is not a characteristic of a planned family? (Q841317)

A. No childbirth beyond the age of 30-35

B. Gap of 2 years between marriage and first child birth

C. Age of mother is >20 years at the time of first child birth

D. Gap of 2 years between 2 successive pregnancies

See Answer in Part B → Q3

@Neet_pg_bot

Q4: In a village with a population of 2,000 eligible couples, the survey findings revealed that 600 couples use oral contraceptives, 300 couples use condoms, 200 couples use intrauterine devices (IUDs), and 100 couples have undergone sterilization. Which of the following is the couple protection rate (CPR)? (Q841316)

A. 45%

B. 50%

C. 55%

D. 60%

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following statements is incorrect regarding the Pearl Index for measuring contraceptive effectiveness? (Q841315)

A. Technique for evaluating contraceptive efficacy

B. (Total no of accidental pregnancies/ total months of exposure) * 1200

C. More accurate than life table analysis

D. Pregnancies per 100 woman-years of exposure to a contraceptive method

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Match the following contraceptive methods with their appropriate failure rates. Contraceptive Failure Rate A. Male condom 1. 9-20/HWY B. Female Condom 2. 20-40/HWY C. Diaphragm 3. 6-12/HWY D. Vaginal sponge (Nulliparous women) 4. 2-14/HWY E. Vaginal sponge (Parous women) 5. 5-21/HWY (Q841314)

A. A-1, B-4, C-3, D-2, E-2

B. A-5, B-4, C-2, D-1, E-3

C. A-4, B-5, C-3, D-1, E-2

D. A-2, B-5, C-3, D-1, E-4

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Match the following: a) Mission Parivar Vikas 1) Contraception counselling method b) NISCHAY 2) Population stabilization fund c) Jansankhya sthirata kosh 3) Nayi pahel kit- family planning kit for newly weds d) Gather approach 4) Home testing UPT provided by ASHA (Q840864)

A. a-3, b-4, c-2, d-1

B. a-1, b-4, c-2, d-3

C. a-4, b-2, c-3, d-1

D. a-2, b-1, c-3, d-4

See Answer in Part B → Q7

@Neet_pg_bot

Q8: What program is the given image a logo for? (Q840860)

A. National family welfare program

B. Jansankhya sthirata kosh

C. Mission parivar vikas

D. Janani shishu suraksha karyakram



See Answer in Part B → Q8

@Neet_pg_bot

Q9: A 29-year-old woman with 3 children has come for counselling regarding sterilisation. She is hesitant to have surgery. Which of the following methods suits her needs? (Q840854)

A. Essure

B. DMPA

C. Mesigyna

D. Cerazette

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following is false regarding female sterilisation? (Q840852)

A. Minilap can be performed at PHC level

B. Permission of spouse must be obtained

C. At least one child over age 1 year old

D. They must be of age 22-49 years

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A 40-year-old male is ready for discharge after vasectomy under his family planning program. How long should he use additional contraceptive measures till he becomes completely sterile? (Q840847)

A. No need of additional contraceptive measures

B. 15 ejaculations

C. 20 ejaculations

D. 10 ejaculations

See Answer in Part B → Q11

@Neet_pg_bot

Q12: In the Basal body temperature method, which of the following is the reason for increase in body temperature? (Q840844)

A. Increase in estrogen

B. Increase in progesterone

C. Decrease in progesterone

D. Decrease in estrogen

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following is not an emergency contraceptive? (Q840843)

A. Ulipristal

B. Mifepristone

C. Levonorgestrel

D. Desogestrel

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A woman missed 2 pills in the second week of her contraceptive pack. She had protected sex yesterday. What should she do? (Q840840)

A. Discard the pack and start a new one immediately

B. Use emergency contraception immediately

C. Skip the missed pills and continue

D. Take 2 pills at the scheduled time

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A 30-year-old sexually active couple presents at a free health clinic seeking advice on contraception methods that also protect against sexually transmitted infections (STIs). They are interested in a method that offers both protection from pregnancy and protection against STDs. Which barrier method would be most recommended for them? (Q840717)

A. Spermicidal jelly

B. Diaphragm

C. Cervical cap

D. Male condom

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A 28 y/o reports a history of deep vein thrombosis (DVT) five years ago but is otherwise healthy. She does not smoke and has no other significant medical history. She desires a reliable, long-term contraceptive method. Which of the following contraceptive options is MOST contraindicated in this patient? (Q840835)

A. Copper Intrauterine Device (IUD)

B. Progesterone-only pill (POP)

C. Combined oral contraceptive pills (COCPs)

D. Barrier methods (condoms, diaphragm)

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Match the following contraceptive methods with their correct descriptions: Contraceptive Method Description A. Femilon 1. A non-hormonal male contraceptive

derived from cottonseed oil. B. Mini Pills 2. A combined oral contraceptive pill containing both estrogen and progesterone. C. Gossypol 3. A progestin-only oral contraceptive pill. (Q840834)

A. A-2, B-3, C-1

B. A-1, B-2, C-3

C. A-3, B-1, C-2

D. A-2, B-1, C-3

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which of the following correctly describes the difference between MALA-N and MALA-D? (Q840832)

A. MALA-N: Contains only progesterone; MALA-D: Contains both estrogen and progesterone

B. MALA-N: Available for free under the government program; MALA-D: Sold at a subsidised price

C. MALA-N: Taken daily; MALA-D: Taken weekly

D. MALA-N: Injectable contraceptive; MALA-D: Oral contraceptive

See Answer in Part B → Q18

@Neet_pg_bot

Q19: A 38 y/o woman presents to a clinic seeking contraception counseling. She is a breastfeeding mother of a 3-month-old baby. She reports a history of heavy menstrual bleeding. Which of the following can be given to her? (Q840830)

A. Combined oral contraceptive pills

B. Depot medroxyprogesterone acetate injections

C. Progesterone-only pills

D. Centchroman

See Answer in Part B → Q19

@Neet_pg_bot

Q20: A 28 y/o woman desires a reliable method that she can manage herself and wants to avoid daily pill-taking. She has no history of cardiovascular disease or other contraindications for combined hormonal contraception. Which of the following offers both estrogen and progesterone and would be suitable for this patient? (Q840825)

A. NuvaRing

B. ANTARA

C. NORPLANT

D. NET-EN

See Answer in Part B → Q20

@Neet_pg_bot

Q21: A 32-year-old woman presents for contraceptive counselling. She has a history of irregular menstrual cycles and desires a long-acting reversible contraceptive method. She is not currently pregnant and has no recent history of pelvic infections. Her last menstrual period was two weeks ago, and she is not currently using any form of contraception. When is the most appropriate time for the gynecologist to insert the intrauterine device (IUD) for this patient? (Q840824)

A. During her current menstrual cycle

B. Immediately after ovulation

C. At any time during her cycle

D. Two weeks before her next menstrual period

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Which of the following is not an absolute contraindication to IUD insertion? (Q840821)

A. Suspected pregnancy

B. CA cervix

C. Current PID

D. Menorrhagia

See Answer in Part B → Q22

@Neet_pg_bot

Q23: A 29-year-old woman with a copper IUD inserted 9 months ago presents with lower abdominal pain, fever (38.5°C), and no visible IUD strings. She has multiple sexual partners. On exam, she has lower abdominal tenderness. What is the most likely complication? (Q840820)

A. Expulsion

B. Uterine perforation

C. Pelvic inflammatory disease (PID)

D. Ectopic pregnancy

See Answer in Part B → Q23

@Neet_pg_bot

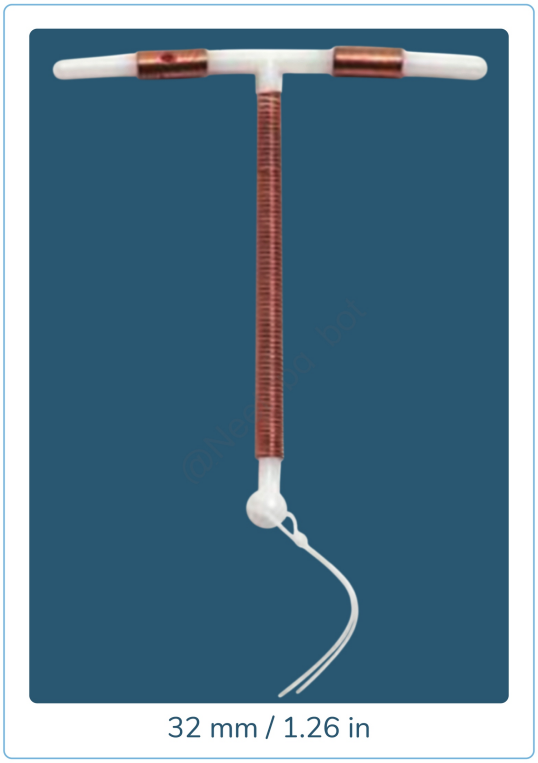
Q24: What is the name of the IUD shown below? (Q840814)

A. CuT 380

B. Nova T

C. Progestastart

D. Multiload



See Answer in Part B → Q24

@Neet_pg_bot

Q25: A 32-year-old woman with a history of heavy menstrual bleeding and dysmenorrhea seeks contraception counseling. She prefers a long-acting reversible contraceptive and is interested in intrauterine devices (IUDs). Which IUD would be the most appropriate choice for her, considering her medical history and preferences? (Q840809)

A. Mirena

B. CuT

C. Lippes loop

D. Grafenberg ring

See Answer in Part B → Q25

@Neet_pg_bot

Q26: Which of the following is NOT a form which spermicide is available in? (Q840802)

A. Jellies

B. Patches

C. Creams

D. Foams

See Answer in Part B → Q26

@Neet_pg_bot

Q27: Which of the following statements is false regarding the contraception shown below? (Q840798)

A. It is made of polyurethane foam and saturated with a spermicide nonoxynol-9

B. It must be left in place for at least 6 hours after intercourse.

C. It offers no protection from sexually transmitted infections.

D. It has a lower failure rate in women who have given birth before.



See Answer in Part B → Q27

@Neet_pg_bot

Q28: Match the following contraceptives with their appropriate classification CATEGORY 1 CATEGORY 2 A. Spermicide 1. Physiological method B. Grafenberg Ring 2. Chemical barrier method C. Nuva rings 3. IUD D. Tubectomy 4. Hormonal contraceptive E. Coitus interruptus 5. Terminal surgical contraception (Q840712)

A. A-1 B-3 C-2 D-5 E- 4

B. A-2 B-3 C-4 D-5 E- 1

C. A-3 B-2 C-4 D-1 E-5

D. A-2 B-4 C-1 D-5 E-3

See Answer in Part B → Q28

@Neet_pg_bot

• [08_Family Planning and Contraceptives] 035 Previous Year Questions

« Back to Folder Directory

[08_Family Planning and Contraceptives] 035 Previous Year Questions — Quick Jump

Q1 (p. 365) *Q2 (p. 365)* *Q3 (p. 365)* *Q4 (p. 366)* *Q5 (p. 366)* *Q6 (p. 367)*
Q7 (p. 367) *Q8 (p. 368)* *Q9 (p. 368)* *Q10 (p. 369)*

Q1: In which of the following conditions is the use of an intrauterine contraceptive device (IUCD) absolutely contraindicated? (Q866883)

A. Hypertension

B. Hyperlipidemia

C. Diabetes mellitus

D. Current PID

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A female presents at 22 weeks of pregnancy due to rape. Which statement is correct regarding medical termination of pregnancy (MTP)? (Q844029)

A. Between 20-24 weeks, one doctor’s opinion is required

B. Between 20-24 weeks, MTP is only done if it is life-saving for the mother

C. MTP can be done up to 24 weeks in this case

D. MTP can be done after 24 weeks.

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Oral contraceptive pills (OCPs) are known to have a protective effect against certain cancers. Which of the following cancers is not reduced (i.e., not protected or may increase in risk) with OCP use? (Q820635)

A. Endometrial cancer

B. Cervical cancer

C. Breast cancer

D. Bladder cancer

See Answer in Part B → Q3

@Neet_pg_bot

Q4: All are given as emergency contraceptives except: (Q820678)

A. LNG 0.75 mg 2 tab

B. Ethyline Estradiol tablet

C. Ulipristal

D. OCP 2 tab within 24 hrs, repeat dose after 14 days

See Answer in Part B → Q4

@Neet_pg_bot

Q5: The duration for which copper T 380 A remains effective is referred to as its shelf life. (Q858099)

A. 3 years

B. 5 years

C. 7 years

D. 10 years

See Answer in Part B → Q5

@Neet_pg_bot

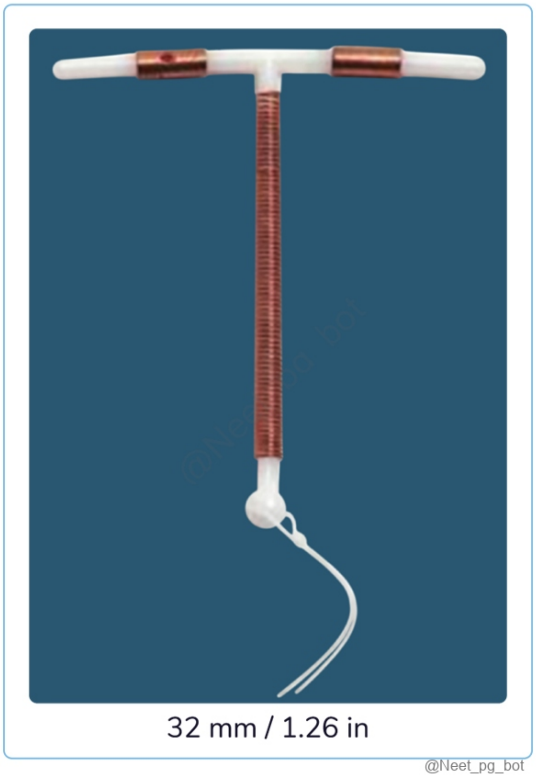
Q6: Which of the following is an absolute contraindication for the device shown in the image below? (Q857748)

A. Anemia

B. Vaginal bleeding

C. Uterine malformations

D. Purulent cervical discharge



See Answer in Part B → Q6

@Neet_pg_bot

Q7: A 25 year old female is using vaginal sponge as a barrier contraceptive during sexual intercourse. Which of the following Spermicide is used in contraceptive 'TODAY'? (Q859193)

A. NET-EN

B. DMPA

C. Nonoxynol-9

D. Norethisterone

See Answer in Part B → Q7

@Neet_pg_bot

Q8: What is the most frequent side effect experienced by a 24-year-old woman of reproductive age who visited a rural primary healthcare center in India for the purpose of having an IUCD inserted to prevent pregnancy? (Q859200)

A. Ectopic pregnancy

B. Pelvic infection

C. Pain

D. Bleeding

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A couple approaches the doctor with a query regarding sexual precautions following the male partner's vasectomy procedure conducted a month ago. What guidance should be provided in this situation? (Q859201)

A. Oral contraceptive pills for 1 month for the woman

B. Use condoms for 3 months

C. No special advice

D. Hormonal treatment given for 2 more months for the man

See Answer in Part B → Q9

@Neet_pg_bot

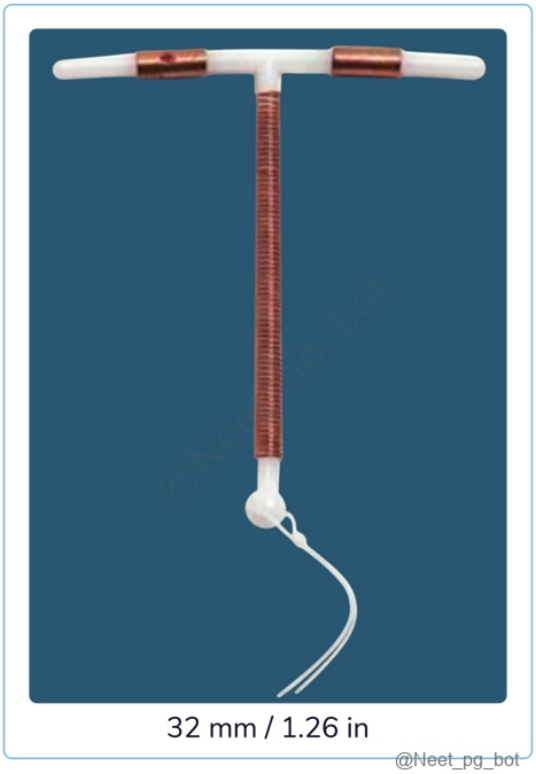
Q10: Which of the following statements about the given image is not true? (Q859217)

A. It is inserted by withdrawal technique

B. The copper in this device has a surface area of 380 square mm

C. It has a life-span of 5 years

D. It is used in emergency contraception



See Answer in Part B → Q10

@Neet_pg_bot

• [09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics] 036 Preventive Medicine In Obstetrics Pediatrics And Geriatrics

« Back to Folder Directory

[09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics] 036 Preventive Medicine In Obstetrics Pediatrics And Geriatrics — Quick Jump

Q1 (p. 370)	*Q2 (p. 370)*	*Q3 (p. 371)*	*Q4 (p. 371)*	*Q5 (p. 371)*	*Q6 (p. 372)*
Q7 (p. 372)	*Q8 (p. 373)*	*Q9 (p. 373)*	*Q10 (p. 374)*	*Q11 (p. 374)*	*Q12 (p. 374)*
Q13 (p. 375)	*Q14 (p. 375)*	*Q15 (p. 376)*	*Q16 (p. 376)*	*Q17 (p. 377)*	*Q18 (p. 377)*
Q19 (p. 377)	*Q20 (p. 378)*	*Q21 (p. 378)*	*Q22 (p. 378)*	*Q23 (p. 379)*	*Q24 (p. 379)*
Q25 (p. 380)					

Q1: Which of the following is NOT a leading cause of mortality in children aged 1-4 years in developing countries? (Q841070)

A. Diarrhoeal diseases

B. Respiratory infections

C. Malnutrition

D. Congenital anomalies

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Under which initiative in India are children screened for common health conditions such as birth defects, deficiencies, developmental delays, and diseases up to the age of 18 years? (Q841084)

A. Anemia Mukt Bharat

B. Rashtriya Bal Swasthya Karyakram (RBSK)

C. Applied Nutrition Programme

D. Mid-day Meal

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following statements are incorrect regarding a healthful school environment? (Q841083)

A. Classrooms should accommodate no more than 40 students with a minimum of 10 sq. ft. per student.

B. The interior walls of classrooms should be colorfully painted to create a stimulating environment for students.

C. One urinal per 60 students, one latrine per 100 students must be provided. Separate facilities for boys and girls.

D. Site should be on high-lying land with an area of 10 acres for higher elementary schools, 5 acres for primary schools, with an additional 1 acre per 100 students.

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following statements about Kangaroo Mother Care (KMC) is incorrect? (Q841082)

A. KMC involves early and prolonged skin-to-skin contact between the infant and the mother.

B. KMC is meant for clinically stable low birth weight (LBW) infants and includes exclusive and frequent breastfeeding.

C. KMC should only be provided in hospitals under skilled supervision and proper guidance.

D. KMC helps stabilize body temperature, promotes breastfeeding, and prevents infections.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following statements is false regarding nutrition in infants? (Q841080)

A. The estimated protein requirement is about 2 g/kg of body weight during the first 6 months; Declines to about 1.5 g/kg by the end of one year.

B. Options used in artificial feeding include dried whole milk powder, fresh milk from a cow or other animal, or commercial formulae

C. Cow milk is the safest and most commonly used artificial feeding method in developing countries

D. The main indications for artificial feeding are failure of breast milk, prolonged illness or death of the mother.

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following statements is incorrect when comparing human milk to cow milk? (Q841079)

A. Human milk contains 3 times lower protein, but is rich in amino acids like cysteine and taurine, essential for infants.

B. Breast milk is almost completely digested, whereas much of cow's milk protein is excreted undigested.

C. The coefficient of uptake of iron is equal in both breast and cow milk, however breast milk contains more Vitamin A and C

D. Dilution of cow's milk during the first 2 months is recommended in order to reduce the solute load on neonatal kidneys.

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A 2-year-old child presents to the pediatric clinic with complaints of poor dietary intake for the past several months. On examination, the child has Bitot's spots and other signs of vitamin A deficiency. What is the most appropriate treatment plan for this child to correct the Vitamin A deficiency? (Q841077)

A. Administer a single dose of 50,000 IU of vitamin A immediately and repeat the dose the next day.

B. Administer a single dose of 100,000 IU of vitamin A immediately and another dose of 100,000 IU after 9 months.

C. Administer 50,000 IU of vitamin A immediately and repeat this dose every 6 months until the child turns 5 years.

D. Administer 200,000 IU of vitamin A immediately and the very next day. If clinical signs persist, third dose of 200,000 IU 2-4 weeks later.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A 2-year-old child presents with bilateral pedal edema, severe wasting, and a mid-upper arm circumference (MUAC) of 10.5 cm. Which of the following is the feature of initial management of this condition? (Q841076)

A. Focus on nutritional and electrolyte balance

B. Starter Diet provides 100 kcal per 1000 ml

C. Initiation of a home-based nutritious diet

D. Provide a catch up diet like F-100

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following statements regarding growth charts is false? (Q841075)

A. The position of dots is more important than direction

B. Flattening of the curve is a sign of growth failure

C. 0 to -2 SD signifies normal growth

D. Age is on the x-axis

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following is not a feature of a severe acute malnourished child? (Q841074)

A. MUAC < 11.5 cm

B. Low weight for height < -3 SD

C. Absence of pitting pedal edema

D. Presence of severe body wasting

See Answer in Part B → Q10

@Neet_pg_bot

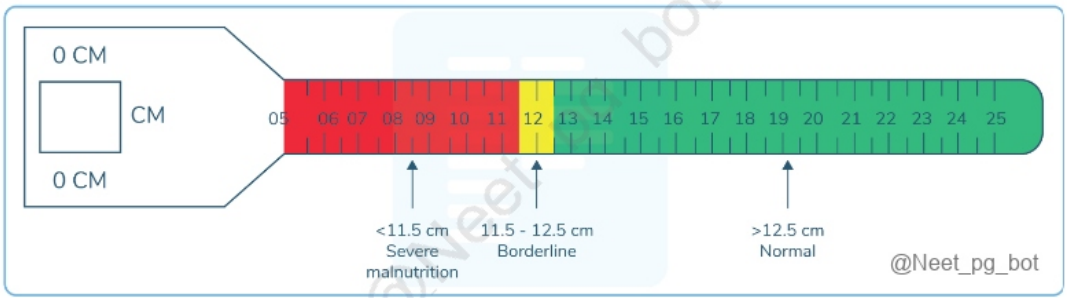
Q11: The image above depicts a measurement used to assess the nutritional status of children. What is being measured? (Q841073)

A. Head circumference

B. Mid upper arm circumference

C. Abdominal girth

D. Leg length



See Answer in Part B → Q11

@Neet_pg_bot

Q12: In a pediatric clinic, a 4-year-old child is assessed using Waterlow's Classification. The child's height-for-age is found to be 85%, while weight-for-height is 85%. According to Waterlow's Classification, the nutritional status of this child would be categorized as: (Q841072)

A. Normal

B. Wasted

C. Stunted

D. Wasted and Stunted

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Match the following markers to the type of malnutrition they best assess: Marker Type of Malnutrition a. Weight-for-height 1. Chronic Malnutrition b. Height-for-age 2. Acute Malnutrition c. Weight-for-age 3. Acute on chronic malnutrition (Q841071)

A. a-2, b-3, c-1

B. a-1, b-2, c-3

C. a-2, b-1, c-3

D. a-3, b-2, c-1

See Answer in Part B → Q13

@Neet_pg_bot

Q14: What is the minimum number of antenatal visits recommended by the WHO? (Q840777)

A. 4

B. 6

C. 8

D. 3

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following statements is FALSE with respect to mortality rates in children? (Q841069)

A. The most common cause of neonatal mortality is low birth weight.

B. Sepsis is a significant cause of both neonatal and infant mortality.

C. The Infant Mortality Rate is considered the best indicator of socio-economic development by UNICEF.

D. Current IMR is 28/1000 live births.

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A 32-year-old woman gives birth to a baby at 36 weeks of gestation. The baby's birth weight is recorded as 1800 grams. The mother is concerned about the baby's health and asks the pediatrician about the potential risks and necessary care for her newborn. Given the clinical scenario, which of the following statements is TRUE regarding the newborn? 1) The baby is classified as moderately preterm and moderately low birth weight. 2) The baby is classified as extremely preterm and extremely low birth weight. 3) The baby is at a higher risk for infant mortality compared to normal birth weight babies. 4) The baby is expected to double its birth weight by 3 months. 5) The baby is classified as normal term and moderately low birth weight. (Q841068)

A. 1 and 3

B. 2, 3 & 4

C. 3 and 5

D. 1, 3, and 4

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Which of the following statements about the Perinatal Mortality Rate (PMR) is FALSE? (Q841067)

A. PMR includes late fetal deaths from 28 weeks of gestation and early neonatal deaths within the first 7 days of life.

B. PMR is considered the best indicator for combined obstetrics and pediatrics care.

C. The weight of the fetus should be at least 2 kg to be included in the PMR.

D. Birth asphyxia is a significant cause of perinatal mortality.

See Answer in Part B → Q17

@Neet_pg_bot

Q18: What is the current Infant Mortality Rate (IMR) in India according to the Sample Registration System (SRS)? (Q841066)

A. 30 per 1000 live births

B. 28 per 1000 live births

C. 25 per 1000 live births

D. 20 per 1000 live births

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Which of the following defines the Neonatal Mortality Rate? (Q841065)

A. Death of a child within 0-28 days of life per 1000 live births

B. Death of a child within 0-7 days of life per 1000 live births

C. Death of a child within 8-28 days of life per 1000 live births

D. Death of a child within 29 days to 1 year of life per 1000 live births

See Answer in Part B → Q19

@Neet_pg_bot

Q20: A state recorded 150 maternal deaths in a year. The number of live births during the same period was 50,000. The total number of women in the reproductive age group (15-49 years) is 10,00,000. What is the maternal mortality ratio (MMR) for this state? (Q840807)

A. 3.0 per 1,000 women of reproductive age

B. 1.5 per 1,000 live births

C. 300 per 100,000 live births

D. 15 per 100,000 women of reproductive age

See Answer in Part B → Q20

@Neet_pg_bot

Q21: What is the minimum number of postnatal visits by ASHA workers recommended in the case of a home delivery? (Q840804)

A. 4 visits on Day 3, Day 7, Day 14, and Day 42

B. 4 visits on Day 1, Day 3, Day 7, and Day 42

C. 6 visits on Day 1, Day 3, Day 7, Day 14, Day 21, and Day 42

D. 7 visits on Day 1, Day 3, Day 7, Day 14, Day 21, Day 28, and Day 42

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Which maternal health initiative launched by the National Health Mission focuses on improving the quality of care in labor rooms and maternity operation theaters? (Q840801)

A. Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)

B. Janani Suraksha Yojana (JSY)

C. Dakshata Training

D. LaQshya

See Answer in Part B → Q22

@Neet_pg_bot

Q23: A 28 y/o pregnant woman, currently at 24 weeks of gestation, visits you for her routine antenatal check-up. She reports feeling excessive thirst and has been urinating more frequently than usual. She also mentions occasional fatigue. Her obstetric history includes a previous pregnancy with a baby weighing 4.2 kg at birth. Which of the following tests would you recommend for her? (Q840799)

A. Random Blood Sugar Test (RBS)

B. Fasting Blood Sugar Test (FBS)

C. Oral glucose challenge test (OGCT)

D. HbA1c Test

See Answer in Part B → Q23

@Neet_pg_bot

Q24: A 25 y/o primigravida, in her 2nd month of pregnancy, has come to you for her routine antenatal checkup. On further questioning, you find out that she has not been given any vaccinations yet. Which of the following is TRUE regarding vaccination protocols in pregnancy? (Q840794)

A. A booster dose of the Td vaccine is enough for this patient

B. 3 doses of Td vaccine must be given

C. 1st Td dose should be given as soon as possible

D. 2nd dose should be given 48 days after the 1st dose

See Answer in Part B → Q24

@Neet_pg_bot

Q25: A 23-year-old primigravida (G1P0L0) working at a construction site comes for her second antenatal check-up in the second trimester. She is found to be anemic with a hemoglobin of 8.4 g/dL. Which of the following is not appropriate advice for her? (Q840784)

A. She should take 1 iron and folic acid (IFA) tablet daily.

B. She should increase her calorie intake

C. She should increase her calcium and vitamin A intake

D. She must come for at least 2 more ANC visits

See Answer in Part B → Q25

@Neet_pg_bot

• [09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics] 037 Previous Year Questions

« Back to Folder Directory

[09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics] 037 Previous Year Questions — Quick Jump

Q1 (p. 381)	*Q2 (p. 381)*	*Q3 (p. 382)*	*Q4 (p. 383)*	*Q5 (p. 383)*	*Q6 (p. 383)*
Q7 (p. 384)	*Q8 (p. 384)*	*Q9 (p. 384)*	*Q10 (p. 385)*	*Q11 (p. 385)*	*Q12 (p. 386)*
Q13 (p. 386)	*Q14 (p. 386)*	*Q15 (p. 387)*	*Q16 (p. 387)*	*Q17 (p. 387)*	*Q18 (p. 388)*
Q19 (p. 388)	*Q20 (p. 389)*	*Q21 (p. 389)*	*Q22 (p. 389)*		

Q1: The school health programs are managed by which of the following? (Q857703)

A. Primary health centre

B. District hospital

C. Sub-centre

D. Sub-divisional hospital

See Answer in Part B → Q1

@Neet_pg_bot

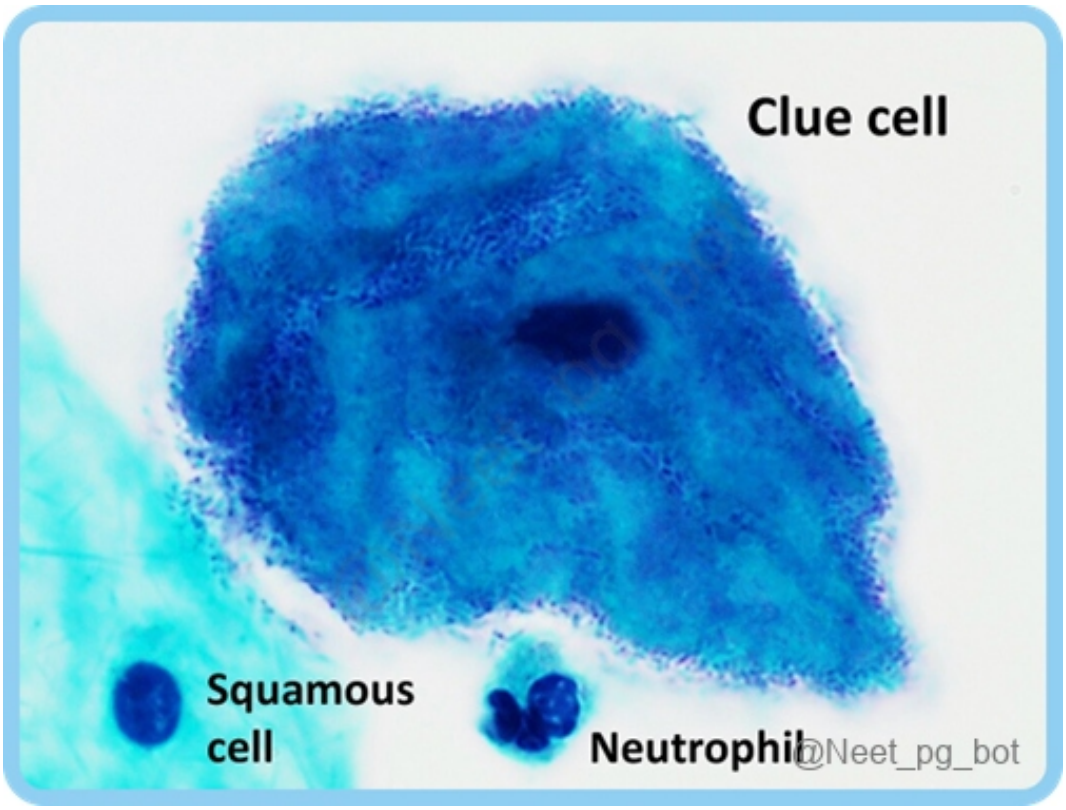
Q2: What kit would you recommend for a 30-year-old woman who has been experiencing creamy discharge with a fishy odor for the past month, AMSEL's score of 3 out of 4 on the Whiff test, and positive amines in the secretion when tested with 10% K■■? (Q859961)

A. Red kit

B. Blue kit

C. Green kit

D. Grey kit



See Answer in Part B → Q2

@Neet_pg_bot

Q3: In a village with a given population, the total number of live births in a year is 4000. 40 newborns died within the first 7 days of life whereas 40 died due to various causes between 8 to 28 days of life. There were 50 deaths between the age of 1 month to 6 months of life and O of them died in utero. What is the neonatal mortality rate in this population? (Q859811)

A. 10

B. 20

C. 30

D. 40

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which one of the following options does not meet the minimum standards for maintaining sanitation in schools and their surroundings in India? (Q859209)

A. Desks to be of 'Minus type'

B. Combined doors + windows area = 25% of floor space area

C. Maximum 40 students per classroom

D. One urinal for 70 students and one latrine for 120 students

See Answer in Part B → Q4

@Neet_pg_bot

Q5: The true statement about cow's milk (per 100 gm) when compared to breast milk is: (Q859199)

A. Lower sodium content

B. Higher lactose content

C. Lower protein

D. High protein

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A pregnant woman whose niece lives with her in the same house contracted Varicella. She tested negative for serum antibodies against varicella. What would this mean? (Q856057)

A. She is immune to zoster

B. She is susceptible to zoster

C. She is susceptible to chickenpox

D. She is immune to chickenpox

See Answer in Part B → Q6

@Neet_pg_bot

Q7: According to the 2010-2013 verbal autopsy report, please arrange the following causes of neonatal mortality in descending order, starting from the highest to the lowest. 1. Prematurity and low birth weight 2. Birth injuries and birth asphyxia 3. Congenital anomalies 4. Sepsis (Q856610)

A. 1>2>4>3

B. 1>4>2>3

C. 4>1>2>3

D. 1>2>3>4

See Answer in Part B → Q7

@Neet_pg_bot

Q8: As per the verbal autopsy report 2010-2013, arrange the most common cause of death among 1-4-year-old children in descending order: . Diarrhea 2. Pneumonia 3. Malaria 4. Injuries (Q856583)

A. 2>1>3>4

B. 4>1> 2>3

C. 1>2>4>3

D. 2>1>4>3

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Compared to a pregnant female, a lactating female would require a higher level of nutrient supplementation for which of the following? (Q855284)

A. Vitamin A

B. Calcium

C. Iron

D. Folic acid

See Answer in Part B → Q9

@Neet_pg_bot

Q10: According to WHO, what is the minimum number of antenatal visits? (Q857743)

A. 8

B. 4

C. 12

D. 14

See Answer in Part B → Q10

@Neet_pg_bot

Q11: The pregnancy test kit launched by the government is called: (Q857728)

A. NISHCHAY

B. NIKSHAY

C. NIKUSTH

D. AXSHYA

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which is not a part of Anemia Mukt Bharat Programme? (Q852873)

A. 6 beneficiaries

B. 6 interventions

C. 6 institutional mechanisms

D. 6 health functionaries

See Answer in Part B → Q12

@Neet_pg_bot

Q13: When should a primigravida initiate breastfeeding after a normal delivery of a healthy baby? (Q858015)

A. Within 1 hour

B. After 1 hour

C. After 4-6 hours

D. After 24 hours

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A pregnant woman with a 2-year-old child gives a history of completing required antenatal vaccinations during her previous pregnancy. Which of the following would you recommend for her current pregnancy? (Q858006)

A. Give a booster dose of TT

B. Give a booster dose of Td

C. Give 2 doses of TT

D. Give 2 doses of Td

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A 22-year-old female comes to the STI clinic with minimal cervical discharge. On speculum examination, erosions are seen on the cervix. Which of the following kit should be given to this patient? (Q855449)

A. Green

B. Red

C. Grey

D. Yellow

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which of the statements about palliative care is true? A. Disease is the centre of concern B. The patient is sovereign C. Death should neither be prolonged nor hastened D. The aim is to improve the quality of life E. The intention is to cure F. Imperative to do something than passively observe (Q857369)

A. A, B, C, D

B. C, E, F

C. B, D, F

D. A, B, E, F

See Answer in Part B → Q16

@Neet_pg_bot

Q17: In a population with a total of 4050 births, there are 50 stillbirths, 50 neonatal deaths within the first 7 days, and 150 deaths between 8 and 28 days of life. What is

the Neonatal Mortality Rate (NMR) for this population? (Q859997)

A. 12.5per 1000 live births

B. 50per 1000 live births

C. 49.4per 1000 live births

D. 62.5per 1000 live births

See Answer in Part B → Q17

@Neet_pg_bot

Q18: What were the goals for Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) by 2023? (Q859991)

A. 70 per 100,000 live births and 30per 1000live births

B. 30 per 100,000 live births and 70per 1000 live births

C. 100 per 100,000 live births and 30per 1000 live births

D. 30 per 100,000 live births and100per 1000 live births

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Calculate the maternal mortality ratio (MMR) for the year 2023, given the following events: Total women who died: 6 Total live births: 4000 Causes of death: 1 due to road traffic accident (RTA) 1 due to sepsis 1 due to obstructed labor 1 due to eclampsia 1 due to ectopic pregnancy 1 due to snake bite (Q844092)

A. 75

B. 150

C. 100

D. 125

See Answer in Part B → Q19

@Neet_pg_bot

Q20: Given 500 live births, 12 stillbirths, and 9 deaths within the first 7 days, calculate the Early Neonatal Mortality Rate (ENMR). (Q844086)

A. 18 per 1,000 live births

B. 36per 1,000 live births

C. 24per 1,000 live births

D. 50per 1,000 live births

See Answer in Part B → Q20

@Neet_pg_bot

Q21: The formula with the numerator being maternal deaths and the denominator being women of reproductive age represents which of the following? (Q844077)

A. Maternal mortality rate

B. Maternal mortality ratio

C. Perinatal mortality rate

D. Perinatal mortality ratio

See Answer in Part B → Q21

@Neet_pg_bot

Q22: A mother delivers in a rural area under the guidance of a skilled care attendant. Which of the following is incorrect regarding the care provided by the skilled care attendant at birth? (Q844000)

A. Start breastfeeding as early as possible

B. Cover the baby's head and body

C. Bathe the baby with warm water

D. Clear eyes with a sterile swab

See Answer in Part B → Q22

@Neet_pg_bot

• [10_Nutrition and Health] 038 Macronutrients

« Back to Folder Directory

[10_Nutrition and Health] 038 Macronutrients — Quick Jump

Q1 (p. 391) *Q2 (p. 391)* *Q3 (p. 391)* *Q4 (p. 392)* *Q5 (p. 392)* *Q6 (p. 393)*
Q7 (p. 393) *Q8 (p. 393)* *Q9 (p. 394)* *Q10 (p. 394)* *Q11 (p. 394)* *Q12 (p. 395)*
Q13 (p. 395) *Q14 (p. 396)* *Q15 (p. 396)*

Q1: Which of the following best describes a balanced diet? (Q840720)

A. A diet containing micronutrients forms the bulk of the food.

B. A diet consisting of 70% carbohydrates, 10% proteins, and 20% fats.

C. A diet adhering to dietary goals, focused on high protein and vitamin intake.

D. A diet consisting of 150 gm/day of cereals, 40 gm/day of pulses and 10 gm/day of fat.

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A 55-year-old patient with a history of diabetes mellitus and hypertension visits your clinic. During the consultation, you advise the patient to adopt a diet that reduces fat and salt intake. What type of diet is being recommended to this patient? (Q840721)

A. Staple diet

B. Prudent diet

C. High-protein diet

D. Balanced diet

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Match the following types of food sources with their respective limiting amino acids Food source Amino-acid 1. Corn a. Lysine 2. Wheat b. Methionine 3. Nuts c. Tryptophan 4. Legumes d. Threonine (Q840738)

A. 1:c, 2:d, 3:a, 4: b

B. 1:a, 2:c, 3:d, 4: b

C. 1:c, 2:a, 3:b, 4: d

D. 1:d, 2:c, 3:a, 4: b

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following statements best describes the protein efficiency ratio (PER)? (Q840739)

A. The ratio of protein to the total energy in a diet

B. Measure of protein quality based on weight gain per unit of protein consumed

C. The balance of essential amino acids in a protein source

D. The proportion of protein retained for growth expressed as the amount of nitrogen absorbed.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following correctly describes the food's digestible amino acid content ratio to the same amino acid in a reference pattern? (Q840742)

A. Digestible Indispensable Amino Acid Score

B. Digestibility coefficient

C. Net Protein Utilization

D. Reference protein

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Why is an egg known as a reference protein? (Q840744)

A. It is the easiest protein to digest.

B. It has the highest protein content per gram.

C. It contains all essential amino acids.

D. It has the longest shelf life of all proteins.

See Answer in Part B → Q6

@Neet_pg_bot

Q7: All are true regarding unsaturated fats except? (Q840747)

A. Contain one or more double bonds in their fatty acid chains.

B. Usually liquid at room temperature.

C. Primarily found in plant-based sources and fish.

D. Increase the risk of cardiovascular disease.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A patient with a history of cardiovascular disease is advised by their doctor to incorporate oils rich in polyunsaturated fatty acids (PUFA) into their diet, with a recommendation of oils containing more than 50% PUFA. Which of the following oils would not be recommended? (Q840750)

A. Safflower Oil

B. Sunflower Oil

C. Soybean Oil

D. Coconut Oil

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A patient presents with rough, dry, scaly skin patches on their elbows, knees, buttocks, and hair follicle keratosis (bumps around hair follicles). Which nutrient deficiency is not associated with this condition? (Q840753)

A. Vitamin A

B. Essential Fatty Acids

C. Vitamin E

D. Zinc

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which statements regarding partially hydrogenated vegetable oils are correct? 1. Longer shelf life compared to unprocessed oils. 2. Fortified with Vitamin A 3. Liquid at room temperature 4. Contains Trans fats 5. No association with increased risk of heart disease. 6. Primarily used in cooking oils to enhance flavor. (Q840756)

A. 1, 2, and 4

B. 2, 4, and 5

C. 1, 2, and 3

D. 2, 4, and 6

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A patient is newly diagnosed with diabetes mellitus. Which of the following dietary recommendations would you recommend? (Q840759)

A. Oats

B. White bread

C. Watermelon

D. Mashed potatoes

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following statements are true regarding the reference Indian man and woman? Statements: The reference Indian man is defined as having a body weight of 60 kg and a height of 170 cm. The reference Indian woman is defined as having a body weight of 55 kg and a height of 162 cm. The reference Age range of 19-29 years is considered The reference Indian BMI (Woman > Man) The reference Indian man typically has a waist circumference of 90 cm. (Q840760)

A. Statements 1 and 3 are correct

B. Statements 2 and 4 are correct

C. Statements 3 and 5 are correct

D. Statements 1 and 4 are correct

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following statements about dietary fiber are true? Promotes satiety but has no role in reducing blood glucose Acts as bile acid sequestrants in the small intestine The recommended daily intake is approximately 60 grams Excessive fibre intake can lead to micronutrient malabsorption Bowel irritation can only occur if the daily intake reaches 80 grams (Q840761)

A. 1,2 and 5

B. 2 and 4

C. 3 and 5

D. 2,3 and 4

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Match the following food items with their respective limiting amino acids a) Cereal i) Lysine b) Pulses ii) Threonine c) Nuts iii) Tryptophan d) Maize iv) Methionine (Q844363)

A. a-ii; b-iv; c-i; d-iii

B. a-iv; b-i; c-ii; d-iii

C. a-iii; b-ii; c-i; d-iv

D. a-iv; b-iii; c-iii; d-ii

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A 23-year-old male reports that his diet has been low in protein. Which of the following amino acids cannot be synthesised in the body and must be obtained from the diet? (Q840737)

A. Glycine

B. Lysine

C. Tyrosine

D. Histidine

See Answer in Part B → Q15

@Neet_pg_bot

• [10_Nutrition and Health] 039 Food Adulteration And Food Fortification

« Back to Folder Directory

[10_Nutrition and Health] 039 Food Adulteration And Food Fortification — Quick Jump

Q1 (p. 398) *Q2 (p. 398)* *Q3 (p. 399)* *Q4 (p. 399)* *Q5 (p. 399)* *Q6 (p. 400)*
Q7 (p. 400) *Q8 (p. 401)* *Q9 (p. 401)* *Q10 (p. 402)* *Q11 (p. 402)*

Q1: Match the following: 1) Food adulteration a) Claviceps in wheat 2) Food additivity b) Saccharin in health drinks 3) Food fortification c) Vanaspati in ghee 4) Food toxication d) Iodine in salt (Q840659)

A. 1-b, 2-d, 3-a, 4-c

B. 1-d, 2-c, 3-b, 4-a

C. 1-c, 2-b, 3-d, 4-a

D. 1-a, 2-d, 3-b, 4-c

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A patient presents with short, jerky steps, which developed progressively over the past month. He has been consuming Khesari dal for the past 8 months. Which of the following should be prescribed as prophylaxis to this patient? (Q840668)

A. Vitamin B

B. Vitamin C

C. Vitamin B12

D. Vitamin D3

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A patient presents with new onset swelling in both her legs associated with frequent diarrhoeal episodes and progressive breathlessness. She has a history of consumption of mustard oil. Which of the following adulterants would have caused the above presentation? (Q840673)

A. Canola oil

B. Argemone oil

C. Rapeseed oil

D. Linseed oil

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following toxins is responsible for endemic ascites? (Q840683)

A. Glycoalkaloids

B. Cyanogenic glycosides

C. Lectins

D. Pyrrolizidines

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following is true about aflatoxicosis? (Q840688)

A. The G1 variant is not associated with hepatocellular carcinoma

B. The B1 variant can commonly be associated with infantile cirrhosis

C. The minimum temperature that favours toxin formation is 18 degrees C

D. Keeping moisture content <22% is recommended for prevention

See Answer in Part B → Q5

@Neet_pg_bot

Q6: What are the acute symptoms associated with ergotism caused by consuming ergot-infested grains? (Q840691)

A. Joint pain and muscle stiffness

B. Nausea, repeated vomiting, giddiness, and drowsiness

C. Rash and skin irritation

D. High fever and chills

See Answer in Part B → Q6

@Neet_pg_bot

Q7: What is the device shown in the image used for? (Q840694)

A. Nutritional assessment

B. Height/length measurement

C. Head circumference measurement

D. None of the above



@Neet_pg_bot

See Answer in Part B → Q7

@Neet_pg_bot

Q8: What is one of the criteria used to define severe acute malnutrition (SAM) according to WHO standards? (Q840697)

A. Mid-upper arm circumference >115 mm

B. Weight-for-age Z-score below -1 SD

C. Presence of nutritional oedema

D. Height-for-age Z-score below -2 SD

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following can be best used to determine acute malnutrition? (Q840702)

A. Weight for age

B. Height for age

C. Weight for height

D. Mid-upper arm circumference

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following is an age-independent anthropometric measure of malnutrition? (Q840710)

A. Mid -upper arm circumference only

B. Weight for height only

C. Weight for height and mid-upper arm circumference

D. None of the above

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A 10-month-old infant is brought to the clinic by his mother due to concerns about poor growth. The child appears emaciated, with visible rib bones and a sunken appearance of the face. On examination, there is minimal subcutaneous fat and muscle wasting. The mother reports that the infant has been exclusively breastfed, but she herself has been malnourished due to economic constraints. What is the most likely diagnosis? (Q840714)

A. Kwashiorkor

B. Marasmus

C. Cystic fibrosis

D. Celiac disease

See Answer in Part B → Q11

@Neet_pg_bot

• [10_Nutrition and Health] 040 Micronutrients

« Back to Folder Directory

[10_Nutrition and Health] 040 Micronutrients — Quick Jump

Q1 (p. 404) *Q2 (p. 404)* *Q3 (p. 405)* *Q4 (p. 405)* *Q5 (p. 406)* *Q6 (p. 406)*
Q7 (p. 407) *Q8 (p. 407)* *Q9 (p. 408)* *Q10 (p. 409)* *Q11 (p. 409)* *Q12 (p. 409)*
Q13 (p. 410) *Q14 (p. 410)* *Q15 (p. 411)* *Q16 (p. 412)*

Q1: Which of the following is true regarding vitamin A? Obtained from animal sources like liver, egg yolks, and dairy products. Maintains healthy skin and mucous membranes. Deficiency leads to night blindness and an increased risk of childhood infections. It helps in calcium absorption (Q840556)

A. 1 only

B. 2, 4

C. 1, 3

D. 1, 2, and 3

See Answer in Part B → Q1

@Neet_pg_bot

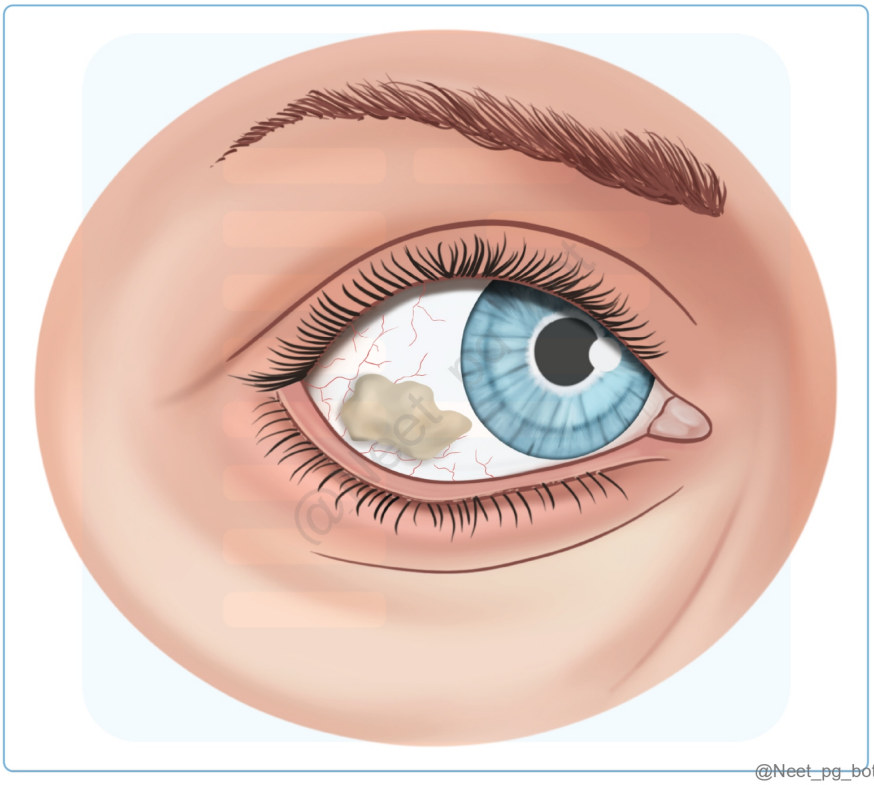
Q2: Which stage of xerophthalmia is depicted in the following image? (Q840558)

A. X1A

B. X1B

C. X2

D. X3A



See Answer in Part B → Q2

@Neet_pg_bot

Q3: What is the first clinical manifestation of Vitamin A deficiency? (Q840562)

A. Bitot spots

B. Night blindness

C. Corneal xerosis

D. Corneal ulceration

See Answer in Part B → Q3

@Neet_pg_bot

Q4: According to WHO criteria, which prevalence rate of night blindness indicates that xerophthalmia is a significant public health problem? (Q840563)

A. Less than 0.5%

B. 0.5% to 1.0%

C. More than 1.0%

D. Less than 0.01%

See Answer in Part B → Q4

@Neet_pg_bot

Q5: What is the recommended dosage for Vitamin A supplementation in a 2-year-old child diagnosed with Vitamin A deficiency? (Q840565)

A. 50,000 IU

B. 100,000 IU

C. 200,000 IU

D. 400,000 IU

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A 32-year-old female presents with weakness, fatigue, and tingling sensations in her extremities. Upon further investigation, she has dry beriberi. Which of the following dietary habits will most likely lead to this condition? (Q840568)

A. High fat, low carbohydrate diet

B. Diet predominantly of polished white rice

C. Vegan diet

D. Gluten-Free Diet

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which vitamin deficiency leads to the condition in the image depicted below? (Q840569)

A. Vitamin E

B. Vitamin B5

C. Vitamin B2

D. Vitamin B6



See Answer in Part B → Q7

@Neet_pg_bot

Q8: A 16-year-old female with dementia was brought to the emergency due to severe diarrhoea and skin lesions similar to the image given below. Investigations reveal niacin deficiency. Which of the following amino acids, if consumed in large quantities, can lead to the above condition? (Q840572)

A. Leucine

B. Tryptophan

C. Threonine

D. Lysine



See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following are NOT true regarding vitamin B9 and Vitamin B12? Both vitamin B9 and B12 deficiency lead to megaloblastic anaemia. Both vitamin B9 and B12 supplementation prevent neural tube defects in pregnancy. Demyelinating neurological symptoms are associated with only Vitamin B12 deficiency. Castle's intrinsic factor is essential for folate absorption. (Q840574)

A. 1 and 2

B. 2 and 4

C. 2 and 3

D. 4 only

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A 16-year-old boy presents with swollen and bleeding gums, easy bruising, and small red spots on his skin. His diet mostly consists of processed foods and lacks fresh fruits and vegetables. Which of the following is the most likely cause of his symptoms? (Q840576)

A. Vitamin B2

B. Vitamin C

C. Vitamin D

D. Iron

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A 45-year-old woman with a past medical history of celiac disease visits the clinic complaining of fatigue, muscle weakness, and bone pain. Upon examination, she is found to have vitamin D deficiency. The doctor advises her to increase her intake of the vitamin D. All of the following are sources of this vitamin except: (Q840577)

A. Sunlight exposure

B. Halibut fish

C. Fortified dairy products

D. Whole grains

See Answer in Part B → Q11

@Neet_pg_bot

Q12: A 30-year-old woman visits a clinic complaining of fatigue, weakness, and pale skin. She has a medical history of menorrhagia, for which she sees a gynaecologist. The serum iron panel is ordered. Which of the following should the patient be advised

to consume to prevent this mineral deficiency? Spinach Red meat Fortified cereals Dairy products (Q840579)

A. 1, 4

B. 1, 2

C. 1, 2, and 3

D. 1, 2, 3, and 4

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following is an important epidemiological indicator for monitoring iodine deficiency in the Goiter Control program? (Q840582)

A. Goiter prevalence

B. Urinary iodine excretion

C. Serum T3/T4/TSH levels

D. Prevalence of Neonatal hypothyroidism

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which of the following levels of fluorine in water leads to the development of dental carries? (Q840585)

A. 0.3mg/L

B. 1.8mg/L

C. 3-6mg/L

D. >10mg/L



See Answer in Part B → Q14

@Neet_pg_bot

Q15: A 2-year-old child is brought to the clinic with symptoms of diarrhea, alopecia, and a distinctive rash shown in the image below. The child's mother reports that the symptoms have persisted despite various treatments. Which of the following nutrient deficiencies is most likely responsible for this condition? (Q840590)

A. Copper

B. Zinc

C. Chromium

D. Molybdenum



See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which of the following fruits is recognized as the richest source of Vitamin C? (Q844362)

A. Amla

B. Avocado

C. Pomegranate

D. Guava

See Answer in Part B → Q16

@Neet_pg_bot

• [10_Nutrition and Health] 041 Recommended Dietary Allowances And Nutritional Health Programmes

« Back to Folder Directory

[10_Nutrition and Health] 041 Recommended Dietary Allowances And Nutritional Health Programmes — Quick Jump

Q1 (p. 413)	*Q2 (p. 413)*	*Q3 (p. 414)*	*Q4 (p. 414)*	*Q5 (p. 414)*	*Q6 (p. 415)*
Q7 (p. 415)	*Q8 (p. 416)*	*Q9 (p. 416)*	*Q10 (p. 416)*	*Q11 (p. 417)*	*Q12 (p. 417)*

Q1: Pick out the true statements regarding reference for Indian man and woman in the latest NIN-RDA guidelines. The age group considered is 19-39 for both men and women. According to the guidelines Ideal weight of an Indian man is 60 kgs and woman is 50kgs The guideline requires a person to rest for at least 8 hours daily. The guideline promotes not more than 10 hours of intense work every day. At Least 2 hours of recreational activities are mandated. The ideal BMI for men and women is 20-21 kg/m². (Q840803)

A. 1, 3, 5 & 6

B. 1, 2, 3 & 6

C. 3, 4, 5 & 6

D. 2, 3, 4 & 5

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Priya is an Indian woman who weighs 60 kilograms. Calculate her daily protein requirement and determine which of the following dietary plans meets her protein needs (Protein in every meal is given in grams) MEAL PLAN A PLAN B PLAN C PLAN D Breakfast 2 eggs (12g) 1 banana (1g) 1 cup oats (6g), 1 slice of bread (3g) Lunch 1 cup dal (18g) 1 cup rice (4g) 200g paneer (14g) 1 cup pasta (7g) Dinner 1 chicken (25g) 2 chapatis (6g), 1 cup dal (18g) 1 cup lentils (18g) 1 cup yogurt (8g) 1 cup beans (15g) 1 apple (0.5g) (Q840806)

A. Plan A

B. Plan B

C. Plan C

D. Plan D

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is the correct energy requirement for a moderately working Indian woman with an exclusively breastfed 8-month-old infant? (Q840810)

A. 2650kcal/day

B. 3550kcal/day

C. 2500kcal/day

D. 2670kcal/day

See Answer in Part B → Q3

@Neet_pg_bot

Q4: What are the Recommended Daily Allowances (RDA) of iron and folate for a pregnant woman? (Q840812)

A. 30 mg/day of iron and 400 mcg/day of folate

B. 27 mg/day of iron and 570 mcg/day of folate

C. 18 mg/day of iron and 600 mcg/day of folate

D. 25 mg/day of iron and 500 mcg/day of folate

See Answer in Part B → Q4

@Neet_pg_bot

Q5: A pediatrician is assessing the dietary needs of two infants. One infant is 4 months old and the other is 10 months old. Determine if the following meal plans meet the requirements for each infant: Meal Plan of Infant 1 (4 months old): 750 Kcal/day with 9 g of protein Meal Plan of Infant 2 (10 months old): 900 Kcal/day with 12 g of protein (Q840813)

A. Both meal plans meet the energy and protein requirements

B. Infant 1's meal plan exceeds the protein requirement as a percentage of total energy intake.

C. Infant 2's meal plan exceeds the protein requirement as a percentage of total energy intake.

D. Neither meal plan meets the energy and protein requirements

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Who among the following is not a beneficiary of ICDS? (Q840816)

A. Pregnant women

B. Adolescent girls

C. Children aged less than 5 years

D. Women aged 49 years and above

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following is false for Anganwadi centres (AWC)? (Q840817)

A. It is used to run ICDS

B. AWC can be opened on demand

C. Anganwadi worker must be 10th pass

D. 1 AWC is for every 500-1000 people in plain areas

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which approach is emphasized under the Anemia Mukt Bharat initiative to combat anemia? (Q840819)

A. Providing free healthcare to pregnant women

B. Conducting nationwide health camps

C. Implementing iron and folic acid supplementation programs

D. Distributing hygiene kits in rural areas

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which indicator is considered the principal impact indicator in the National Iodine Deficiency Disorders Control Program (NIDDCP), reflecting the effectiveness of salt iodization? (Q840822)

A. Median urinary iodine levels

B. Prevalence of goitre

C. Neonatal hypothyroidism

D. Salt iodine content at the production site

See Answer in Part B → Q9

@Neet_pg_bot

Q10: What is the primary objective of the Kishori Shakti Yojana? (Q840826)

A. Promoting higher education among adolescent girls

B. Ensuring maternal healthcare for pregnant women

C. Empowering adolescent girls through nutrition and health education

D. Providing financial assistance for marriage expenses

See Answer in Part B → Q10

@Neet_pg_bot

Q11: What is the main focus of the Pradhan Mantri Poshan Scheme launched by the Government of India? (Q840829)

A. Empowering women through nutrition development programs

B. Improving nutritional outcomes among children

C. Promoting sustainable agriculture practices

D. Providing financial assistance for rural agricultural development

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Match the logos with their appropriate description LOGO DESCRIPTION (A) 1. Affiliated to a department that comes under the Ministry of Consumer affairs (B) 2. Regulated by the Ministry of Food Processing Industries (C) 3. Affiliated with the Ministry of Agriculture and Farmers Welfare (D) 4. Affiliated to a department that comes under the Ministry of Health and Family Welfare (Q840833)

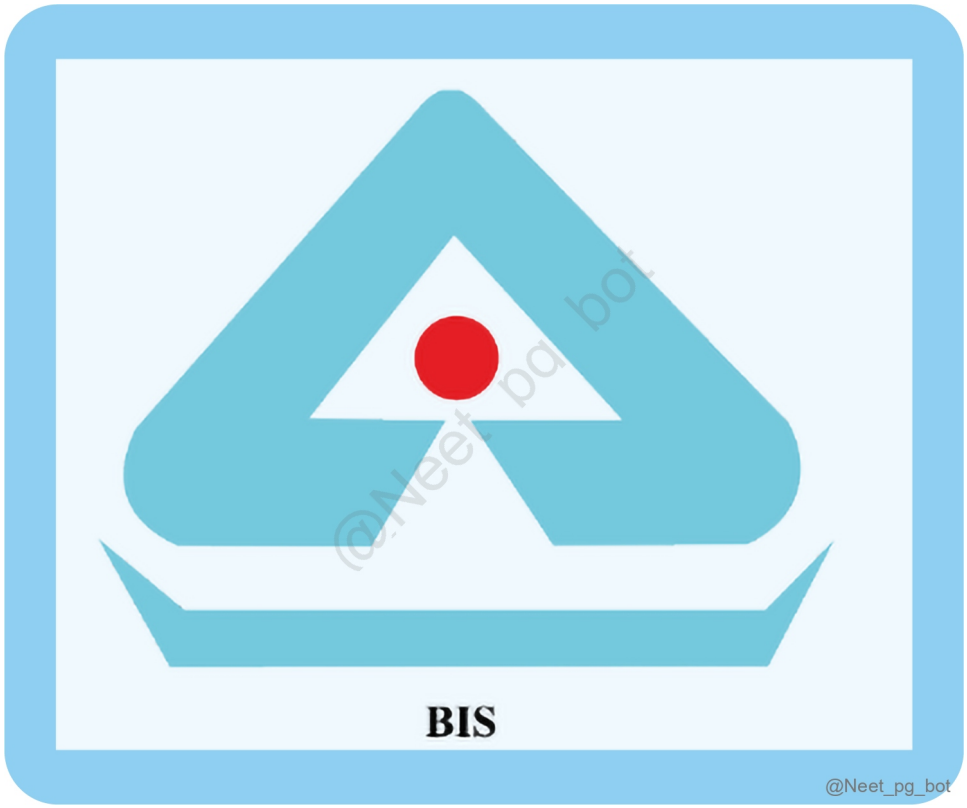
A. A-2 B-1 C-3 D-4

B. A-4 B-1 C-2 D-3

C. A-1 B-2 C-3 D-4

D. A-1 B-4 C-3 D-2


fssai
Food Safety and Standards Authority of India
C O D E X
ALIMENTARIUS
International Food Standards
World Health Organization
Food and Agriculture Organization of the United Nations
@Neet_pg_bot


BIS
@Neet_pg_bot





See Answer in Part B → Q12

@Neet_pg_bot

• [10_Nutrition and Health] 042 Previous Year Questions

« Back to Folder Directory

[10_Nutrition and Health] 042 Previous Year Questions — Quick Jump

Q1 (p. 421)	*Q2 (p. 421)*	*Q3 (p. 422)*	*Q4 (p. 422)*	*Q5 (p. 422)*	*Q6 (p. 423)*
Q7 (p. 423)	*Q8 (p. 423)*	*Q9 (p. 424)*	*Q10 (p. 424)*	*Q11 (p. 425)*	*Q12 (p. 425)*
Q13 (p. 425)	*Q14 (p. 426)*	*Q15 (p. 426)*	*Q16 (p. 426)*	*Q17 (p. 427)*	*Q18 (p. 427)*
Q19 (p. 428)	*Q20 (p. 428)*	*Q21 (p. 428)*	*Q22 (p. 429)*	*Q23 (p. 430)*	*Q24 (p. 430)*
Q25 (p. 430)	*Q26 (p. 431)*	*Q27 (p. 431)*	*Q28 (p. 431)*	*Q29 (p. 432)*	*Q30 (p. 432)*
Q31 (p. 432)	*Q32 (p. 433)*	*Q33 (p. 433)*	*Q34 (p. 434)*	*Q35 (p. 434)*	*Q36 (p. 434)*
Q37 (p. 435)	*Q38 (p. 436)*	*Q39 (p. 436)*			

Q1: Highest sodium content is present in which of the following foods: (Q857724)

A. Sugar cane

B. Barley

C. Canned soup

D. Fresh fruit juices

See Answer in Part B → Q1

@Neet_pg_bot

Q2: In a 30-year-old woman with a body weight of 55 kg, what is the recommended daily protein intake? (Q820670)

A. 45gm

B. 55gm

C. 60gm

D. 70gm

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A patient presents with increased consumption of Bajra (pearl millet) roti and now complains of drowsiness and giddiness. What is the most likely diagnosis? (Q866768)

A. Epidemic Dropsy

B. Ergotism

C. Botulism

D. Fusarium Toxicity

See Answer in Part B → Q3

@Neet_pg_bot

Q4: In a village, it is observed that several farmers have crossed gait and use a stick for support to stand up and walk. Due to poor yield from farms, they consume meals containing rice and pulses only. Supplementing their diet with which of the following vitamins could have prevented this? (Q855421)

A. Vitamin A

B. Vitamin D

C. Vitamin C

D. Vitamin B

See Answer in Part B → Q4

@Neet_pg_bot

Q5: In rural areas, delivery huts established to provide safe childbirth services are primarily managed by which of the following health workers? (Q855444)

A. ANM

B. AWW

C. Trained birth attendant

D. ASHA

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A poor farmer with a history of successive crop failure develops progressive spastic paraparesis, signs of upper motor neuron paralysis, and gait instability. Name the toxin responsible for this condition. (Q855526)

A. Aflatoxin

B. Beta-oxalyl-amino-alanine

C. Ergot alkaloids

D. Fusarium toxin

See Answer in Part B → Q6

@Neet_pg_bot

Q7: You are administering vitamin A supplements to an 8-month-old infant for two consecutive days. What is the recommended dose? (Q858095)

A. 25,000 IU

B. 50,000 IU

C. 100,000 IU

D. 200,000 IU

See Answer in Part B → Q7

@Neet_pg_bot

Q8: What vitamin deficiency leads to xerophthalmia, a condition characterized by dryness of the eyes? (Q858097)

A. Vitamin A

B. Vitamin B

C. Vitamin C

D. Vitamin D

See Answer in Part B → Q8

@Neet_pg_bot

Q9: What is the likely reason for the food poisoning experienced by the worker in the groundnut factory who consumed spoiled groundnuts that were stored in the facility? (Q857078)

A. Beta oxalyl amino alanine

B. Smoke from factory

C. Sanguinarine

D. Aflatoxins

See Answer in Part B → Q9

@Neet_pg_bot

Q10: In a 30-year-old male presenting with bleeding gums and iron deficiency anemia, which vitamin deficiency would you anticipate? (Q830811)

A. Vitamin A

B. Vitamin B1

C. Vitamin C

D. Vitamin D

See Answer in Part B → Q10

@Neet_pg_bot

Q11: An 8-month-old baby on examination shows signs of vitamin A deficiency. What is the dose of vitamin A to be administered to the baby? (Q857733)

A. 25,000 IU IM

B. 25,000 IU orally

C. 100,000 IU orally

D. 100,000 IU IM

See Answer in Part B → Q11

@Neet_pg_bot

Q12: If Bajra is mixed with black seeds, what is used to separate them? (Q857758)

A. 20% salt water

B. Normal saline

C. 10% salt water

D. Water

See Answer in Part B → Q12

@Neet_pg_bot

Q13: With regards to the pasteurization of milk, which of the following tests is not related? (Q855344)

A. Phosphatase test

B. Iodine test

C. Standard plate count

D. Methylene blue reduction test

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which of the following factors contributes most directly to the precipitation or aggravation of malnutrition in children who already have inadequate dietary intake? (Q856049)

A. Child rearing

B. Infectious diseases

C. Food habits

D. Socioeconomic factors

See Answer in Part B → Q14

@Neet_pg_bot

Q15: What is the most relevant information that should be obtained from the medical history of a patient from Chhattisgarh who is experiencing gradual muscle weakness and spasms in the legs, and exhibits only motor impairment upon examination? (Q856050)

A. History of similar illness in the past

B. History of fever

C. History of vaccination

D. History of diet

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which statement is correct regarding the reference woman represents the average healthy woman's nutritional needs and is used as a standard for setting the RDA ? (Q856456)

A. Weight 55 kgs

B. Height 1.73 m

C. Works 10 hours/day

D. Age of 18-25 years

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Which of the following food items contains the lowest amount of iron? (Q859456)

A. Liver

B. Spinach

C. Beans

D. Milk

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which of the following foods has the maximum biological value? (Q860032)

A. Pulses

B. Soyabean

C. Milk

D. Egg

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Criteria of mid arm circumference in Shakir's tape for severe acute malnutrition ? (Q820608)

A. < 11.5

B. <12.5

C. <13.5

D. <14.5

See Answer in Part B → Q19

@Neet_pg_bot

Q20: A patient whose diet mainly consists of pulses and rice presents with bowed legs (stick deformity). Which of the following vitamins could have prevented this condition? (Q866778)

A. Vitamin A

B. Vitamin B 12

C. Vitamin C

D. Vitamin D

See Answer in Part B → Q20

@Neet_pg_bot

Q21: According to the American Heart Association, what is the current recommendation regarding dietary cholesterol intake in the general population? (Q866459)

A. Strictly limit cholesterol intake to less than 200 mg per 1000 kcal per day

B. Avoid all foods containing cholesterol, regardless of total fat content

C. Focus on reducing saturated fat and overall dietary patterns rather than setting a specific cholesterol limit

D. Restrict cholesterol to less than 100 mg per day in all individuals

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Which of the following substances should be eaten to prevent thiamine deficiency? (Q844056)

A. Rice and wheat

B. Curd

C. Salad

D. Sabji (Aloo)



See Answer in Part B → Q22

@Neet_pg_bot

Q23: A mother comes with her child who has papules on the extensor surfaces of the skin, which resolve with the administration of vitamins A and C and essential amino acids. What is your diagnosis? (Q844060)

A. Phrynoderma

B. Rickets

C. Kwashiorkor

D. Marasmus

See Answer in Part B → Q23

@Neet_pg_bot

Q24: A man presented with bilateral swelling of his legs, diarrhoea, and dyspnea. He has a history of consuming mustard oil from a local vendor. Which test should be performed by the health inspector to check for the adulterant? (Q844124)

A. Paper Chromatography Test

B. Baudouin test

C. Methylene Blue Reduction Test

D. None of the above

See Answer in Part B → Q24

@Neet_pg_bot

Q25: Xeropthalmia is considered a public health problem if the prevalence of bitot's spot is more than: (Q860525)

A. 0.01%

B. 0.05%

C. 0.5%

D. 1%

See Answer in Part B → Q25

@Neet_pg_bot

Q26: A mother of a breastfeeding child only eats vegetables. Which deficiency is common in this case? (Q860530)

A. Vitamin B12

B. Vitamin A

C. Vitamin D

D. Vitamin K

See Answer in Part B → Q26

@Neet_pg_bot

Q27: Iron absorption is decreased in which of the following? (Q860542)

A. Amla

B. Sprouting

C. Tea

D. Lemon

See Answer in Part B → Q27

@Neet_pg_bot

Q28: What are the potential effects of folic acid deficiency during pregnancy? (Q860603)

A. Neural tube defects

B. Preterm labour

C. Pernicious anemia

D. Iron deficiency anemia

See Answer in Part B → Q28

@Neet_pg_bot

Q29: Which of the following mineral deficiency is associated with sexual dysfunction? (Q839891)

A. Zinc

B. Copper

C. Magnesium

D. Molybdenum

See Answer in Part B → Q29

@Neet_pg_bot

Q30: A 5-year-old has the following anthropometric findings: Weight/age < -3.2 SD, Height/age < -2.5 SD, Weight/height < -1.7 SD. Under which of the following categories would this child be classified? (Q839896)

A. Acute malnutrition

B. Chronic malnutrition

C. Acute on chronic malnutrition

D. Severe malnutrition

See Answer in Part B → Q30

@Neet_pg_bot

Q31: Wasting in a child is assessed by which of the following measures? (Q859983)

A. Weight-for-height

B. Weight-for-age

C. Height-for-weight

D. Height-for-age

See Answer in Part B → Q31

@Neet_pg_bot

Q32: What concentration of fluoride is typically associated with causing crippling fluorosis? (Q859990)

A. > 10 mg/L

B. > 6 mg/L

C. > 3 mg/L

D. > 1.5 mg/L

See Answer in Part B → Q32

@Neet_pg_bot

Q33: A woman develops edema, visual disturbances, and heart failure after consuming a food item. What is the most likely adulterant? (Q860003)

A. Sanguinarine

B. BOAA

C. Pyrrolizidine

D. Aflatoxin

See Answer in Part B → Q33

@Neet_pg_bot

Q34: In endemic area what will be the dose of Vitamin A for 1-6 year old baby? (Q820567)

A. 2 lakh IU orally for 6 months

B. 1 lakh IU orally for 6 months

C. 2 lakh IU for 6 weeks

D. 2 lakh IU for 1 year

See Answer in Part B → Q34

@Neet_pg_bot

Q35: A 3 year old child came in the opd with severe diarrhea , vomiting, skin, deeply sunken eyes and no urine output. On examination baby is severely dehydrated, lethargic,high respiratory rate and BP of 80/60mmHg. Which fluid is given for management? (Q820645)

A. ORS

B. Ringer lactate with 5% dextrose

C. Normal Saline

D. Dextrose

See Answer in Part B → Q35

@Neet_pg_bot

Q36: What is the most prevalent cause of macrocytic anemia among the options provided? (Q793705)

A. Vitamin B12 deficiency

B. Bone marrow disorders

C. Alcohol

D. Drug-induced

See Answer in Part B → Q36

@Neet_pg_bot

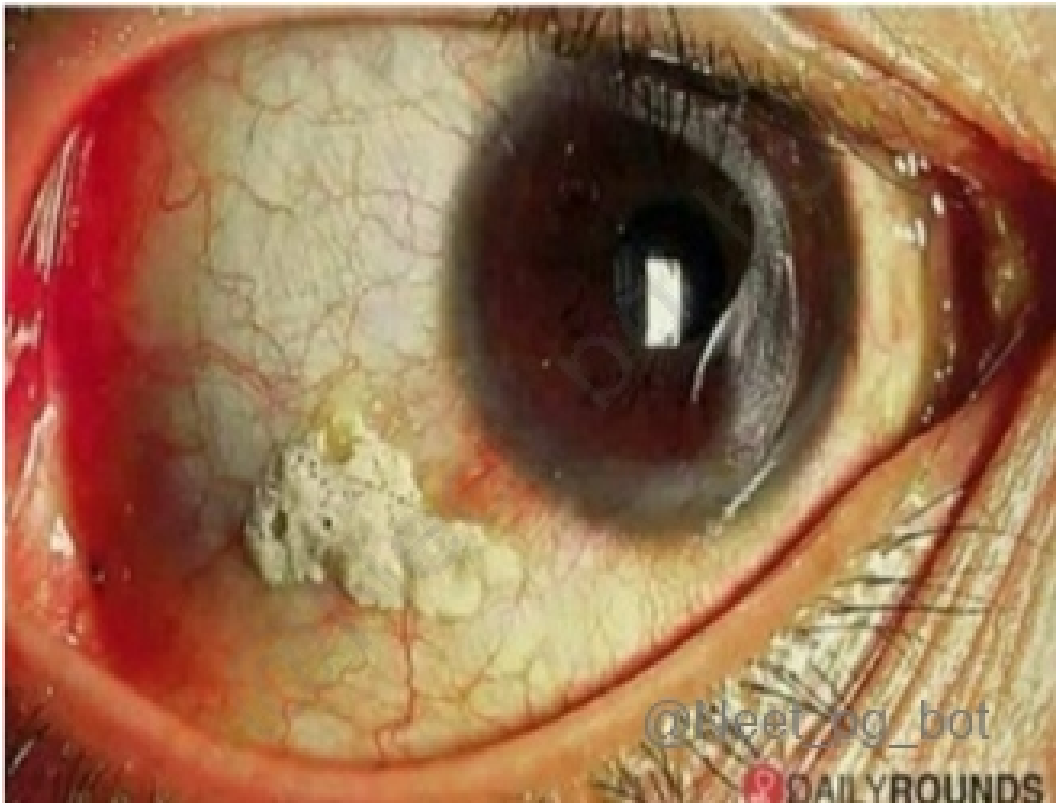
Q37: On ocular examination, a teenage girl with low body weight is observed to have the following finding. Which WHO grade corresponds to this finding? (Q793633)

A. 1A

B. 1B

C. 2A

D. 2B



See Answer in Part B → Q37

@Neet_pg_bot

Q38: Which of the following options can be employed for the treatment of Kesari dal toxicity? (Q793554)

A. Sodium bicarbonate

B. Vitamin A

C. Vitamin C

D. IV immunoglobulin

See Answer in Part B → Q38

@Neet_pg_bot

Q39: What is the cause of the 40-year-old female patient's acute onset leg swelling and loose stools, considering her family members also have similar symptoms and mustard oil is a regular part of their diet? (Q793496)

A. Clavine alkaloids

B. Sanguinarine

C. BOAA

D. Pyrrolizidine alkaloids

See Answer in Part B → Q39

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• [11_Social Sciences and Health] 043 Social Sciences And Health

« Back to Folder Directory

[11_Social Sciences and Health] 043 Social Sciences And Health — Quick Jump

Q1 (p. 437) *Q2 (p. 437)* *Q3 (p. 437)* *Q4 (p. 438)* *Q5 (p. 438)* *Q6 (p. 439)*
Q7 (p. 439) *Q8 (p. 439)* *Q9 (p. 440)* *Q10 (p. 440)*

Q1: Which of the following is a permanent social group? (Q840870)

A. Herd

B. Mob

C. Band

D. Crowd

See Answer in Part B → Q1

@Neet_pg_bot

Q2: “The risk of contracting a disease increases if profit is valued more than health”. This statement represents which of the following theories in sociology? (Q840872)

A. Feminist theory

B. Parsonian theory

C. Foucauldian theory

D. Marxist theory

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A couple with three children lives in a small town. The couple's first and second child travel abroad for their studies. Which phase of the family cycle is the above

family in? (Q840876)

A. Extension

B. Complete extension

C. Contraction

D. Dissolution

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following best describes a joint family? (Q840878)

A. A Family with husband, wife and biological/adopted children.

B. A family with Grandparents, parents and children.

C. A family with Grandparents, parents and children living along with uncle, aunt and their families.

D. A family with both parents are not together.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Match the following Socio-Economic Status (SES) scales with their respective contexts: A. Modified Kuppuswamy scale 1. Non-Indian SES scale B. Udai Pareek scale 2. Urban SES scale C. Bhardwaj scale 3. Rural SES scale D. Hollingshead scale 4. Student’s scale (Q840880)

A. A-2, B-3, C-4, D-1

B. A-1, B-2, C-3, D-4

C. A-4, B-1, C-2, D-3

D. A-2, B-4, C-3, D-1

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Mr. Sharma's family consists of four members. Mr. Sharma is a graduate working as a manager in a private company, earning a monthly income of INR 50,000. Mrs. Sharma is a high school graduate and a homemaker, and their two children are school students. Based on the Modified Kuppuswamy Scale, what is the socio-economic status of Mr. Sharma's family? (Q840882)

A. Upper Class

B. Upper Middle Class

C. Lower Middle Class

D. Upper Lower Class

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following statements regarding the Udai Pareek Scale and the BG Prasad Scale is true? (Q840884)

A. The Udai Pareek Scale is based on per capita income.

B. The BG Prasad Scale includes parameters like caste and land.

C. The Udai Pareek Scale is used in rural areas.

D. The BG Prasad Scale is used in urban areas.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A family living in rural India. They struggle to make ends meet, and their diet consists mainly of rice and lentils. They lack access to proper sanitation and healthcare. The family's income is inconsistent and often falls short of covering their basic needs. Based on the scenario, this family would most likely be classified as:

(Q840886)

A. Above Poverty Line

B. Below Poverty Line

C. Upper Middle Class

D. Middle Class

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A doctor finds that many patients don't follow his advice regarding medication and lifestyle changes, even when he explains the scientific basis clearly and patiently. What communication factor should this doctor prioritise to improve his patient interactions in this context? (Q840887)

A. Sharing humorous anecdotes to ease the patients' anxiety.

B. Understanding the local cultural beliefs and practices related to health and illness.

C. Using complex medical terminology to establish his authority and expertise.

D. Focusing solely on conveying information about the latest advancements in medical science.

See Answer in Part B → Q9

@Neet_pg_bot

Q10: In a clinical setting, a doctor is teaching an intern how to perform a knee reflex test. This type of learning primarily involves: (Q846613)

A. Cognitive learning

B. Affective learning

C. Psychomotor learning

D. Experiential learning

See Answer in Part B → Q10

@Neet_pg_bot

• [11_Social Sciences and Health] 044 Previous Year Questions

« Back to Folder Directory

[11_Social Sciences and Health] 044 Previous Year Questions — Quick Jump

Q1 (p. 442) *Q2 (p. 442)* *Q3 (p. 442)* *Q4 (p. 443)* *Q5 (p. 443)* *Q6 (p. 444)*
Q7 (p. 444) *Q8 (p. 444)* *Q9 (p. 445)* *Q10 (p. 445)*

Q1: A couple with one child welcomes a second child, increasing the total number of children in the household. What is this specific type of change in the family called? (Q866774)

A. Family initiation

B. Household contraction

C. Complete extension

D. Kinship enlargement

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which is not the component of PQLI? (Q844113)

A. Life expectancy at 1 year

B. Literacy rate

C. Infant mortality rate

D. Gross national product

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Identify the correct sequence regarding the family cycle? (Q860547)

A. Formation, extension, complete extension, contraction, complete contraction, dissolution, extinction

B. Formation, extension, complete extension, complete contraction, contraction, dissolution, extinction

C. Extension, Formation, complete extension, contraction, complete contraction, dissolution, extinction

D. Formation, extension, complete extension, contraction, complete contraction, extinction, dissolution

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which barrier is the doctor addressing when a male patient expresses concern about potential impotency from the recommended vaccine during a vaccination drive? (Q858024)

A. Physical barrier

B. Environmental barrier

C. Physiological barrier

D. Cultural barrier

See Answer in Part B → Q4

@Neet_pg_bot

Q5: What kind of family would the surveyor categorize the household as, considering it consists of a 35-year-old man, his 6-week pregnant wife, a 3-year old child, and the temporary presence of the man's brother and his wife during their winter vacation? (Q858055)

A. Joint family

B. Nuclear family

C. Extended family

D. Third generation family

See Answer in Part B → Q5

@Neet_pg_bot

Q6: In which of the following situations is confidentiality upheld? (Q858101)

A. Group discussion

B. Counselling

C. Panel discussion

D. Seminar

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A couple brought their son to the doctor. They were worried because their son prefers eating food from multinational companies instead of traditional, home-made foods. What do we call this shift from consumption of traditional natural food to western fast foods? (Q857065)

A. Food transition

B. Social pathology

C. Acculturation

D. Demographic change

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A couple has given birth to their first child. Based on the nuclear family cycle, which phase is the family entering into? (Q857702)

A. Extension

B. Complete extension

C. Contraction

D. Completed contraction

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following is responsible for maintaining the births and deaths in India? (Q857750)

A. Vital registration system

B. Census

C. Death certificate

D. Lay reporting

See Answer in Part B → Q9

@Neet_pg_bot

Q10: A study was done on the Family Health Education Model. Which of the following is/are the roles of the Family in health other than biological reproduction? 1. Provide a hygienic environment 2. Close monitoring of the sexual activities of children 3. Take care when ill 4. Passing down cultural beliefs that affect health (Q879050)

A. 1, 2, 3

B. 1, 3, 4

C. 2, 3, 4

D. 1 and 4

See Answer in Part B → Q10

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• [12_Environment and Health] 045 Water Ii Disinfection Chlorination

« Back to Folder Directory

[12_Environment and Health] 045 Water Ii Disinfection Chlorination — Quick Jump

Q1 (p. 446)	*Q2 (p. 446)*	*Q3 (p. 447)*	*Q4 (p. 447)*	*Q5 (p. 447)*	*Q6 (p. 448)*
Q7 (p. 448)	*Q8 (p. 448)*	*Q9 (p. 449)*	*Q10 (p. 449)*	*Q11 (p. 450)*	*Q12 (p. 450)*
Q13 (p. 451)	*Q14 (p. 451)*	*Q15 (p. 452)*	*Q16 (p. 452)*		

Q1: Which of the following statements is true regarding shallow and deep wells? (Q840734)

A. Shallow wells tap water from underneath the first impervious layer and are not liable for contamination.

B. Deep wells yield limited quantities of water and usually dry up during summer.

C. Shallow wells are more likely to get contaminated and yield limited quantities of water.

D. Deep wells are easier and cheaper to construct compared to shallow wells.

See Answer in Part B → Q1

@Neet_pg_bot

Q2: You are required to disinfect a well using Horrock’s apparatus. The well has a diameter of 1.5 meters and a depth of 10 meters. Considering 2 grams of bleaching powder (calcium hypochlorite) is needed per cubic meter of water for effective disinfection, how much bleaching powder is required to disinfect this well? (Q840735)

A. 28 grams

B. 35 grams

C. 42 grams

D. 50 grams

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following diseases is primarily classified as a water-washed disease? (Q840736)

A. Cholera

B. Dracunculiasis (Guinea worm disease)

C. Trachoma

D. Malaria

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following microbiological tests is considered confirmatory evidence for recent fecal contamination of water? (Q840741)

A. Total Coliform Test

B. Fecal streptococci

C. Clostridium perfringens Test

D. Heterotrophic Plate Count

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following statements regarding the Presumptive Coliform Test is TRUE? (Q840743)

A. Membrane filtration technique confirms the presence of E.Coli in water

B. Suitable growth medium is key in multiple tube method

C. Coliforms must be detected in 1000mL of sample of drinking water

D. 1-3 coliforms in 100 cc of water is satisfactory water

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following statements is true ? A) Evidence of remote contamination of water: Clostridium perfringens B) Evidence of recent contamination of water: Streptococcus/ Enterococcus faecalis C) Multiple Tube Method is used for detection and estimation of coliform in water samples D) The presumptive coliforms test is a confirmatory test for E. coli detection in water E) Most reliable evidence of faecal contamination of water: Coliform organism (E.Coli) (Q840745)

A. A,B,C

B. A,B,D

C. B,C,D,E

D. A,B,C,E

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following is false regarding WHO recommended drinking water quality? (Q840746)

A. Turbidity: Up to 5 NTU (Nephelometric Turbidity Unit)

B. Color: Up to 15 TCU (True Color Unit)

C. Potable water ideally should have zero coliforms per 100ml

D. Nitrate: < 100 mg/L

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following statements regarding the hardness of water is false? (Q840748)

A. Sodium carbonate can remove temporary and permanent hardness of water

B. Temporary hardness of water is the presence of Calcium and Magnesium sulfates

C. 1 meq/L hardness = 50 mg CaCO3 (50ppm) per liter of water

D. Hardness of water protects from cardiovascular disease

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following are the features of Rapid Sand filter ? i) Large storage is required ii) Needs skilled operations iii) Effective size of sand 0.4-0.7 mm iv) Ideal for smaller towns for rapid purification of water v) Functions by utilizing the concept of gravity and pressure. (Q840749)

A. i, iii, iv

B. i, ii, iii

C. ii, iii, v

D. ii, iii, iv

See Answer in Part B → Q9

@Neet_pg_bot

Q10: John & his 10-year-old son set off on a camping trip to a remote area for its beautiful streams and scenic views. They spot a river flowing with clear water however John warns his son to not drink from it directly and rather purify it first. Which of the following statements is true regarding the purification of water on a small scale? (Q840751)

A. Boiling water is preferred over chlorination because it is cost-effective and provides long-term residual activity.

B. Boiling is not preferred as a mode of water purification because it requires re-treatment every 4-6 hours.

C. Chlorination is less effective than boiling because it lacks residual activity and requires frequent re-treatment.

D. Water should be turbid for chlorination to effectively take place.

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which statement best describes the disinfecting property of chlorine when used in water purification? (Q840752)

A. The major disinfecting property of chlorine is due to the hypochlorite ion (OCl-).

B. The residual activity of chlorine, known as free chlorine, is mainly due to hydrogen chloride (HCI) in water.

C. Chlorination is the primary method for water purification due to its ability to kill all types of microorganisms without altering taste and smell.

D. The disinfecting property of chlorine is primarily due to hypochlorous acid (HOCl).

See Answer in Part B → Q11

@Neet_pg_bot

Q12: All of the following are true regarding the components of the given apparatus except: (Q840754)

A. It contains 1 black cup and 6 white cups.

B. The 6 white cups are of 200ml capacity each

C. The indicator used in this is starch iodide.

D. It has 1 glass stirring rod



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See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following statements is true regarding the OT and OTA tests used for chlorination of water? (Q840755)

A. The OT test can detect both free and combined chlorine separately, making it superior to the OTA test.

B. OTA test is better than the OT test as it detects both free and combined chlorine separately

C. The OTA test is unable to detect combined chlorine

D. OT Test cannot detect free Cl separately

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A major earthquake has struck a densely populated coastal city, causing widespread infrastructure damage. The city's water supply system is severely compromised, leading to contamination of water sources. How much residual chlorine would be required to purify water in this scenario? (Q840757)

A. >0.5mg/L for a contact period of 1 hour

B. >1 mg/L and contact period of 1 hour

C. >2 mg/L for a contact period of 1 hour

D. ≥ 0.7 mg/L for a contact period of 1 hour.

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Near your home, there is an overhead water tank that needs disinfection. The sanitation officer decides to prepare a solution using high-test hypochlorite. Which of the following is true regarding high-test hypochlorite? (Q840758)

A. A single tablet of 0.5 g is sufficient to disinfect 20 liters of water.

B. It contains 60-70% available chlorine.

C. It is available as Nesfield's and Bursoline's tablets.

D. It is no longer recommended for water disinfection.

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A 27-year-old male from a rural village presented to the PHC complaining of blister formation and worms coming out of it, accompanied by fever. The condition was diagnosed as guinea worm disease. This condition is a common public health problem that is attributed to the use of? (Q882171)

A. Dug well

B. Sanitary well

C. Artesian well

D. Step well

See Answer in Part B → Q16

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• [12_Environment and Health] 046 Air Light Sound And Radiation

« Back to Folder Directory

[12_Environment and Health] 046 Air Light Sound And Radiation — Quick Jump

Q1 (p. 454)	*Q2 (p. 454)*	*Q3 (p. 455)*	*Q4 (p. 455)*	*Q5 (p. 455)*	*Q6 (p. 456)*
Q7 (p. 456)	*Q8 (p. 456)*	*Q9 (p. 457)*	*Q10 (p. 458)*	*Q11 (p. 458)*	*Q12 (p. 458)*
Q13 (p. 459)	*Q14 (p. 459)*	*Q15 (p. 460)*	*Q16 (p. 461)*	*Q17 (p. 461)*	*Q18 (p. 461)*

Q1: Match the loudness of noise in decibels (dB) with their corresponding situation. 1. 60 dB a. Auditory fatigue 2. 90 dB b. Rupture of tympanic membrane 3. 160 dB c. Noise threshold for pain 4. 140 dB d. Normal conversation (Q841178)

A. 1:d , 2:a, 3:b , 4:c

B. 1:b , 2:d, 3:a , 4:c

C. 1:d , 2:a, 3:c , 4:b

D. 1:a , 2:d, 3:b , 4:c

See Answer in Part B → Q1

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Q2: Which of the following statement about strength of sewage is incorrect? (Q845073)

A. COD estimation is best estimated by potassium dichromate.

B. BOD is the most important test that is done on sewage.

C. Normal range of suspended solids is 100-500 mg/L.

D. Strong sewage will have BOD of >100 mg/L.

See Answer in Part B → Q2

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Q3: Which of the following statements accurately describes the trench method of refuse disposal in sanitary landfills? (Q845072)

A. The trench method involves digging a trench, burying solid waste in it, and covering it with soil.

B. The trench method entails digging a trench, filling it with refuse and covering it with a layer of supplemental earth from outside sources to manage waste.

C. Decomposition begins as refuse heats to 60°C within 4-6 weeks, killing pathogens.

D. Refuse cools immediately after burial, starts decomposition at ambient temperature, and rises to 60°C after 2-3 months.

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A 31-year-old male who wants to set up a radio diagnostic centre consults you regarding the possible health hazards his radio technicians might face. What is the minimum thickness of lead aprons you advise him to provide his employees to prevent them from radiation hazards? (Q841193)

A. 0.26 mm

B. 0.34 mm

C. 0.4 mm

D. 0.5 mm

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following is considered overcrowding? (Q841192)

A. 1 person: 80 sq ft

B. 1 person: 90 sq ft

C. 2 persons: 120 sq ft

D. None of the above

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Identify the correct statements regarding ideal housing standards. Built-up area of houses should not exceed 2/3rd in urban areas Roof of a house should be at least 10 meters in height Window area should be at least 1/5th of the floor area Cattle sheds should be at least 25 feet from the housing area Doors and window: >25% of total floor area (Q841189)

A. 1,2 and 5

B. 2,4 and 5

C. 1,3,4 and 5

D. 1,2 and 3

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following units is used to measure the luminous intensity of a light source? (Q841186)

A. Lumen

B. Lux

C. Candela

D. Lambert

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following is a primary use of this instrument? (Q841180)

A. Measuring octave band frequencies.

B. Measuring occupational noise exposure over a period of time

C. Measuring the intensity of sound in dB

D. Evaluation of hearing ability



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See Answer in Part B → Q8

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Q9: Which of the following is considered a type of mechanical ventilation? (Q841179)

A. Plenum

B. Perflation

C. Diffusion

D. Temperature inequality

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Identify the primary air pollutants among the following options: Carbon Monoxide (CO) Methane (CH4) Sulfur Dioxide (SO2) Nitrogen Dioxide (NO2) Ozone (O3) Lead (Pb) (Q841162)

A. 1, 3, 4, and 5

B. 2, 3, 4, and 6

C. 1, 3, 4, and 6

D. 1, 2, 4, and 5

See Answer in Part B → Q10

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Q11: Which of the following is true about global warming? (Q841177)

A. It is primarily caused by increased solar radiation.

B. Paris Agreement aimed to reduce greenhouse gas emissions in developed countries

C. Kyoto Protocol called for a 50% reduction in greenhouse emissions.

D. Water vapour is one of the important greenhouse gases.

See Answer in Part B → Q11

@Neet_pg_bot

Q12: All of the following instruments can be used to measure air humidity except? (Q841176)

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following statements regarding the following device are not true? It measures radiant heat flux. It is used to assess thermal comfort in indoor environments. It measures a lower temperature than the ordinary air temperature It measures air temperature directly. It is not used to measure the cooling power of air. (Q841175)

A. 3 and 4

B. 2 and 3

C. 4 and 5

D. 3, 4 and 5



See Answer in Part B → Q13

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Q14: What is the instrument's name, shown below, for measuring low air velocity? (Q841174)

A. Globe thermometer

B. Kata thermometer

C. Wet bulb hygrometer

D. Anemometer



See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following is best measured by McArdle's Index? (Q841168)

A. Cooling power of air

B. Heat stress

C. Predictable 4 hours sweat rate

D. Corrected effective temperature

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Match the following question Indoor Air Pollutants and their Sources: Pollutant Source 1. Polyaromatic hydrocarbons a. Destruction of construction materials 2. Asbestos b. Adhesives, Solvents and Aerosol sprays 3. Aldehydes c. Fuel consumption 4. Benzene d. Furnishings and Construction materials (Q841166)

A. 1-c, 2-a, 3-d, 4-b

B. 1-b, 2-c, 3-a, 4-c

C. 1-d, 2-a, 3-c, 4-b

D. 1-a, 2-b, 3-d, 4-c

See Answer in Part B → Q16

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Q17: A patient resides in an area with an AQI of 250. What does it indicate? (Q841165)

A. Very Poor

B. Moderate

C. Satisfactory

D. Poor

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which of the following is not an indicator of air pollution? (Q841164)

A. SO 2

B. Soiling index

C. Air Quality Index (AQI)

D. McArdle's index

See Answer in Part B → Q18

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• [12_Environment and Health] 047 Entomology - I

« Back to Folder Directory

[12_Environment and Health] 047 Entomology - I — Quick Jump

Q1 (p. 463) *Q2 (p. 464)* *Q3 (p. 464)* *Q4 (p. 465)* *Q5 (p. 466)* *Q6 (p. 467)*
Q7 (p. 468) *Q8 (p. 468)* *Q9 (p. 469)* *Q10 (p. 470)* *Q11 (p. 471)* *Q12 (p. 472)*
Q13 (p. 472)

Q1: Which of the following diseases can be spread by the mosquito, as shown in the image below? (Q841211)

A. Filariasis

B. Malaria

C. Chickungunya

D. Yellow fever



See Answer in Part B → Q1

@Neet_pg_bot

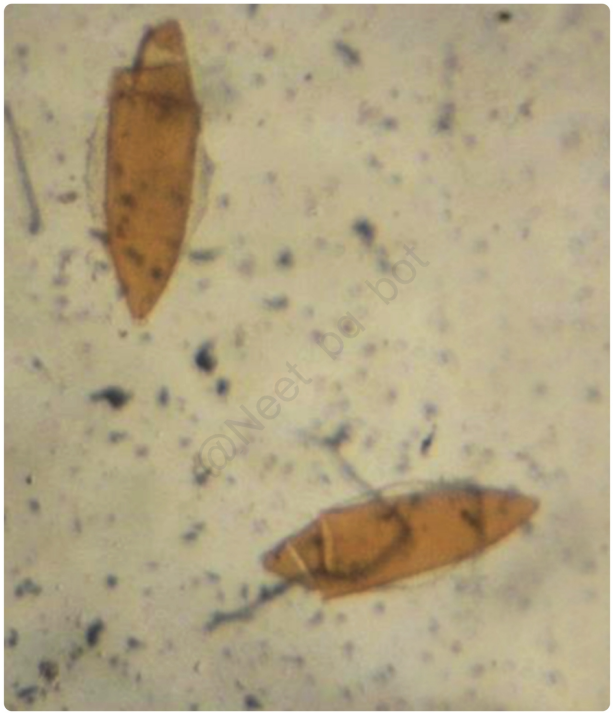
Q2: Identify the genus of the mosquito, the eggs of which are collected from the water source of a street and subjected to microscopic examination as given in the image below. (Q841212)

A. Aedes

B. Anopheles

C. Culex

D. Mansonoides



See Answer in Part B → Q2

@Neet_pg_bot

Q3: A 45-year-old male from Bihar, India, presents with a 3-month history of intermittent fever, significant weight loss, and enlargement of the spleen and liver.

Physical examination reveals darkening of his skin on the face and extremities. He was bitten by the organism given in the image below. What is the disease and the organism? (Q841213)

A. Visceral leishmaniasis - sandfly

B. Trypanosomiasis - Tsetse fly

C. Dengue fever-Aedes mosquito

D. Lyme disease - Ixodes tick



See Answer in Part B → Q3

@Neet_pg_bot

Q4: Given below is the image of a parasite. From the options pick a disease that is not transmitted by it. (Q841214)

A. Epidemic typhus

B. Relapsing fever

C. Trench fever

D. Oriental sore



See Answer in Part B → Q4

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Q5: What does this insect transmit? (Q841215)

A. Epidemic relapsing fever

B. Trench fever

C. Epidemic typhus

D. Endemic typhus



See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following statements is true about the parasite shown in the image (Q841216)

A. Ornithodorus moubata is an important species of this parasite

B. Transmit relapsing fever

C. Has 5 years of nymphal stage

D. Cannot stand starvation



See Answer in Part B → Q6

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Q7: A 35-year-old hiker presents with sudden onset fever, severe headache, and a macular rash that appeared around the 5th day of illness. On examination, there is generalised lymphadenopathy and an eschar on his abdomen. What is the most likely diagnosis? (Q841217)

A. Epidemic typhus

B. Scrub typhus

C. Relapsing fever

D. Dengue fever

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A 30-year-old woman presents with severe itching, particularly worse at night, and skin lesions on her hands and wrists. On examination, there are follicular lesions and evidence of secondary infection with crusted papules and pustules. She reports that her husband and children also have similar symptoms. Which of the following is used exclusively as a preventive measure against this disease? (Q841218)

A. Use of chlordane

B. Applying benzyl benzoate

C. Using gamma-HCH (lindane) on the skin

D. Administering tetmosol solution daily

See Answer in Part B → Q8

@Neet_pg_bot

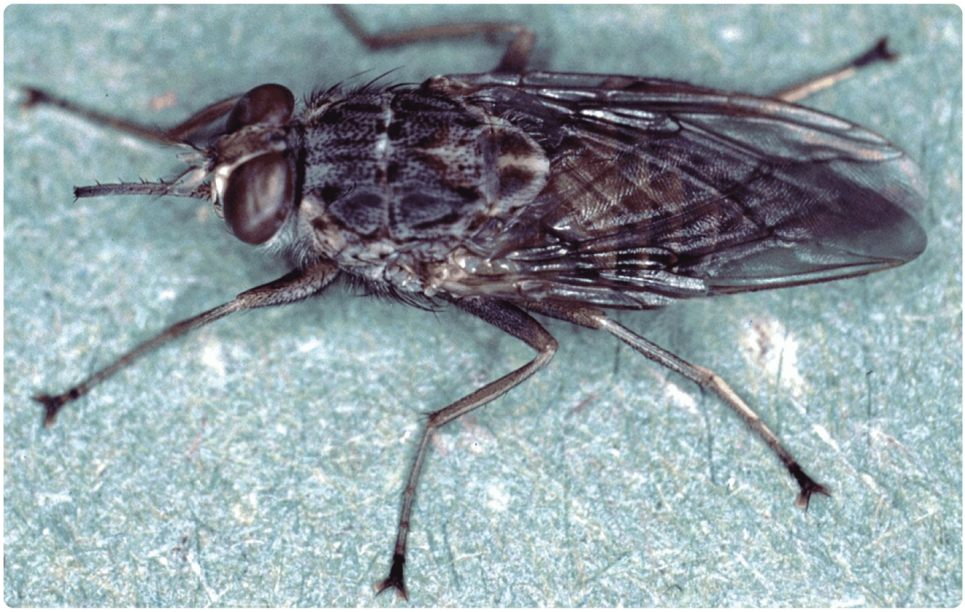
Q9: The image of a fly is given below. Which disease does it transmit? (Q841219)

A. Q fever

B. Relapsing fever

C. Sleeping sickness

D. Lyme disease



See Answer in Part B → Q9

@Neet_pg_bot

Q10: A 37-year-old man is complaining of heart palpitations, nausea, and facial flushing after being bitten by the insect shown in the image. What is the diagnosis? (Q841220)

A. Chagas disease

B. Scrub typhus

C. Tularaemia

D. Sleeping sickness



See Answer in Part B → Q10

@Neet_pg_bot

Q11: Mr. Smith, a 50-year-old farmer from rural Africa, presents with severe itching and a "leopard skin" appearance on his legs. He complains of worsening vision with photophobia and conjunctivitis. Examination reveals papular dermatitis, skin depigmentation, and early signs of corneal scarring. He gives a history of being bitten by a fly given in the image below. What is the diagnosis? (Q841221)

A. Onchocerciasis

B. Trench fever

C. Loiasis

D. Scrub typhus



See Answer in Part B → Q11

@Neet_pg_bot

Q12: All of the following are transmitted by houseflies except? (Q841222)

A. Tularaemia

B. Yaws

C. Trachoma

D. Anthrax

See Answer in Part B → Q12

@Neet_pg_bot

Q13: The mosquito larvae collected from a local water source have been examined. Based on the features observed under the microscope, which genus of mosquito is

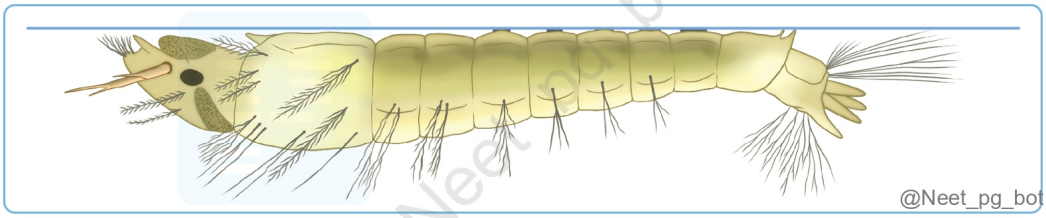
identified? (Q846619)

A. Aedes

B. Anopheles

C. Culex

D. Mansonoides



See Answer in Part B → Q13

@Neet_pg_bot

• [12_Environment and Health] 048 Previous Year Questions

« Back to Folder Directory

[12_Environment and Health] 048 Previous Year Questions — Quick Jump

Q1 (p. 474)	*Q2 (p. 474)*	*Q3 (p. 475)*	*Q4 (p. 475)*	*Q5 (p. 476)*	*Q6 (p. 476)*
Q7 (p. 477)	*Q8 (p. 477)*	*Q9 (p. 478)*	*Q10 (p. 478)*	*Q11 (p. 478)*	*Q12 (p. 479)*
Q13 (p. 479)	*Q14 (p. 480)*	*Q15 (p. 480)*	*Q16 (p. 480)*	*Q17 (p. 481)*	*Q18 (p. 481)*
Q19 (p. 481)	*Q20 (p. 482)*	*Q21 (p. 482)*	*Q22 (p. 483)*	*Q23 (p. 483)*	*Q24 (p. 483)*
Q25 (p. 484)	*Q26 (p. 484)*	*Q27 (p. 485)*	*Q28 (p. 485)*	*Q29 (p. 486)*	*Q30 (p. 486)*
Q31 (p. 487)	*Q32 (p. 487)*	*Q33 (p. 487)*	*Q34 (p. 488)*	*Q35 (p. 488)*	*Q36 (p. 488)*

Q1: What is the classification of the air quality index in Delhi station on November 23, based on the provided air pollution index chart for 4 consecutive days? Date AQI November 21 350 November 22 340 November 23 407 November 24 356 (Q856091)

A. Moderately polluted

B. Poor

C. Very poor

D. Severe

See Answer in Part B → Q1

@Neet_pg_bot

Q2: While measuring a patient's blood pressure at a primary health center, the sphygmomanometer accidentally fell and broke, resulting in spilled mercury on the ground. Which of the following is the most appropriate step to clean this spillage? (Q855294)

A. Collect it by using a card on a sheet of paper and put the mercury into a jar

B. Collect it by sweeping it with a broom and throwing outside

C. Collect it by sweeping it and flush it in the toilet

D. Collect it by hand and then wash hands with water

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Water from a broken septic tank is collected in a container and breeding mosquitoes are seen. The image of the larva is given below. Identify the species of the mosquito. (Q855127)

A. Anopheles

B. Aedes

C. Mansonia

D. Culex



@Neet_pg_bot

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Under which category of disaster management does the modification of building codes to construct earthquake-resistant buildings fall? (Q855137)

A. Disaster response

B. Disaster reconstruction

C. Disaster rehabilitation

D. Disaster mitigation

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Orthotolidine test is used to determine (Q857084)

A. Nitrates in water

B. Nitrites in water

C. Free chlorine in water

D. Ammonia content in water

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A 45-year-old man living in Nellore, Andhra Pradesh presents with the following lesions on his teeth. What is the most likely diagnosis? (Q857147)

A. Selenosis

B. Plumbism

C. Fluorosis

D. Lathyrism



See Answer in Part B → Q6

@Neet_pg_bot

Q7: What is the maximum number of persons allowed to live in a household with 2 rooms without causing overcrowding? (Q857720)

A. 2 people

B. 3 people

C. 4 people

D. 5 people

See Answer in Part B → Q7

@Neet_pg_bot

Q8: What is the standard unit for measuring the brightness of light emitted from a single point source? (Q856064)

A. Candela

B. Lux

C. Lambert

D. Lumen

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which type of thermometer is employed to assess the low air velocity rather than the cooling efficiency of the air? (Q856078)

A. Kata thermometer

B. Globe thermometer

C. Wet globe thermometer

D. Dial thermometer

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Sickness absenteeism of workers in the industry is used to evaluate (Q858128)

A. Health of the worker

B. Health of the family

C. Industrial environment

D. Community health

See Answer in Part B → Q10

@Neet_pg_bot

Q11: The Pathanamthitta district of Kerala was affected by floods and the government distributed doxycycline tablets for prophylaxis. Which other chemical will be distributed along with it? (Q856092)

A. Zinc phosphide

B. Malathion

C. Lindane

D. Paris green

See Answer in Part B → Q11

@Neet_pg_bot

Q12: What is the vector that causes the occurrence of buboes in the community? (Q856093)

A. Xenopsylla cheopis

B. Phlebotomus argentipes

C. Ixodes tick

D. Female Anopheles mosquito

See Answer in Part B → Q12

@Neet_pg_bot

Q13: What are the most reliable indicators for regular monitoring of air pollution? (Q854854)

A. Sulfur dioxide, smoke, and suspended particles

B. Sulfur dioxide, lead, and particulate matter

C. Sulfur dioxide and carbon monoxide

D. Carbon monoxide and hydrogen sulfide

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A 45-year-old healthy man with a history of small streaks of blood in his stools is being sent for a colonoscopy to screen for colon cancer. This type of prevention is- (Q859432)

A. Primordial

B. Secondary

C. Primary

D. Tertiary

See Answer in Part B → Q14

@Neet_pg_bot

Q15: What is the required thickness of a lead apron used for radiation protection? (Q859953)

A. 1mm

B. 2mm

C. 0.5mm

D. 1.5 mm

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Mode of disposal of sewage ground water: (Q860030)

A. Activated sludge process

B. Grit chamber

C. Oxidation pond

D. All of the above

See Answer in Part B → Q16

@Neet_pg_bot

Q17: According to biomedical waste management protocols, what is the proper method of disposing of a broken vaccine vial? (Q855635)

A. Puncture proof blue bin

B. White container

C. Yellow container

D. Red Bag

See Answer in Part B → Q17

@Neet_pg_bot

Q18: PM 2.5 is considered particularly harmful to human health because it can enter which of the following? (Q879026)

A. Trachea

B. Alveoli

C. Bronchioles

D. Nose

See Answer in Part B → Q18

@Neet_pg_bot

Q19: What type of sanitation facilities should be provided for the soldiers during war in military environments? (Q860583)

A. Pit method

B. Dumping method

C. Trench latrine

D. Acqua privy

See Answer in Part B → Q19

@Neet_pg_bot

Q20: What does the Langelier Saturation Index (LSI) primarily indicate in water quality management? (Q866779)

A. Water balance: scaling vs corrosion

B. Total dissolved solids in water

C. Hardness of water only

D. Presence of biological contaminants

See Answer in Part B → Q20

@Neet_pg_bot

Q21: During the assessment of drinking water from a village tank, which of the following parameters is not within the acceptable limits for safe drinking water? (Q866783)

A. Cadmium – 0.03 mg/L

B. Fluoride – 0.8 mg/L

C. Total Dissolved Solids (TDS) – 300 mg/L

D. Nitrate – 20 mg/L

See Answer in Part B → Q21

@Neet_pg_bot

Q22: During a Health Mela organized by a medical college, the Nalgonda technique for water purification was demonstrated. Which two chemicals are used in this technique? (Q866430)

A. Alum and Gypsum

B. Alum and Charcoal

C. Alum and Lime

D. Charcoal and Lime

See Answer in Part B → Q22

@Neet_pg_bot

Q23: A 20-year-old resident of Andhra Pradesh presents with outward bending of the lower limbs and signs of osteoporosis. His diet mainly consists of rice and jowar roti. What should not be done in the management of this patient? (Q866432)

A. Provision of running surface water for drinking

B. Change the water source

C. Fluoride supplementation

D. Add lime and alum to drinking water

See Answer in Part B → Q23

@Neet_pg_bot

Q24: A pus swab sample has been sent to the microbiology laboratory for examination. After testing is completed, how should the used swab and its container be safely discarded according to biomedical waste management guidelines? (Q852865)

A. Red

B. Yellow

C. Blue

D. Black

See Answer in Part B → Q24

@Neet_pg_bot

Q25: A student went on a trip to Jaisalmer, where the temp was 40 degrees, and relative humidity was 20%. What will the mechanism of heat loss be? (Q852869)

A. Evaporation

B. Radiation

C. Conduction with air

D. Conduction with objects

See Answer in Part B → Q25

@Neet_pg_bot

Q26: The following instrument is used for the measurement of? (Q844063)

A. Cooling power air

B. Radiant heat

C. Humidity

D. Temperature



See Answer in Part B → Q26

@Neet_pg_bot

Q27: Rukmini is attending the village health nutrition and sanitation program day. How frequently is this conducted? (Q860566)

A. Every month

B. Every week

C. Every 14 days

D. Every 3 months

See Answer in Part B → Q27

@Neet_pg_bot

Q28: An elderly man presents with leg deformities and skeletal abnormalities. On examination, he is using crutches and has visible bowing of the legs. It is also noted that several other villagers exhibit similar symptoms. Considering the cluster of cases in the same geographic area, which of the following is the most appropriate next step in the investigation? (Q866766)

A. Check serum vitamin D levels

B. Measure serum calcium levels

C. Perform parathyroid hormone (PTH) assay

D. Collect and analyze water samples for fluoride content

See Answer in Part B → Q28

@Neet_pg_bot

Q29: What is the recommended free residual chlorine level after chlorination of a well to ensure adequate disinfection? (Q860601)

A. 0.5 ppm after 1 hour

B. 0.5 ppm after 2 hours

C. 0/8 ppm after 1 hour

D. 0.8 ppm after 2 hours

See Answer in Part B → Q29

@Neet_pg_bot

Q30: Which of the following is the vector responsible for transmitting Orientia tsutsugamushi? (Q859986)

A. Mite

B. Tick

C. Louse

D. Flea

See Answer in Part B → Q30

@Neet_pg_bot

Q31: Air humidity and dew point temperature of the air is measured using which of the following instruments? (Q860045)

A. Sling psychrometer

B. Kata thermometer

C. Barometer

D. Dial thermometer

See Answer in Part B → Q31

@Neet_pg_bot

Q32: Match the following columns A. Byssinosis 1. Cane sugar factories B. Bagassosis 2. Sandstone industry C. Silicosis 3. Cement industry D. Asbestosis 4. Textile industry (Q857363)

A. A2-B4-C1-D3

B. A4-B1-C2-D3

C. A2-B1-C4-D3

D. A4-B1-C3-D2

See Answer in Part B → Q32

@Neet_pg_bot

Q33: Which international agency helps in construction of sanitary latrines(toilet building) in India? (Q820591)

A. USAID

B. CURE

C. Redcross

D. FORD

See Answer in Part B → Q33

@Neet_pg_bot

Q34: All of the following about purification of water are true except? (Q855532)

A. Clostridium pores indicate remote contamination of water

B. Coliforms maybe detected by Multiple Tube Method and Indole production

C. Sodium thiosulphate is added to neutralize certain contaminants

D. Coliforms must not be detectable in any 1000 mL sample of drinking water

See Answer in Part B → Q34

@Neet_pg_bot

Q35: The ideal per capita space for students in a classroom should be (Q858027)

A. >5 sq. ft.

B. >10 sq. ft.

C. >15 sq. ft.

D. >20 sq. ft.

See Answer in Part B → Q35

@Neet_pg_bot

Q36: What is the term used to describe the process that occurs in an oxidation pond? (Q858122)

A. Always aerobic

B. Always anaerobic

C. Aerobic during day, anaerobic during night

D. Anaerobic during day, aerobic during night

See Answer in Part B → Q36

@Neet_pg_bot

• [13_Allied Health Disciplines] 049 Occupational Health

« Back to Folder Directory

[13_Allied Health Disciplines] 049 Occupational Health — Quick Jump

Q1 (p. 490)	*Q2 (p. 491)*	*Q3 (p. 491)*	*Q4 (p. 491)*	*Q5 (p. 492)*	*Q6 (p. 492)*
Q7 (p. 492)	*Q8 (p. 493)*	*Q9 (p. 493)*	*Q10 (p. 493)*	*Q11 (p. 494)*	*Q12 (p. 494)*
Q13 (p. 495)	*Q14 (p. 495)*	*Q15 (p. 496)*	*Q16 (p. 496)*	*Q17 (p. 496)*	*Q18 (p. 497)*
Q19 (p. 497)	*Q20 (p. 498)*				

Q1: A 50-year-old man presents with severe abdominal pain, confusion, and difficulty walking. Examination reveals moderate pallor, blue-black lines on his gums (shown in the image below), and bilateral foot drop. Which heavy metal poisoning is most likely responsible for his symptoms? (Q840949)

A. Arsenic

B. Mercury

C. Lead

D. Cadmium



See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following best describes the objective of ergonomics? (Q841031)

A. Achieving optimal human performance and well-being through work adjustments.

B. Enhancing job satisfaction by adjusting tasks to fit human capabilities.

C. Ensuring workers perform efficiently without health risks.

D. Assessing job tasks to prevent health hazards.

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Where is the National Institute of Occupational Health(Apex) of India located? (Q841029)

A. New Delhi

B. Hyderabad

C. Pune

D. Ahmedabad

See Answer in Part B → Q3

@Neet_pg_bot

Q4: How frequently are periodic medical examinations typically conducted for employees in dichromate industries? (Q841027)

A. Once a year

B. Once a month

C. Once in six months

D. Daily

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following is a primary objective of a pre-placement medical examination? (Q841026)

A. To evaluate the effectiveness of the company's health and safety programs.

B. To ensure the employee's ongoing health and fitness after being hired.

C. To determine if the candidate is medically fit for the job they are being considered for.

D. To provide health benefits and insurance options to the new employee.

See Answer in Part B → Q5

@Neet_pg_bot

Q6: What does the sickness absenteeism rate measure? (Q841025)

A. The number of employees absent from work due to sickness.

B. The percentage of working hours lost due to employee absences caused by illness..

C. The average duration of sickness absences per employee per month.

D. The economic impact of sickness absences on the organisation

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A 32-year-old man presents with intermittent episodes of pale and white fingers followed by a dusky red colour, leading to a diagnosis of Raynaud's phenomenon. Considering his symptoms, what is his most likely occupation? (Q841023)

A. Farmers

B. Dentist

C. Construction workers

D. Office workers

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A 65-year-old male comes to the OPD due to hematuria. Cystoscopy reveals bladder cancer. Past occupational exposure to which of the following chemicals is associated with this condition? (Q840988)

A. Vinyl chloride

B. Benzidine

C. Benzene

D. Arsenic

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which metal oxide fumes are most commonly implicated in causing metal fume fever? (Q840958)

A. Copper

B. Zinc

C. Lead

D. Mercury

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following tests is the more sensitive and specific screening test for lead exposure? (Q840956)

A. Urine Coproporphyrin level

B. Urine aminolevulinate level

C. Blood lead level

D. Peripheral blood smear

See Answer in Part B → Q10

@Neet_pg_bot

Q11: A 45-year-old radiology technician consults his occupational health physician about his annual radiation exposure, concerned about potential health risks and whether his exposure is within safe limits. What is the maximum annual radiation exposure level a person can tolerate without significant health risks? (Q840731)

A. 1 rem

B. 5 rem

C. 15 rem

D. 10 rem

See Answer in Part B → Q11

@Neet_pg_bot

Q12: A 4-year-old child presents with irritability, loss of appetite, and developmental delays. The parents mention living in an old house undergoing renovation, with peeling paint and dust. Blood tests confirm elevated lead levels. What is the most common route of lead poisoning in this child? (Q840945)

A. Inhalation

B. Absorption through the skin

C. Injection

D. Ingestion

See Answer in Part B → Q12

@Neet_pg_bot

Q13: A 38-year-old male factory worker at a sugarcane processing plant presents with a dry cough, shortness of breath, and fever. On examination, bilateral inspiratory crackles are noted. Chest X-ray shows diffuse infiltrates, and spirometry indicates a restrictive pattern. What respiratory condition is he likely suffering from? (Q840940)

A. Byssinosis

B. Farmer’s lung

C. Bird fancier lung

D. Bagassosis

See Answer in Part B → Q13

@Neet_pg_bot

Q14: A 55-year-old male with over 30 years in the construction industry presents to the clinic with a chronic cough and shortness of breath. His history includes long-term asbestos exposure. Chest X-ray reveals interstitial fibrosis. The patient is concerned about complications from his occupational exposure. What is the most common manifestation in a patient with asbestosis? (Q840936)

A. Pleural plaques

B. Mesothelioma

C. Pleural effusion

D. Adenocarcinoma of the lungs

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A 60-year-old man presents with chronic cough, weight loss, and night sweats. He has worked in the mining industry for over 25 years. On examination, there are crackles in the upper lung fields, and a chest X-ray shows nodular opacities in the upper lobes. Which type of pneumoconiosis is most commonly associated with an increased risk of tuberculosis (TB)? (Q840933)

A. Asbestosis

B. Berylliosis

C. Coal worker's pneumoconiosis

D. Silicosis

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A 55-year-old male presents to the outpatient clinic with progressive shortness of breath and a chronic dry cough. He mentions working in shipbuilding for over 30 years. On examination, his lungs have a dull percussion note and fine crackles at the bases. A chest X-ray is performed. Which of the following is the characteristic radiologic change seen in this patient? (Q840929)

A. Mottling of lung

B. Snowstorm appearance

C. Fine nodular opacity

D. Ground glass opacity

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Which of the following factors plays a crucial role in determining the severity of pneumoconiosis in individuals exposed to mineral dust? 1) Fineness of particles 2)

Chemical composition 3) Concentration of dust in the air 4) Period of exposure (Q840926)

A. 1,2,3

B. 1,2,3,4

C. 2,3

D. 2,3,4

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Match the following pneumoconiosis conditions with their related industries: Pneumoconiosis Exposure Industry 1. Silicosis a. Textile Manufacturing 2. Asbestosis b. Mining and Quarrying 3. Byssinosis c. Construction and Shipbuilding 4. Anthracosis d. Coal Mining (Q840924)

A. 1-a, 2-b, 3-c, 4-d

B. 1-b, 2-c, 3-a, 4-d

C. 1-d, 2-c, 3-a, 4-b

D. 1-b, 2-d, 3-c, 4-a

See Answer in Part B → Q18

@Neet_pg_bot

Q19: A 55-year-old coal miner with a history of fine dust exposure presents with chronic cough and shortness of breath. A chest X-ray shows extensive lung fibrosis, and he is diagnosed with pneumoconiosis. Which particle size is most dangerous for causing pneumoconiosis by reaching the lower respiratory tract? (Q840733)

A. 5 - 10 µm

B. 3 - 5 µm

C. 0.5 - 3 µm

D. >10 µm

See Answer in Part B → Q19

@Neet_pg_bot

Q20: A 30-year-old construction worker presents with painful muscle spasms after several hours of heavy sweating in the hot sun. He reports extreme thirst and muscle tightness, but his vital signs are normal. Which heat-related illness is primarily caused by loss of sodium and chloride during heavy physical work in high temperatures? (Q840732)

A. Heat stroke

B. Heat exhaustion

C. Heat cramps

D. Heat syncope

See Answer in Part B → Q20

@Neet_pg_bot

• [13_Allied Health Disciplines] 050 Esi Act Factory Act Nrega Act And Disaster Management

« Back to Folder Directory

[13_Allied Health Disciplines] 050 Esi Act Factory Act Nrega Act And Disaster Management — Quick Jump

Q1 (p. 499) *Q2 (p. 499)* *Q3 (p. 500)* *Q4 (p. 500)* *Q5 (p. 500)* *Q6 (p. 501)*
Q7 (p. 501) *Q8 (p. 501)* *Q9 (p. 502)* *Q10 (p. 502)* *Q11 (p. 502)* *Q12 (p. 503)*
Q13 (p. 503)

Q1: Which of the following chemicals was released during the Bhopal gas tragedy? (Q840855)

A. Strontium

B. Sarin

C. Methyl isocyanate

D. Cesium

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following is the correct sequence in a disaster management cycle? (Q840858)

A. Disaster impact → Response → Rehabilitation → Reconstruction → Mitigation → Preparedness

B. Disaster impact → Mitigation → Preparedness → Response → Rehabilitation → Reconstruction

C. Disaster impact → Response → Rehabilitation → Reconstruction → Preparedness → Mitigation

D. Disaster impact → Rehabilitation → Reconstruction → Response → Mitigation → Preparedness

See Answer in Part B → Q2

@Neet_pg_bot

Q3: During a disaster, a patient is suffering from a closed femur fracture with stable vital signs and another patient with a penetrating chest wound with respiratory distress. Which of the following are the colour coding given to the patients respectively based on triage principle? (Q840862)

A. Red and Yellow

B. Yellow and green

C. Yellow and Red

D. Green and Yellow

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Following an earthquake, which of the following is the most effective step to manage infectious diseases? (Q840866)

A. Mass vaccination against all infectious agents

B. Meticulous antibiotic supply

C. Ensure thorough water chlorination and adequate sanitation

D. Isolating infected people

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following is not true regarding post-disaster rehabilitation and accommodation? (Q840868)

A. Residual chlorine level >0.7 mg/L for 1 hour contact

B. 0.5 gm chlorine tablet is sufficient for 20 liters of water

C. Distance between water point and latrine should be 100 mts

D. Number of people per latrine: 50

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following is not a component of disaster mitigation according to the provided information? (Q840874)

A. Implementing optimal land-use plans

B. Improved building codes for earthquake-resistant structures

C. Developing communication and warning systems

D. Flood mitigation codes for dam resistance

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following is not a key activity of disaster preparedness? (Q840877)

A. Risk assessment to identify specific hazards

B. Securing financial and logistical resources for preparedness and response

C. Public education programs to raise awareness about disaster risks and responses

D. Enforcing disaster-resistant building codes

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which agency was established by the Disaster Management Act (2005) to oversee disaster management at the national level in India? (Q840879)

A. Ministry of Home Affairs (MHA)

B. National Institute of Disaster Management

C. National Disaster Management Authority (NDMA)

D. Emergency Medical Relief Wing

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following statements is true regarding the minimum age requirements for employing children in factories as per the Factories Act? (Q841323)

A. Guaranteed employment for under 14-year-olds from below-poverty-line families in factories.

B. No employment for under 18-year-olds in factories.

C. Under 14-year-olds can be employed only in non-hazardous factory roles.

D. 15-18 year olds need a fitness certificate for factory work from a certified surgeon

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which statement regarding the administration of the Employees' State Insurance (ESI) Act is incorrect? (Q841324)

A. ESI Corporation administers the ESI Scheme

B. Union Minister for Labour is Chairman of the ESI Corporation.

C. The Director General of Health Services heads the Medical Benefit Council.

D. ESI Corporation functions under the Ministry of Health and Family Welfare.

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following benefits is not offered under the ESI Act? (Q841325)

A. Unemployment Allowance

B. Paid Vacation Time

C. Funeral Expenses

D. Rehabilitation Allowance

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following benefits offered under the ESI Act provides coverage for 26 weeks? (Q841326)

A. Sickness benefit

B. Maternity benefit for confinement

C. Temporary disablement benefit

D. Extended sickness benefit

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following schemes is most closely related to providing unemployment relief to eligible individuals who have lost their jobs in specific circumstances? (Q841327)

A. Atal Beemit Vyakti Kalyan Yojana

B. Abhiyan Indra Dhanush

C. MGNREGA

D. None of the above

See Answer in Part B → Q13

@Neet_pg_bot

• [13_Allied Health Disciplines] 051 Previous Year Questions

« Back to Folder Directory

[13_Allied Health Disciplines] 051 Previous Year Questions — Quick Jump

Q1 (p. 504)	*Q2 (p. 504)*	*Q3 (p. 505)*	*Q4 (p. 505)*	*Q5 (p. 505)*	*Q6 (p. 506)*
Q7 (p. 506)	*Q8 (p. 507)*	*Q9 (p. 507)*	*Q10 (p. 508)*	*Q11 (p. 508)*	*Q12 (p. 508)*
Q13 (p. 509)	*Q14 (p. 509)*	*Q15 (p. 509)*	*Q16 (p. 510)*	*Q17 (p. 510)*	*Q18 (p. 510)*
Q19 (p. 511)	*Q20 (p. 511)*	*Q21 (p. 512)*	*Q22 (p. 512)*	*Q23 (p. 512)*	*Q24 (p. 513)*
Q25 (p. 513)	*Q26 (p. 513)*	*Q27 (p. 514)*	*Q28 (p. 514)*	*Q29 (p. 514)*	*Q30 (p. 515)*
Q31 (p. 515)	*Q32 (p. 515)*	*Q33 (p. 516)*			

Q1: As per the Factories Act 1948, what is the maximum number of work hours allowed per week, including any hours worked as overtime? (Q854816)

A. 48 hours

B. 72 hours

C. 60 hours

D. 66 hours

See Answer in Part B → Q1

@Neet_pg_bot

Q2: What is the most frequent association of lung malignancy? (Q857751)

A. Asbestosis

B. Silicosis

C. Bagassosis

D. Byssinosis

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which benefit does a patient receive when seeking treatment at an ESI hospital under the ESI Act? (Q857756)

A. Sickness benefit

B. Medical benefit

C. Maternity benefit

D. Dependent's benefit

See Answer in Part B → Q3

@Neet_pg_bot

Q4: What is the primary method of absorption of inorganic lead in industrial settings that can result in lead poisoning? (Q855297)

A. Absorption through skin

B. Inhaled lead dust

C. Ingestion of contaminated food and water

D. Contaminated hands

See Answer in Part B → Q4

@Neet_pg_bot

Q5: In the hospital ward, the nurse arranges the bins as depicted in the image. Which of the subsequent items should be disposed of in the black bin? (Q855302)

A. Soiled linen bedsheet

B. Glove paper cover

C. Gloves

D. Contaminated gloves



See Answer in Part B → Q5

@Neet_pg_bot

Q6: A patient admitted following a road traffic accident has left a blood spill on the hospital floor. Which disinfectant is most appropriate for effectively decontaminating the area? (Q856045)

A. Ethyl alcohol

B. Chlorhexidine

C. Sodium hypochlorite

D. Formaldehyde

See Answer in Part B → Q6

@Neet_pg_bot

Q7: In the case of a child presenting with pharyngitis, when a throat swab is collected and sent for culture, in which colored bin should the used swab be disposed of?

(Q856069)

A. Red

B. Yellow

C. White

D. Blue

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following bags are used for disposing of latex gloves after they have been used? (Q856878)

A. Yellow

B. Red

C. Blue

D. Transparent

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Sharp waste is disposed of in? (Q854807)

A. Yellow bag

B. Red bag

C. Blue bag

D. White bag

See Answer in Part B → Q9

@Neet_pg_bot

Q10: In controlled tipping, the amount of land required for the trench method to be practiced for a population of 10,000 is: (Q857701)

A. 4 acres

B. 5 acres

C. 2 acres

D. 1 acre

See Answer in Part B → Q10

@Neet_pg_bot

Q11: What is the duration of the extended sickness benefit provided to an employee who has been diagnosed with TB? (Q854834)

A. 1 year

B. 2 years

C. 3 years

D. 4 years

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which compound is primarily responsible for the disinfectant properties of bleaching powder among the following options? (Q854864)

A. Hypochlorite ion

B. Hydrochloric acid

C. Hypochlorous acid

D. Chloride ion

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following items is placed in the yellow bag for disposal? (Q858449)

A. Blood bag

B. IV set

C. Sharps

D. Needle

See Answer in Part B → Q13

@Neet_pg_bot

Q14: What type of bags are used for the disposal of chemical waste? (Q858456)

A. Yellow

B. White

C. Red

D. Green

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A 38-year-old man visits a Suraksha Clinic with complaints of anorectal discharge. According to the National AIDS Control Organisation (NACO) guidelines for syndromic management of sexually transmitted infections (STIs), which color-coded kit should be used for treatment? (Q859930)

A. Brown

B. Green

C. White

D. Blue

See Answer in Part B → Q15

@Neet_pg_bot

Q16: A nurse got an accidental prick from a needle used for an HIV+ patient. Which single test would lead to a confirmatory diagnosis in her? (Q859958)

A. p24 antigen

B. PCR

C. HIV ELISA

D. Western blot assay

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Which organization is responsible for gathering and regularly publishing extensive surveys on morbidity, family planning, and vital events? (Q859974)

A. AIIMS

B. National sample survey

C. Sample registration system

D. Central Bureau of Health

See Answer in Part B → Q17

@Neet_pg_bot

Q18: A factory worker sustained burns covering 25% of his body while on duty. He later developed infections and complications related to the injury. Under the ESI Act, which of the following benefits is he eligible for? (Q866780)

A. Dependants' Benefit

B. Sickness Benefit

C. Extended Sickness Benefit

D. Enhanced Sickness Benefit

See Answer in Part B → Q18

@Neet_pg_bot

Q19: According to the Biomedical Waste Management Rules, in which color-coded bag should used cotton swabs contaminated with blood or body fluids be disposed of? (Q857699)

A. Yellow

B. Red

C. Blue

D. Transparent

See Answer in Part B → Q19

@Neet_pg_bot

Q20: What are the potential health risks faced by workers in a sugarcane factory? (Q857148)

A. Anthracosis

B. Siderosis

C. Bagassosis

D. Byssinosis

See Answer in Part B → Q20

@Neet_pg_bot

Q21: In biomedical waste management, waste placed in which color-coded bag is typically disposed of by incineration? (Q857083)

A. Yellow

B. Red

C. Blue

D. Black

See Answer in Part B → Q21

@Neet_pg_bot

Q22: Heart of sewage disposal plant: (Q860028)

A. Primary sedimentation tank

B. Aeration tank

C. Secondary sedimentation tank

D. Sludge digestion tank

See Answer in Part B → Q22

@Neet_pg_bot

Q23: What is the recommended area per worker in a factory, considering that any height above a specified limit is not taken into account? (Q860024)

A. 100 cubic feet

B. 500 cubic feet

C. 300 cubic feet

D. 400 cubic feet

See Answer in Part B → Q23

@Neet_pg_bot

Q24: Which pneumoconiosis is caused by exposure to cotton dust? (Q860006)

A. Byssinosis

B. Bagassosis

C. Anthracosis

D. Silicosis

See Answer in Part B → Q24

@Neet_pg_bot

Q25: Patients requiring immediate life-threatening care are categorized under which of the following triages? (Q839887)

A. Red

B. Yellow

C. Green

D. Black

See Answer in Part B → Q25

@Neet_pg_bot

Q26: The needle with the syringe is disposed of in which container? (Q860558)

A. Yellow

B. Red

C. Blue

D. White

See Answer in Part B → Q26

@Neet_pg_bot

Q27: Arrange the order of the Disaster management cycle (Q860548)

A. Impact-response-rehabilitation-mitigation

B. Rehabilitation-response-impact-mitigation

C. Response-disaster-rehabilitation-mitigation

D. Impact-mitigation-response-rehabilitation

See Answer in Part B → Q27

@Neet_pg_bot

Q28: What is the correct order of disaster management steps? (Q844104)

A. Impact-Response- Rehab-Mitigation

B. Response- Rehab- Mitigation- Impact

C. Rehab- mItigation-Response-Impact

D. Mitigation-Response-Impact-Rehab

See Answer in Part B → Q28

@Neet_pg_bot

Q29: Which of the following phases of the disaster management cycle occur before disaster strike? Response Rehabilitation Mitigation Preparedness (Q844070)

A. 1 and 2

B. 1 and 3

C. 3 and 4

D. 2 and 4

See Answer in Part B → Q29

@Neet_pg_bot

Q30: Which of the following occupational exposures is most strongly associated with the development of mesothelioma? (Q866885)

A. Asbestos exposure

B. Silica dust

C. Cotton dust

D. Coal dust

See Answer in Part B → Q30

@Neet_pg_bot

Q31: A study was conducted among nursing staff to analyze the time spent on different aspects of patient care, such as bed preparation, monitoring vital signs, attending the doctor's rounds, blood sampling, and drug administration. Which of the following management techniques is most appropriate for this type of analysis? (Q866786)

A. Critical Path Method

B. System Analysis

C. Work Sampling

D. Time and Motion Study

See Answer in Part B → Q31

@Neet_pg_bot

Q32: What is used to clean up blood spills in the operation theater? (Q793778)

A. Chlorine compound

B. Phenolic compound

C. Quaternary ammonium compounds

D. Alcoholic compounds

See Answer in Part B → Q32

@Neet_pg_bot

Q33: In the context of biomedical waste disposal, which type of waste is discarded in a yellow bag? (Q793538)

A. Blood bag

B. Gloves

C. Sharps

D. Urine bag

See Answer in Part B → Q33

@Neet_pg_bot

• [14_Health Education and Communication] 052 Health Education And Communication

« Back to Folder Directory

[14_Health Education and Communication] 052 Health Education And Communication — Quick Jump

Q1 (p. 517) *Q2 (p. 517)* *Q3 (p. 518)* *Q4 (p. 518)* *Q5 (p. 519)* *Q6 (p. 519)*
Q7 (p. 519) *Q8 (p. 520)*

Q1: The Community medicine department set out to an urban community to raise awareness about the importance of hand hygiene in preventing infectious diseases. As part of the campaign, health educators plan to conduct workshops to educate community members about proper handwashing techniques and their benefits. Which of the following is not a principle of health education? (Q840578)

A. Interest

B. Credibility

C. Authoritativeness

D. Feedback

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A 35 y/o woman comes to the clinic concerned about vaccinating her child due to information she encountered online suggesting that vaccines cause severe side effects and are part of a government conspiracy. She mentions feeling very emotional and scared after reading several personal stories about vaccine injuries on social media. Which of the following is a feature of the propaganda she has encountered? (Q840581)

A. It is behavior-centered.

B. Promotes reflective behavior in people

C. Develops individuality and personality

D. Appeals to emotion

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A public health campaign aims to reduce smoking rates in a community. The campaign involves spreading awareness about the dangers of smoking, encouraging people to try quitting through support programs, and promoting the success stories of those who have quit. Which model of health education does this campaign best represent? (Q840586)

A. Medical model

B. Motivation or adoption model

C. Social interventional model

D. Behavioral modification model

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A healthcare provider is conducting a patient interview and encounters several barriers to effective communication. Which of the following is not one of them? (Q840589)

A. The patient is geriatric and belongs to a low socio-economic status.

B. The clinic is located in a busy area with constant traffic noise, making it hard to communicate.

C. The patient speaks a different language and has difficulty understanding the provider's instructions.

D. The patient appears distressed and anxious, making it difficult for them to concentrate on the conversation.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: The most effective method of educating the general public about how to perform CPR (Cardiopulmonary resuscitation) is: (Q840591)

A. Flashcards

B. Demonstration

C. Lecture

D. Group discussion

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A group of 4 experts on cardiac health were invited to interact with an audience of about 100 members. However, they were not given any set agenda to speak upon nor did they have any set speeches. They are allowed to discuss among themselves during the event as well and there is no set order of speaking. What kind of event were they invited to? (Q840593)

A. Panel discussion

B. Symposium

C. Workshop

D. Seminar

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following statements best describes the Delphi technique? (Q840596)

A. A method of data collection where participants discuss and agree on a topic in person.

B. A qualitative research method that involves direct observation of participants in their natural environment.

C. A structured communication technique used in health research that relies on a panel of experts answering questionnaires in multiple rounds to achieve consensus.

D. A statistical analysis method used to interpret large datasets through the use of complex algorithms.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which counseling approach is used in family planning to provide structured and supportive communication to clients? (Q840601)

A. SPIKES approach

B. Flannel graph

C. Flipcharts

D. GATHER approach

See Answer in Part B → Q8

@Neet_pg_bot

• [14_Health Education and Communication] 053 Previous Year Questions

« Back to Folder Directory

[14_Health Education and Communication] 053 Previous Year Questions — Quick Jump

Q1 (p. 521)	*Q2 (p. 521)*	*Q3 (p. 522)*	*Q4 (p. 522)*	*Q5 (p. 522)*	*Q6 (p. 523)*
Q7 (p. 523)	*Q8 (p. 524)*	*Q9 (p. 524)*	*Q10 (p. 524)*	*Q11 (p. 525)*	*Q12 (p. 525)*
Q13 (p. 525)	*Q14 (p. 526)*	*Q15 (p. 526)*	*Q16 (p. 526)*	*Q17 (p. 527)*	*Q18 (p. 527)*

Q1: Which of the following statements accurately reflects the truth about health propaganda? (Q858075)

A. It is actively acquired

B. It appeals to emotions

C. It is behaviour centred

D. It aids in developing a reflective behaviour

See Answer in Part B → Q1

@Neet_pg_bot

Q2: What is the method employed to gather agreement on predictions among a substantial group of individuals? (Q859203)

A. Television

B. GATHER approach

C. Conferences

D. Delphi method

See Answer in Part B → Q2

@Neet_pg_bot

Q3: As a Medical Officer in charge of a Primary Health Center, you intend to engage in a conversation and address health concerns specifically with Antenatal mothers. What would be the ideal number of participants you would include in the focus group discussion? (Q857760)

A. 4-6

B. 3-5

C. 6-12

D. 12-15

See Answer in Part B → Q3

@Neet_pg_bot

Q4: What is the term used to describe the act of disseminating a specific organized belief system or political perspective through the use of information with the intention of implanting it in people's minds? (Q857708)

A. Health doctrine

B. Health propaganda

C. Health education

D. Health information

See Answer in Part B → Q4

@Neet_pg_bot

Q5: In India, which organization is responsible for promoting health awareness? (Q857143)

A. Central Bureau of health intelligence

B. Indian council of medical research

C. Central health education bureau

D. National health library

See Answer in Part B → Q5

@Neet_pg_bot

Q6: The most effective approach to educating an urban slum community about oral rehydration solution (ORS) is - (Q857110)

A. Lecture

B. Roleplay

C. Flashcards

D. Demonstration

See Answer in Part B → Q6

@Neet_pg_bot

Q7: In a country like India, which is characterized by its varied cultures and languages, what measures should a physician adopt to effectively communicate with patients and ensure improved treatment results? 1. Insist on good communication 2. Insist on communication only via an interpreter 3. Treat them regardless of their cultural perceptions 4. The physician should consider the patient's religion and cultural perception (Q855126)

A. 1, 2

B. 2, 3

C. 3, 4

D. 1, 4

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following Acts is primarily concerned with the protection of personal medical data and privacy in India? (Q865317)

A. PNDT Act

B. DPDP Act

C. HIPAA

D. MTP Act

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Giving class in a village for wound care after a dog bite by enacting it is which mode of health communication? (Q858073)

A. Lecture

B. Group discussion

C. Flashcards

D. Demonstration

See Answer in Part B → Q9

@Neet_pg_bot

Q10: The socially acquired learned behaviour is known as? (Q857371)

A. Custom

B. Culture

C. Socialization

D. Mores

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which term refers to the practice of instilling a particular point of view in people's minds and inhibiting their independent thought? (Q860002)

A. Health Propaganda

B. Health Promotion

C. Health Awareness

D. Health Education

See Answer in Part B → Q11

@Neet_pg_bot

Q12: What is the ANMOL program for auxiliary nurse midwives? (Q860550)

A. Tablet-based software

B. TV based

C. Newspaper

D. Telephone-based

See Answer in Part B → Q12

@Neet_pg_bot

Q13: What significant error did the intern make while creating a banner on measures to prevent the spread of non-communicable diseases, as assigned by a group of doctors? (Q860549)

A. Ban smoking in public areas

B. Restrictions on alcohol selling/consumption

C. Shift from PUFA to transfat

D. Decrease additive salts

See Answer in Part B → Q13

@Neet_pg_bot

Q14: In the health education model, the first step is awareness; the second step is motivation. What is the third step? (Q844117)

A. Reflection

B. Dedication

C. Contemplation

D. Action

See Answer in Part B → Q14

@Neet_pg_bot

Q15: A patient does not understand the meaning of the doctor's words. Which type of barrier is this? (Q844033)

A. Cultural

B. Linguistic

C. Psychological

D. Environmental

See Answer in Part B → Q15

@Neet_pg_bot

Q16: ICER is a unit for which of the following economical analysis? (Q852867)

A. Cost effectiveness

B. Cost benefit

C. Cost utility

D. Cost margin

See Answer in Part B → Q16

@Neet_pg_bot

Q17: What is the term commonly used to describe a mode of communication wherein 4-8 speakers engage in a discussion on a specific topic in front of a large audience, without following a specific agenda, predetermined speeches, or a set order of speaking, and eventually interact with the audience? (Q793631)

A. Panel discussion

B. Symposium

C. Workshop

D. Seminar

See Answer in Part B → Q17

@Neet_pg_bot

Q18: In a community, an awareness session on handwashing was organized. The appropriate order of events in this session is: (Q793708)

A. Awareness > interest > adoption > evaluation

B. Awareness > interest > evaluation > adoption

C. Evaluation > adoption > awareness > interest

D. Adoption > awareness > interest > evaluation

See Answer in Part B → Q18

@Neet_pg_bot

• [15_Health Planning and Management] 054 Health Planning And Management

« Back to Folder Directory

[15_Health Planning and Management] 054 Health Planning And Management — Quick Jump

Q1 (p. 528) *Q2 (p. 528)* *Q3 (p. 529)* *Q4 (p. 529)* *Q5 (p. 529)* *Q6 (p. 530)*
Q7 (p. 530) *Q8 (p. 531)* *Q9 (p. 531)*

Q1: In a rural community, there is a sudden outbreak of a waterborne disease, necessitating immediate intervention. The local health authorities have identified that additional trained medical personnel are required to effectively manage the situation. In the context of health planning, what do manpower and money represent? (Q840618)

A. Objectives

B. Evaluation

C. Resources

D. Monitoring

See Answer in Part B → Q1

@Neet_pg_bot

Q2: In health planning, which term refers to a broad aim or purpose distinct from specific measurable outcomes? (Q840622)

A. Target

B. Goal

C. Objective

D. Strategy

See Answer in Part B → Q2

@Neet_pg_bot

Q3: According to the recommendations of the Chadha Committee, what was the proposed ratio of basic health workers to the population ? (Q840629)

A. 1 worker for every 1000 population

B. 1 worker for every 5000 population

C. 1 worker for every 10000 population

D. 1 worker for every 20000 population

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which organization is primarily responsible for developing the Health Index in India? (Q840632)

A. Ministry of Health and Family Welfare

B. NITI Aayog

C. Indian Council of Medical Research (ICMR)

D. World Health Organization (WHO)

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which health management technique is used for creating a graphical representation of all events and activities required to complete a project enabling timely project completion? (Q840636)

A. Systems Analysis

B. Programme Evaluation and Review Technique (PERT)

C. Cost-Effectiveness Analysis

D. Planning–Programming–Budgeting System (PPBS)

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following statements correctly describes the difference between Cost-Benefit Analysis and Cost-Effective Analysis in health management? (Q840639)

A. Cost-Benefit Analysis focuses on the qualitative aspects of health services, while Cost-Effective Analysis focuses on quantitative aspects.

B. Cost-benefit analysis compares monetary costs and benefits, whereas Cost-Effectiveness Analysis compares the costs to achieve a specific non-monetary outcome.

C. Cost-Benefit Analysis is used for planning and budgeting, while Cost-Effective Analysis is used for project scheduling.

D. Cost-Benefit Analysis evaluates staff performance, whereas Cost-Effective Analysis evaluates patient outcomes.

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following is an incorrect statement regarding Work Sampling as a health management technique? (Q840647)

A. Work Sampling involves systematic observation and recording of activities at random intervals to estimate the proportion of time spent on different tasks.

B. Work Sampling is used for the evaluation of Doctors, Nurses, and Pharmacists.

C. Work Sampling helps to calculate the total project cost by evaluating the monetary benefits of health interventions.

D. Work Sampling is a quantitative type of health management technique.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Match the following Class Names with their % of total items and % of Total Cost according to ABC Classification of Inventory Management- Class Name % of Total Items % of Total Cost A. Class-A 1. 20-40% i. 05-20% B. Class-B 2. 40-75% ii.15-40% C. Class-C 3. 05-25% iii. 40-80% (Q840654)

A. Class A-3-ii, Class B-1-iii, Class C-2-i

B. Class A-3-i, Class B-2-ii, Class C-1-iii

C. Class A-3-iii, ClassB-1-ii, Class C-2-i

D. D) Class A-2-i, Class B-1-ii, Class C-3-iii

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Arrange the following steps of the planning cycle in the correct chronological sequence: Establishment of goals and objectives Evaluation Programming and implementation Analysis of the health situation Assessment of resources (Q845075)

A. 4-1-5-3-2

B. 2-3-5-4-1

C. 4-5-1-3-2

D. 1-4-5-3-2

See Answer in Part B → Q9

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• [15_Health Planning and Management] 055 Previous Year Questions

« Back to Folder Directory

[15_Health Planning and Management] 055 Previous Year Questions — Quick Jump

Q1 (p. 532)	*Q2 (p. 532)*	*Q3 (p. 533)*	*Q4 (p. 533)*	*Q5 (p. 533)*	*Q6 (p. 534)*
Q7 (p. 534)	*Q8 (p. 534)*	*Q9 (p. 535)*	*Q10 (p. 535)*	*Q11 (p. 536)*	*Q12 (p. 536)*
Q13 (p. 536)	*Q14 (p. 537)*	*Q15 (p. 537)*			

Q1: A group of experts delivered individual speeches on a common topic. There was no discussion allowed between them, and at the end, one person summarized the key points. What is this type of academic session called? (Q866782)

A. Panel discussion

B. Symposium

C. Seminar

D. Workshop

See Answer in Part B → Q1

@Neet_pg_bot

Q2: An urban city has a population of 70,00,000, with 30% residing in slum areas. According to NUHM (National Urban Health Mission) norms, how many Urban Primary Health Centres (UPHCs) are required for the slum population? (Q866433)

A. 22

B. 32

C. 42

D. 52

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is related to Navjaat Shishu Suraksha Karyakram? (Q860051)

A. Mother

B. Children

C. Newborn

D. Pregnant woman

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Hyperpigmentation and keratosis can be seen with which of the following: (Q857368)

A. Arsenic

B. Cadmium

C. Copper

D. Zinc

See Answer in Part B → Q4

@Neet_pg_bot

Q5: According to WHO, what proportions of GNP should be spent on health services? (Q857985)

A. 2%

B. 2.5%

C. 3.5%

D. 5%

See Answer in Part B → Q5

@Neet_pg_bot

Q6: A woman who is 8 weeks pregnant and employed in an industry consults a doctor. According to the Employees' State Insurance (ESI) Act, what is the duration of maternity leave she is entitled to? (Q858106)

A. 4 months

B. 28 weeks, starting from 4 weeks after delivery

C. 26 weeks, starting from 8 weeks before delivery

D. 9 months

See Answer in Part B → Q6

@Neet_pg_bot

Q7: In a hospital setting, the management seeks to determine the average duration of doctor-patient interactions in order to assess the need for adjusting the number of doctors. This adjustment is aimed at enhancing the quality of care provided. Which management technique would be most appropriate for this purpose? (Q857137)

A. Model

B. Decision making

C. Personnel management

D. Work sampling

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which of the following is not an element of evaluation? (Q856086)

A. Relevancy

B. Adequacy

C. Acceptability

D. Input

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following methods does not rely on the principles of behavioral sciences? (Q858452)

A. Organizational design

B. Personal management

C. Network analysis

D. Management by objective

See Answer in Part B → Q9

@Neet_pg_bot

Q10: In which of the following analyses is the financial advantage quantified? (Q858460)

A. Cost-effective analysis

B. Cost-benefit analysis

C. Network analysis

D. Input-Output analysis

See Answer in Part B → Q10

@Neet_pg_bot

Q11: What is the ultimate desired state towards which objectives and resources are aimed in the medical field? (Q859189)

A. Target

B. Mission

C. Goal

D. Plan

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following is defined as the systematic observation and recording of activities of one or more individuals at predetermined or random intervals? (Q859206)

A. Model

B. Decision making

C. Personnel management

D. Work sampling

See Answer in Part B → Q12

@Neet_pg_bot

Q13: NITI Aayog has replaced the? (Q859830)

A. Medical council of India (MCI)

B. National institute of health & family welfare (NIHFW)

C. National planning commission (NPC)

D. National board of examinations (NBE)

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Under which benefit in the ESI act do beneficiaries receive 70% of their wages for a duration of 3 months? (Q859946)

A. Sickness benefit

B. Medical benefit

C. Maternity benefit

D. Dependent's benefit

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following is the primary objective of the usage of the Health Index by Niti Aayog? (Q879058)

A. Raise funding for private hospitals to improve the public-private partnership

B. Rank the state according to health status

C. Assess the efficiency of the government hospital

D. Identify the aspirational districts

See Answer in Part B → Q15

@Neet_pg_bot

• [16_Health Care of The Community in India] 056 Healthcare Of Community And Health Delivery Systems

« Back to Folder Directory

[16_Health Care of The Community in India] 056 Healthcare Of Community And Health Delivery Systems — Quick Jump

Q1 (p. 538)	*Q2 (p. 538)*	*Q3 (p. 539)*	*Q4 (p. 539)*	*Q5 (p. 540)*	*Q6 (p. 541)*
Q7 (p. 542)	*Q8 (p. 542)*	*Q9 (p. 542)*	*Q10 (p. 543)*	*Q11 (p. 543)*	*Q12 (p. 543)*
Q13 (p. 544)	*Q14 (p. 544)*	*Q15 (p. 544)*	*Q16 (p. 545)*	*Q17 (p. 545)*	*Q18 (p. 545)*
Q19 (p. 546)					

Q1: What is the population covered by Municipal Boards in urban areas? (Q841159)

A. 5000-10,000

B. 5,00,000

C. 10,000-2,00,000

D. 10,000-50,000

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A pregnant woman avoids a particular fruit due to a commonly held belief that its consumption can induce abortion, despite there being no scientific evidence to support this claim. Which of the following fruits is most commonly associated with this misconception (Q882296)

A. Banana

B. Grapes

C. Orange

D. Papaya

See Answer in Part B → Q2

@Neet_pg_bot

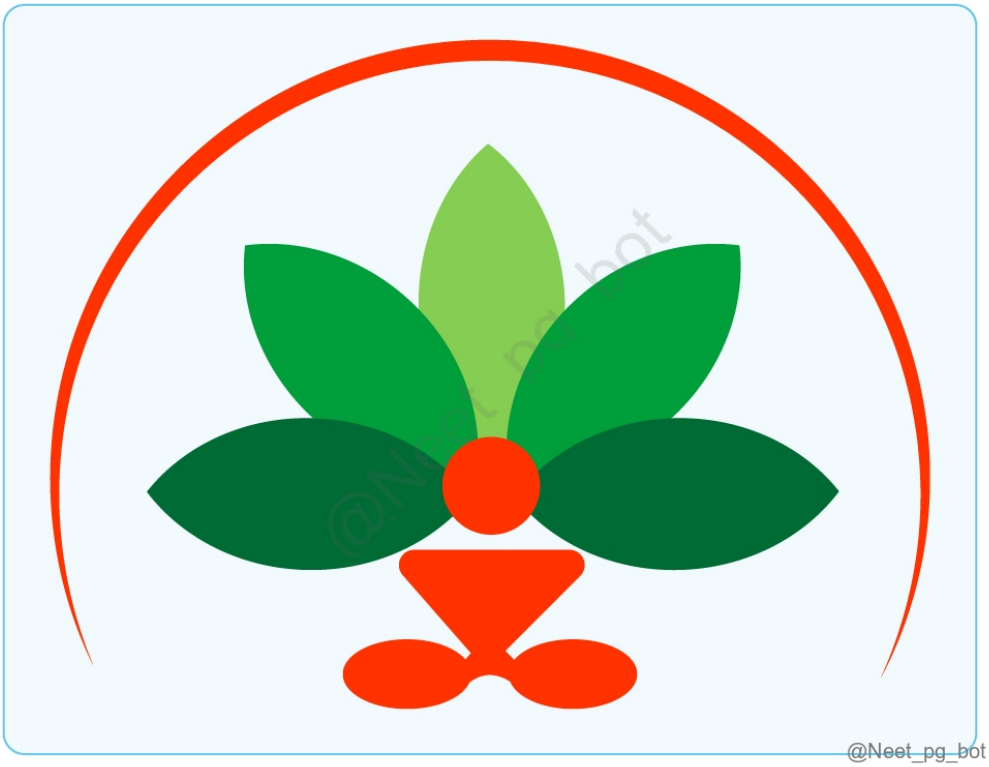
Q3: The logo shown below represents a health scheme launched by the Government of India. What is the primary objective of this program? (Q841173)

A. To provide comprehensive outbreak response essential drugs and diagnostic services.

B. To offer health insurance coverage to the economically disadvantaged

C. To reduce morbidity due to vaccine-preventable diseases in children

D. To promote accessible, affordable, and quality healthcare to the rural population



See Answer in Part B → Q3

@Neet_pg_bot

Q4: A 30-year-old laborer struggles to access basic healthcare services due to high costs and limited availability. The logo shown below represents an initiative that aims to address issues like the one faced by this patient. Which healthcare concept does this

logo represent? (Q841172)

A. National Program for Prevention and Control of cancer and diabetes

B. Universal Health Coverage

C. Integrated disease surveillance project

D. Accessible India Campaign



See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which primary healthcare principle is represented by the displayed image to ensure appropriate usability and quality? (Q841171)

A. Appropriate Technology

B. Community Participation

C. Intersectoral Coordination

D. Equitable Distribution



See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following statements regarding elements of primary healthcare are true: 1. It includes education concerning health problems and methods of preventing them. 2. It involves the promotion of food supply and appropriate nutrition. 3. It provides essential and non-essential drugs. 4. It consists of individuals who have a common health goal based on community requirements. 5. It emphasizes maternal and child health care, including family planning. (Q841170)

A. 1, 2, and 5

B. 1, 2, 3 and 5

C. 2, 3 and 4

D. All of the above

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following does not come under the 4 A's of primary healthcare? (Q841169)

A. Accessibility

B. Affordability

C. Accountability

D. Acceptability

See Answer in Part B → Q7

@Neet_pg_bot

Q8: How many tests are available in Primary Health Centers under the Free Drugs and Diagnostic Service Initiative of the National Health Mission? (Q841167)

A. 19

B. 39

C. 56

D. 73

See Answer in Part B → Q8

@Neet_pg_bot

Q9: What should be the minimum number of members in the Village Health Sanitation and Nutrition Committee? (Q841163)

A. 10

B. 20

C. 25

D. 15

See Answer in Part B → Q9

@Neet_pg_bot

Q10: What is the role of Rogi Kalyan Samiti? (Q841160)

A. Healthcare policymaking

B. Recruiting healthcare professionals

C. Framing Village Action Plans

D. Support the functioning of health facilities

See Answer in Part B → Q10

@Neet_pg_bot

Q11: According to the national health policy, how many people should have one health subcenter (HSC) in hilly and tribal areas? (Q841147)

A. 2000

B. 3000

C. 4000

D. 5000

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which committee established the Panchayati Raj Institution? (Q841158)

A. Balwant Rai Mehta Committee

B. Ashok Mehta Committee

C. GVK Rao Committee

D. Gadgil Committee

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which among the following is NOT a function of Mahila Arogya Samiti? (Q841157)

A. Focus on preventive and promotive care

B. Act as a peer education group

C. Facilitate access to identified facilities

D. Providing primary medical care for minor ailments of women

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which of the following represents the population norm for an Urban PHC [Primary Health Centre] according to the IPHS [Indian Public Health Standards] guidelines 2022? (Q841156)

A. 20,000

B. 30,000

C. 50,000

D. 45,000

See Answer in Part B → Q14

@Neet_pg_bot

Q15: An ASHA worker from a rural area ensures antenatal care and institutional delivery for a mother from her village. How much incentive does she get? (Q841155)

A. None

B. 300 per delivery

C. 200 per delivery

D. 500 perdelivery

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which of the following is NOT an ASHA role? (Q841154)

A. Providing counseling on birth preparedness and safe delivery

B. Administering vaccines to infants and children

C. Mobilizing the community for health awareness programs

D. Providing directly observed treatment short-course (DOTS) for tuberculosis

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Which statements about an Accredited Social Health Activist-ASHA is true? (Q841153)

A. Can be a male or female

B. Preferably from the age group 25-45

C. Education level of class 6

D. Only unmarried females are eligible

See Answer in Part B → Q17

@Neet_pg_bot

Q18: Which of the following is a primary function of a Female Health Worker (auxiliary Nurse Midwife - ANM)? (Q841152)

A. Risk pooling fund

B. Promoting the construction of toilets

C. Registering and providing care to pregnant women

D. Providing advice on health insurance

See Answer in Part B → Q18

@Neet_pg_bot

Q19: All of the following are true about a primary health centre (PHC) except? (Q841149)

A. 1/30,000 in plain areas

B. Type A PHC: delivery load >20

C. 1/20,000 in hilly areas

D. The recommended bed count for Type B : 6-10

See Answer in Part B → Q19

@Neet_pg_bot

• [16_Health Care of The Community in India] 057 Previous Year Questions

« Back to Folder Directory

[16_Health Care of The Community in India] 057 Previous Year Questions — Quick Jump

Q1 (p. 547)	*Q2 (p. 547)*	*Q3 (p. 548)*	*Q4 (p. 548)*	*Q5 (p. 548)*	*Q6 (p. 549)*
Q7 (p. 549)	*Q8 (p. 550)*	*Q9 (p. 550)*	*Q10 (p. 550)*	*Q11 (p. 551)*	*Q12 (p. 551)*
Q13 (p. 551)	*Q14 (p. 552)*	*Q15 (p. 552)*	*Q16 (p. 552)*	*Q17 (p. 553)*	*Q18 (p. 553)*
Q19 (p. 553)	*Q20 (p. 554)*	*Q21 (p. 554)*	*Q22 (p. 555)*		

Q1: Universal health coverage of India was recently approved by which health committee? (Q852868)

A. Medical education health group

B. MPW in health and family planning

C. High level expert group

D. ealth survey and development committee

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which statement most accurately describes the criteria for initiating an urban community health center? (Q855632)

A. Caters to a population of 1-1.5 lakh

B. Referral center for 2-3 primary health centers

C. No sub-district and district hospitals present in the area

D. Should have a 100-bed facility in metro cities

See Answer in Part B → Q2

@Neet_pg_bot

Q3: As a medical professional at a primary health center (PHC) located in a region prone to frequent seismic activities, what measures would you take to ensure preparedness in the event of an emergency? 1. Disaster preparedness by making sure all financial and other resources are available 2. Increase public awareness through campaigns and loudspeakers 3. Conduct a simulation for the disaster and assess the response 4. Follow instructions given over the phone or radio by higher officials (Q855624)

A. 1,2,3,4

B. 2,3,4

C. 1,2,3

D. 1,2,4

See Answer in Part B → Q3

@Neet_pg_bot

Q4: How much financial incentive is provided to mothers residing in urban areas within low-performing states under the Janani Suraksha Yojana? (Q855620)

A. Rs 1000

B. Rs1500

C. Rs 2000

D. Rs 500

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following statements accurately describes Ayushman Bharat? (Q859823)

A. Launched in 2019

B. Aim is to achieve universal health coverage in India

C. Covers only tertiary health care centres

D. Cashless, paperless service by only government hospitals

See Answer in Part B → Q5

@Neet_pg_bot

Q6: How many individuals are allocated to one ASHA worker for the population in rural areas? (Q859812)

A. 500

B. 1200

C. 2500

D. 1000

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following is not considered a pillar of primary health care? (Q859187)

A. Health education

B. Intersectoral coordination

C. Appropriate technology

D. Equitable distribution

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Which entity is responsible for overseeing the school health programs? (Q856053)

A. Primary health center

B. District hospital

C. Sub-centre

D. Sub-divisional hospital

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following is not a responsibility of an Accredited Social Health Activist (ASHA) worker? (Q857718)

A. Identify target beneficiaries and support ANM in conducting outreach sessions

B. Promote formation of Women's Health Groups/ Mahila Arogya Samiti

C. Accompany pregnant women and children requiring treatment/ admission

D. Water quality : Ensure chlorination and safe water supply

See Answer in Part B → Q9

@Neet_pg_bot

Q10: What are the primary referral centers in India's healthcare system? (Q857127)

A. Primary health centres and district hospitals

B. Medical colleges and district hospitals

C. Community health centres and medical colleges

D. Sub-district hospitals and community health centres

See Answer in Part B → Q10

@Neet_pg_bot

Q11: Which of the following is not considered a pillar of primary health care? (Q857105)

A. Health education

B. Intersectoral coordination

C. Appropriate technology

D. Equitable distribution

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which of the following is the initial point of contact for individuals seeking medical assistance within a community? (Q793638)

A. Primary health center (PHC)

B. Community health center (CHC)

C. Sub-centre

D. District hospital

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which of the following is not a part of the urban health care delivery system? (Q858123)

A. PHC

B. CHC

C. Swasthya Chowki

D. Subcenter

See Answer in Part B → Q13

@Neet_pg_bot

Q14: At which of the following centers are the records of eligible couples maintained? (Q858093)

A. PHC

B. CHC

C. Sub-centre

D. District hospital

See Answer in Part B → Q14

@Neet_pg_bot

Q15: What is the number of the deliveries performed by Type-A PHC in a month? (Q858089)

A. Less than 20

B. 20 or above

C. Less than 30

D. 30 or above

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which of the following should not be included in the school health service? (Q857988)

A. Education of handicapped children

B. Doctor on premises

C. Dental and eye health services

D. School health records

See Answer in Part B → Q16

@Neet_pg_bot

Q17: Which of the following is a technology-based surveillance system for tuberculosis (TB) in India? (Q859980)

A. Nikshay

B. Nischay

C. Dots99

D. DOTS

See Answer in Part B → Q17

@Neet_pg_bot

Q18: For what population size is an urban Primary Health Centre (PHC) typically intended? (Q859979)

A. 1 per 50,000

B. 1 per 100,000

C. 1 per 250,000

D. 1 per 200,000

See Answer in Part B → Q18

@Neet_pg_bot

Q19: Who is primarily responsible for registering eligible couples for family planning and maintaining their records under the national health system? (Q866799)

A. ASHA

B. Multipurpose Worker (Female)

C. Village Health Guide

D. Anganwadi Worker

See Answer in Part B → Q19

@Neet_pg_bot

Q20: Which of the following statements is false regarding a primary healthcare center (PHC)? (Q793660)

A. There is 1 PHC per 30,000 population in plain areas

B. Type A PHC conducts <20 deliveries per month

C. Provides maternal and child health care, family planning and MTP

D. Is the first referral unit

See Answer in Part B → Q20

@Neet_pg_bot

Q21: Which of the following statements is false regarding the staff of an urban primary health center? (Q793616)

A. 2 doctors

B. 5 Multiskilled staff nurse

C. 1 lab technician

D. 1 pharmacist

See Answer in Part B → Q21

@Neet_pg_bot

Q22: What is number of the deliveries performed by Type-A PHC in a month? (Q820638)

A. less than 20

B. 20 or above

C. less than 30

D. 30 or above

See Answer in Part B → Q22

@Neet_pg_bot

• [17_International Health] 058 International Health

« Back to Folder Directory

[17_International Health] 058 International Health — Quick Jump

Q1 (p. 556) *Q2 (p. 556)* *Q3 (p. 556)* *Q4 (p. 557)* *Q5 (p. 557)* *Q6 (p. 557)*
Q7 (p. 558) *Q8 (p. 558)*

Q1: Which of the following best describes the services covered under UNICEF's GOBI-FFF strategy? (Q840938)

A. Providing emergency relief and disaster response

B. Promoting environmental sustainability and climate action

C. Enhancing maternal health and prenatal care

D. Addressing essential child health interventions

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which international organization primarily focuses on reproductive health and population issues? (Q840939)

A. FAO

B. WFP

C. UNFPA

D. Urban HEART

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following is not a bilateral agency? (Q840941)

A. USAID

B. World bank

C. SIDA

D. DANIDA

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which organisation promotes economic and social development in South Asia and the South-East Asia region? (Q840944)

A. Colombo Plan

B. Rockefeller Foundation

C. Ford Foundation

D. CARE

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which of the following organisations has its headquarters in Geneva? (Q840947)

A. UNAID

B. UNDP

C. UNFPA

D. UNICEF

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following is NOT one of the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015? (Q840948)

A. End poverty in all its forms everywhere

B. Ensure inclusive and equitable quality education for all

C. Promote sustainable consumption and production patterns

D. Achieve world peace and disarmament

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the following best describes the services covered under UNICEF's GOBI-FFF strategy? (Q844356)

A. Providing emergency relief and disaster response

B. B. Promoting environmental sustainability and climate action

C. C. Enhancing maternal health and prenatal care

D. D. Addressing essential child health interventions

See Answer in Part B → Q7

@Neet_pg_bot

Q8: Select the true statements regarding the World Health Organization. It was the world's first International health agency. It was established on 7th April 1948. Biomedical research is not a duty of the WHO. Weekly epidemiological records are part of the WHO surveillance system. The headquarters of WHO is in Geneva. (Q845077)

A. 2, 4, 5

B. 3, 5

C. 1, 2, 3, 4, 5

D. 1, 3, 4, 5

See Answer in Part B → Q8

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• [17_International Health] 059 Previous Year Questions

« Back to Folder Directory

[17_International Health] 059 Previous Year Questions — Quick Jump

Q1 (p. 560) *Q2 (p. 560)* *Q3 (p. 560)* *Q4 (p. 561)* *Q5 (p. 561)*

Q1: Under which health organization are the Sustainable Development Goals (SDGs) implemented? (Q857076)

A. United nations development programme

B. United nations children's fund

C. United nations educational, scientific and cultural organisation

D. World health organization

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following organizations is the largest international fund dedicated to population and reproductive health issues? (Q857142)

A. World bank

B. UNFPA

C. UNESCO

D. UNICEF

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which of the following statements is not true according to the sustainable development goals? (Q859213)

A. End the epidemics of AIDS, tuberculosis, malaria and combat hepatitis

B. Reduce the global maternal mortality ratio to less than 70 (per 100,000 liver births)

C. Reduce the neonatal mortality rate to as low as 25 (per 1,000 liver births)

D. Reduce under-5 mortality to as low as 25 (peer 1,000 liver births)

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following steps is excluded from the STEP approach of the World Health Organization (WHO)? (Q855626)

A. Therapeutic assessment

B. Physical assessment

C. Psychological assessment

D. Behavioral assessment

See Answer in Part B → Q4

@Neet_pg_bot

Q5: Which organization is responsible for vaccines, child health and nutrition, safe water and sanitation, quality education and skill-building? (Q855873)

A. CARE

B. UNDP

C. UNICEF

D. WHO

See Answer in Part B → Q5

@Neet_pg_bot

• [18_Biostatistics] 060 Biostatistics And Measures Of Central Tendency

« Back to Folder Directory

[18_Biostatistics] 060 Biostatistics And Measures Of Central Tendency — Quick Jump

Q1 (p. 562) *Q2 (p. 562)* *Q3 (p. 562)* *Q4 (p. 563)* *Q5 (p. 563)* *Q6 (p. 564)*
Q7 (p. 564) *Q8 (p. 564)* *Q9 (p. 565)* *Q10 (p. 565)*

Q1: Which of the following is an example of a qualitative variable? (Q841127)

A. Blood Pressure

B. Heart Rate

C. Blood group

D. Cholesterol Level

See Answer in Part B → Q1

@Neet_pg_bot

Q2: A continuous variable is best described as? (Q841130)

A. A variable that can only take on whole numbers.

B. A variable that can take on any value within a specified range.

C. A variable whose value is obtained by counting.

D. A variable that represents distinct, separate values.

See Answer in Part B → Q2

@Neet_pg_bot

Q3: The presence or absence of a disease is an example of? (Q841133)

A. Continuous variable

B. Discrete variable

C. Dichotomous variable

D. Polytomous variable

See Answer in Part B → Q3

@Neet_pg_bot

Q4: An investigator studies the life expectancy of IV drug abusers and divides a sample of patients into HIV-positive and HIV-negative groups. What type of data does this division constitute? (Q841137)

A. Ratio

B. Ordinal

C. Nominal

D. Interval

See Answer in Part B → Q4

@Neet_pg_bot

Q5: America uses Fahrenheit (°F) in temperature measurement, and India uses Celsius (°C). Which type of scale is this an example of? (Q841139)

A. Nominal scale

B. Ordinal scale

C. Interval scale

D. Ratio scale

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following is the most commonly used statistical average? (Q841142)

A. Weighted mean

B. Geometric mean

C. Arithmetic mean

D. Harmonic mean

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A patient who presented yesterday with occasional chest pain on & off for quite a while was found to have a blood pressure of 160/100 mmHg. An ambulatory blood pressure monitoring has been set up and the readings today are 130/90, 158/98, 140/80, 160/90, 150/100 and 138/88 mmHg. What is his mean blood pressure? (Q841143)

A. 139/85mmHg

B. 146/91mmHg

C. 150/89mmHg

D. 154/95 mmHg

See Answer in Part B → Q7

@Neet_pg_bot

Q8: TSH values taken from a few antenatal mothers from an area where iodine deficiency is suspected are 4.5, 3.0, 1.9, 6.2, 8.0, 8.4, 2.4 and 9.2 IU/L. Calculate the median TSH in these mothers. (Q841144)

A. 4.12

B. 6.33

C. 5.35

D. 4.78

See Answer in Part B → Q8

@Neet_pg_bot

Q9: The malaria cases reported in the last 10 years are 270, 300, 200, 310, 6000, 110, 250, 320, 330 and 120. An epidemiologist wants to determine the average number of malaria cases reported during these 10 years. Which of the following is the most appropriate measure of average for this data? (Q841145)

A. Weighted mean

B. Median

C. Mean

D. Geometric mean

See Answer in Part B → Q9

@Neet_pg_bot

Q10: In the case of a bimodal distribution, calculate the mode if the median is 2 and the mean is 3. (Q841146)

A. 5

B. 3

C. 0

D. 2

See Answer in Part B → Q10

@Neet_pg_bot

• [18_Biostatistics] 061 Types Of Dispersion Distribution And Errors

« Back to Folder Directory

[18_Biostatistics] 061 Types Of Dispersion Distribution And Errors — Quick Jump

Q1 (p. 566)	*Q2 (p. 566)*	*Q3 (p. 567)*	*Q4 (p. 567)*	*Q5 (p. 567)*	*Q6 (p. 568)*
Q7 (p. 568)	*Q8 (p. 569)*	*Q9 (p. 569)*	*Q10 (p. 569)*	*Q11 (p. 570)*	*Q12 (p. 570)*
Q13 (p. 571)	*Q14 (p. 571)*	*Q15 (p. 572)*	*Q16 (p. 572)*	*Q17 (p. 573)*	*Q18 (p. 574)*
Q19 (p. 574)	*Q20 (p. 574)*				

Q1: Which of the following correctly describes Type I and Type II errors in hypothesis testing? (Q840705)

A. Type I rejects a true null hypothesis; Type II accepts a false null hypothesis.

B. Type I accepts a false null hypothesis; Type II rejects a true null hypothesis.

C. Type I rejects a true alternative hypothesis; Type II accepts a false alternative hypothesis.

D. Type I: Accepting a true null hypothesis; Type II: Rejecting a false null hypothesis.

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which of the following is statistically significant? (Q840730)

A. RR of 2.5 with a 95% CI of 2.0 to 3.1

B. OR of 0.9 with a 95% CI of 0.5 to 8

C. p-value of 0.5 and a RR of 2.5.

D. RR of 5.0 with a 95% CI of 0.1 to 9.8

See Answer in Part B → Q2

@Neet_pg_bot

Q3: A biostatistician studies adults' average systolic blood pressure (SBP) in a certain population. A sample of 40 adults was taken, and the mean systolic blood pressure was 130 mmHg with a standard deviation of 15 mmHg. Which is the correct 95% confidence interval for the true mean systolic blood pressure? (Q840729)

A. (125.25 mmHg, 134.75 mmHg)

B. (138.36 mmHg, 131.64 mmHg)

C. (128.00 mmHg, 127.00 mmHg)

D. (127.36 mmHg, 132.64 mmHg)

See Answer in Part B → Q3

@Neet_pg_bot

Q4: A public health researcher is studying the average weight of newborns in a specific region. The researcher collects a random sample of 100 newborns and calculates a 95% confidence interval for the mean weight (3.2 kg, 3.8 kg). Which of the following statements correctly interprets the 95% confidence level? (Q840728)

A. There is a 95% chance that the mean weight of all newborns in the region falls between 3.2 kg and 3.8 kg

B. 95% of the newborns in the sample weigh between 3.2 kg and 3.8 kg.

C. 95 % of the intervals will include the true mean if we calculate CI for multiple samples

D. Mean weight of all newborns in the region is exactly 3.5 kg, which is the midpoint of the confidence interval.

See Answer in Part B → Q4

@Neet_pg_bot

Q5: A study was conducted to determine the effectiveness of a new antihypertensive. The study is designed with a significance level (alpha) of 0.05 and a sample size of 50 participants. The type II error is calculated as 0.25. Which of the following is the

power of this study, and how can it be increased? (Q840726)

A. The power of the study is 75% and can be increased by decreasing the sample size.

B. The power of the study is 70%, and it can be increased by increasing the sample size.

C. The power of the study is 75% and it can be increased by increasing the sample size.

D. The power of the study is 95% and it can be increased by increasing the sample size.

See Answer in Part B → Q5

@Neet_pg_bot

Q6: The P-value of a randomized controlled trial comparing operation X which is a new procedure and operation Y which is gold standard procedure is 0.04, the conclusion from the following is: (Q840725)

A. The investigator can be 96% sure that the result is obtained by chance

B. The probability of a false positive conclusion that operation X is better than operation Y, when in truth it is not, is 4%

C. Type II error is small, and we can accept the findings of this study

D. The power of the study to detect a difference between operation X and Y is 96%

See Answer in Part B → Q6

@Neet_pg_bot

Q7: What does the p-value represent in hypothesis testing? (Q840724)

A. Probability that a Type 2 error is being made.

B. Probability of declaring a significant difference when there is none in reality.

C. Probability of declaring a significant difference when it is present.

D. It represents power and is equal to 1 - Beta.

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A weighing scale consistently adds 10% to each weight. A true weight of 10 kg is 11 kg, while a true weight of 40 kg is 44 kg. Which type of error is exhibited in this scenario? (Q840722)

A. Random error

B. Non-random error

C. Human error

D. Operator error

See Answer in Part B → Q8

@Neet_pg_bot

Q9: A new drug designed to lower cholesterol levels is being tested. The testing involved 1000 participants. The null hypothesis is that "the new drug does not affect cholesterol levels". After analysing the data, the researchers conclude that the drug doesn't work, but in reality, it does have a small but clinically significant effect. What type of error has occurred? (Q840708)

A. Type I error

B. Type II error

C. No error has occurred

D. Both Type I and Type II errors

See Answer in Part B → Q9

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Q10: In a clinical trial for a new hypertension drug, the null hypothesis states: "The new drug does not affect blood pressure." If researchers commit a Type 1 error, which of the following is true? (Q840707)

A. Drug lower BP, but it was concluded that it has no effect.

B. Drug has no effect, but it was concluded as it lowers BP.

C. Drug raises BP, but it was concluded that it has no effect.

D. Drug has no effect, and it was correctly concluded.

See Answer in Part B → Q10

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Q11: Which measure of dispersion is considered the most comprehensive and widely used in statistical analysis? (Q840643)

A. Range

B. Standard deviation

C. Mean deviation

D. Variance

See Answer in Part B → Q11

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Q12: Which of the following statements regarding Poisson’s distribution is NOT true? (Q840700)

A. It measures the probability of the occurrence of discrete events.

B. The average rate of events is denoted by lambda.

C. Poisson's distribution is skewed to the left when the rate of occurrence is small.

D. The distribution approaches symmetry as its rate of occurrence increases.

See Answer in Part B → Q12

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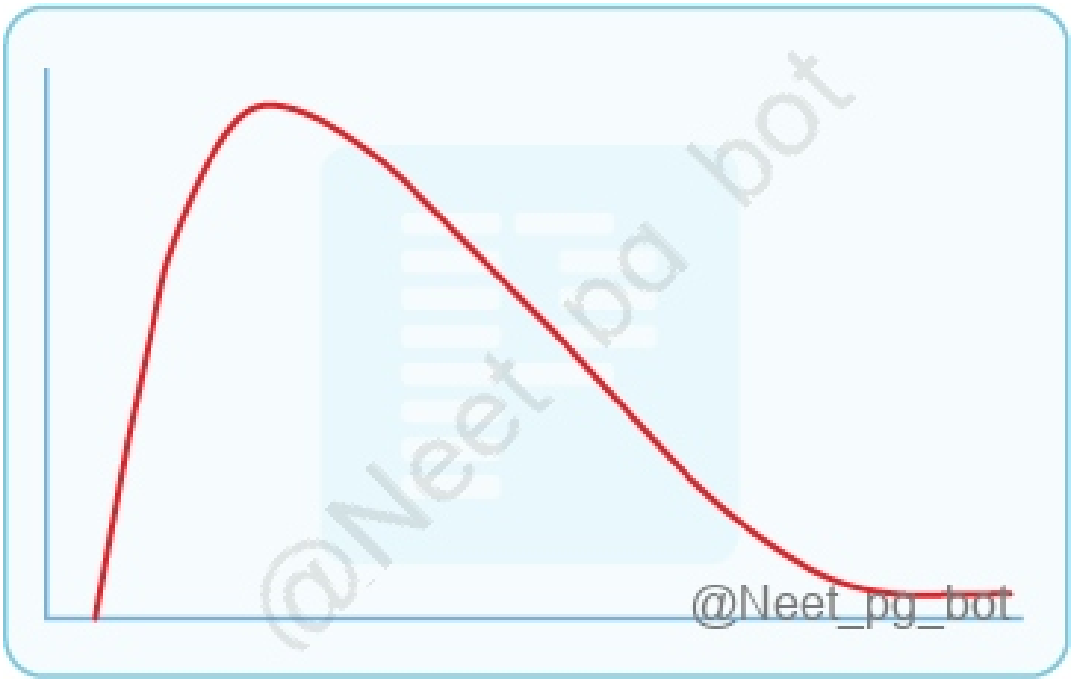
Q13: In the right-sided skewed distribution graph given below, what is the correct order of the measures of central tendency? (Q840695)

A. Mean < median < mode

B. Mean > median > mode

C. Mean = median > mode

D. Mean = median = mode



See Answer in Part B → Q13

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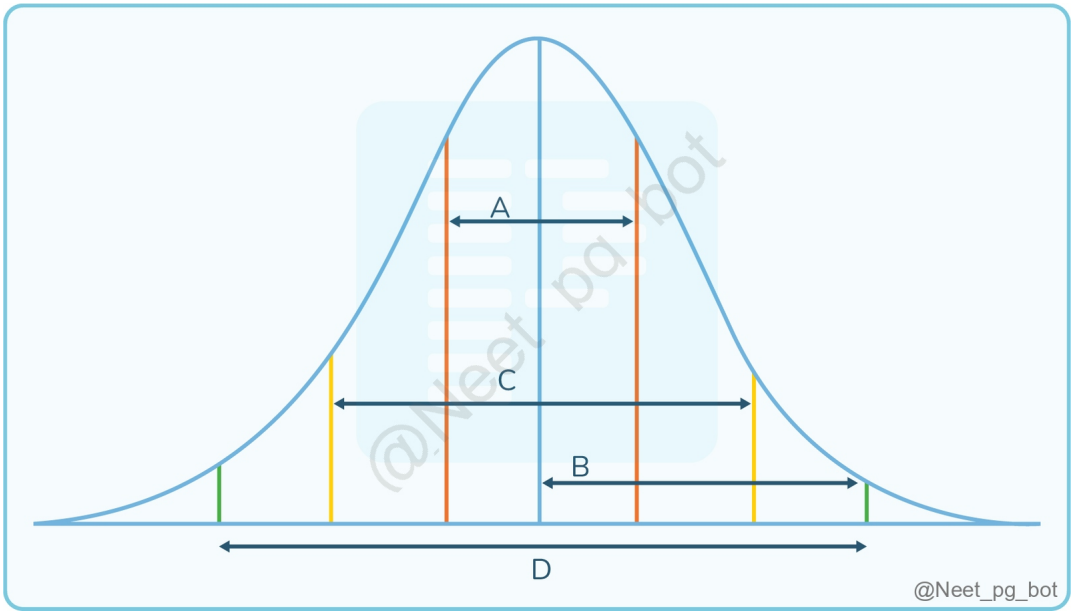
Q14: Based on the Gaussian curve, which ranges under the curve cover 95% of the observations? (Q840689)

A. Range A

B. Range B

C. Range C

D. Range D



See Answer in Part B → Q14

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Q15: The blood pressure measurement of 120 patients was conducted in a health camp. The first quartile systolic blood pressure was 108 mm Hg, and the third quartile was 136 mm Hg. How many people will have their BP between the 1st and 3rd quartile? (Q840681)

A. 30 patients

B. 60 patients

C. 90 patients

D. 75 patients

See Answer in Part B → Q15

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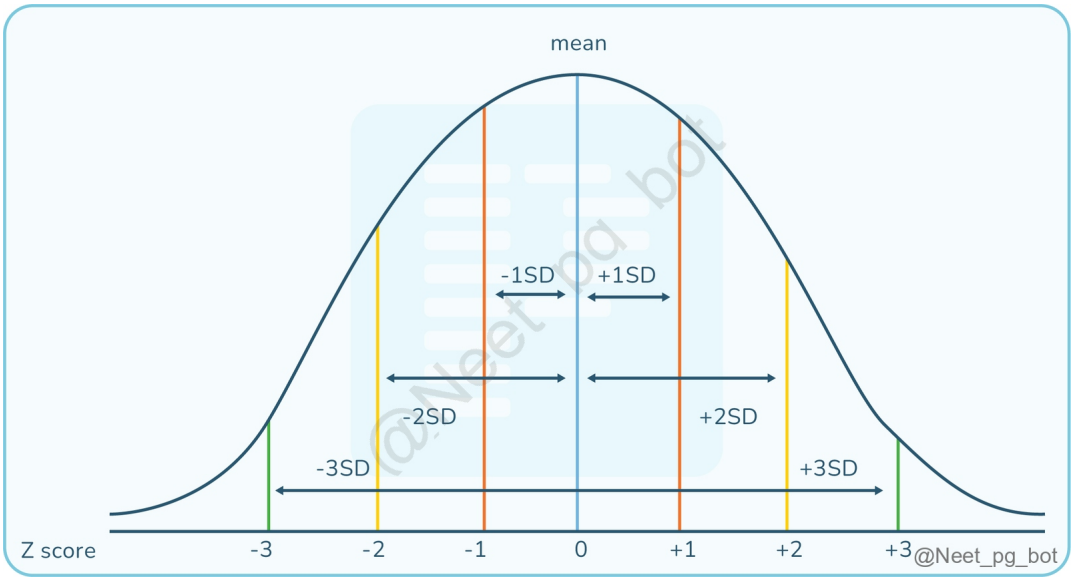
Q16: Where does the data point fall if the Z score equals zero in a normal distribution graph? (Q840666)

A. Between mean and +1 SD

B. Exactly at the mean

C. Between mean and -1 SD

D. Less than -3 SD



See Answer in Part B → Q16

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Q17: In a survey, 100 individuals were randomly sampled to estimate the mean age of a population. The sample mean age was 35, with a standard deviation of 5 years. What is the standard error of the mean (SE of mean) for this survey? (Q840661)

A. 0.5 years

B. 0.05 years

C. 5 years

D. 0.25 years

See Answer in Part B → Q17

@Neet_pg_bot

Q18: The heights (in centimetres) of students in the two classes are summarised as follows: Class A: Mean height = 170 cm, Standard Deviation = 7.5 cm Class B: Mean height = 162.5 cm, Standard Deviation = 8.2 cm Which class shows a higher coefficient of variation (COV)? (Q840660)

A. Class A

B. Class B

C. Both classes have the same coefficient of variation

D. Cannot be determined from the given information

See Answer in Part B → Q18

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Q19: Which of the following is not true regarding the coefficient of variation (COV)? (Q840655)

A. COV compares the relative variability of datasets with different means.

B. Higher COV signifies greater dispersion relative to the mean, indicating lower reliability

C. Lower COV suggests data points are closer to the mean, indicating higher reliability.

D. COV can be negative if the standard deviation is smaller than the mean.

See Answer in Part B → Q19

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Q20: A small sample of students' weights (in pounds) is recorded to analyse their distribution. The weights are 120,125,130,122,128. Calculate the standard deviation for the weights of students. (Q840646)

A. 4.12

B. 4.00

C. 4.51

D. 5.20

See Answer in Part B → Q20

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• [18_Biostatistics] 062 Test Of Statistical Significance Graphical Representation Of Data Sampling And Probability

« Back to Folder Directory

[18_Biostatistics] 062 Test Of Statistical Significance Graphical Representation Of Data Sampling And Probability — Quick Jump

Q1 (p. 576)	*Q2 (p. 576)*	*Q3 (p. 577)*	*Q4 (p. 578)*	*Q5 (p. 578)*	*Q6 (p. 578)*
Q7 (p. 579)	*Q8 (p. 579)*	*Q9 (p. 580)*	*Q10 (p. 581)*	*Q11 (p. 581)*	*Q12 (p. 582)*
Q13 (p. 583)	*Q14 (p. 584)*	*Q15 (p. 585)*	*Q16 (p. 585)*	*Q17 (p. 585)*	*Q18 (p. 586)*
Q19 (p. 586)	*Q20 (p. 586)*	*Q21 (p. 587)*	*Q22 (p. 587)*	*Q23 (p. 588)*	*Q24 (p. 588)*
Q25 (p. 588)	*Q26 (p. 589)*	*Q27 (p. 589)*	*Q28 (p. 590)*	*Q29 (p. 590)*	*Q30 (p. 590)*
Q31 (p. 591)	*Q32 (p. 591)*	*Q33 (p. 592)*	*Q34 (p. 592)*		

Q1: A researcher wants to compare the effectiveness of three different types of exercise programs on reducing blood pressure in individuals with hypertension. Which parametric test is most appropriate for analyzing the data? (Q840927)

A. Paired Student's t-test

B. Unpaired Student's t-test

C. ANOVA

D. Z- test

See Answer in Part B → Q1

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Q2: A study aims to compare the mean weight (in kilograms) of children diagnosed with severe protein-energy malnutrition before and after receiving a nutritional intervention program. Which type of statistical test is appropriate for analyzing the data in this scenario? (Q840925)

A. Both parametric and non-parametric

B. Non-parametric only

C. Parametric only

D. None of the Above

See Answer in Part B → Q2

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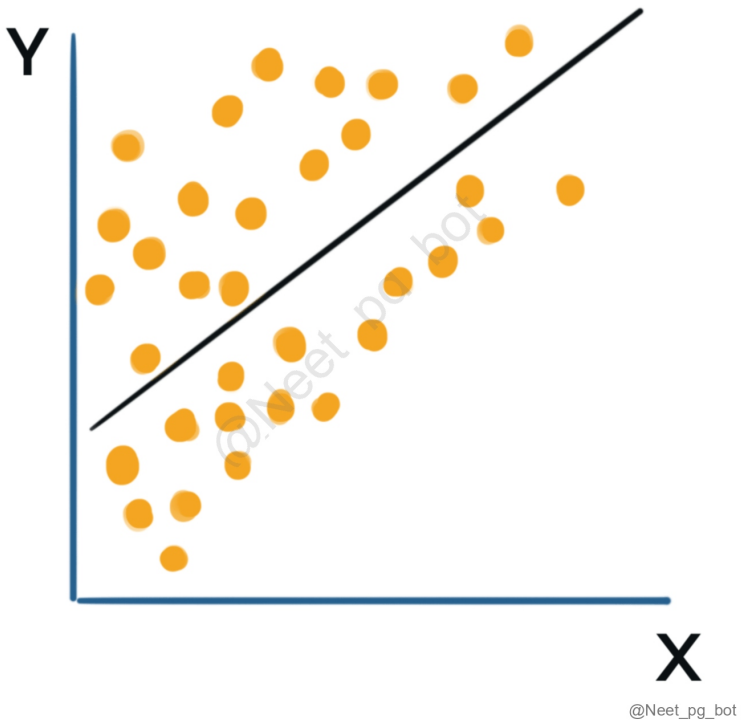
Q3: A Scatter Diagram /Dot diagram used in the depiction of correlation is given in the image below. Interpret the Statistical graph. (Q882191)

A. Positive correlation

B. Negative correlation

C. Absent correlation

D. Spurious correlation



See Answer in Part B → Q3

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Q4: A researcher is conducting a study to estimate the prevalence of diabetes among patients with obesity. The researcher divides the patients into two gender groups (male and female) and then selects the study sample from each of these two groups separately. Which type of random probability sampling method is being used in this study? (Q841112)

A. Simple Random Sampling

B. Systematic Random Sampling

C. Stratified Random Sampling

D. Cluster Random Sampling

See Answer in Part B → Q4

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Q5: Which of the following correctly defines Systematic Random Sampling? (Q841110)

A. It involves selecting units from the population purely by chance, ensuring each unit has an equal probability of being chosen.

B. It involves selecting every nth unit from the population after a random starting point.

C. It involves systematically dividing the population into subgroups and randomly sampling from each subgroup.

D. It involves dividing the population into groups and randomly selecting entire groups to be included in the sample.

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following is an incorrect statement regarding sampling methods? (Q841108)

A. In a probability sampling method, each individual in the representative population is provided with an equivalent likelihood of being included in the study.

B. Non-probability sampling includes convenience sampling, voluntary response sampling, purposive sampling, and snowball sampling.

C. As the size of the sample increases, sampling error decreases.

D. Cluster sampling is a type of Non-Random Non-Probability Sampling method.

See Answer in Part B → Q6

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Q7: Which of the following statements is incorrect about regression? (Q841103)

A. It measures the strength and direction of the relationship between two or more variables.

B. It is used to predict the value of a dependent variable based on one or more independent variables.

C. Multiple Linear Regression describes the effect of multiple independent (Qualitative, Quantitative or Mixed) variables on dichotomous qualitative variables (discrete i.e., yes or no)

D. It can be linear or nonlinear depending on the relationship between variables.

See Answer in Part B → Q7

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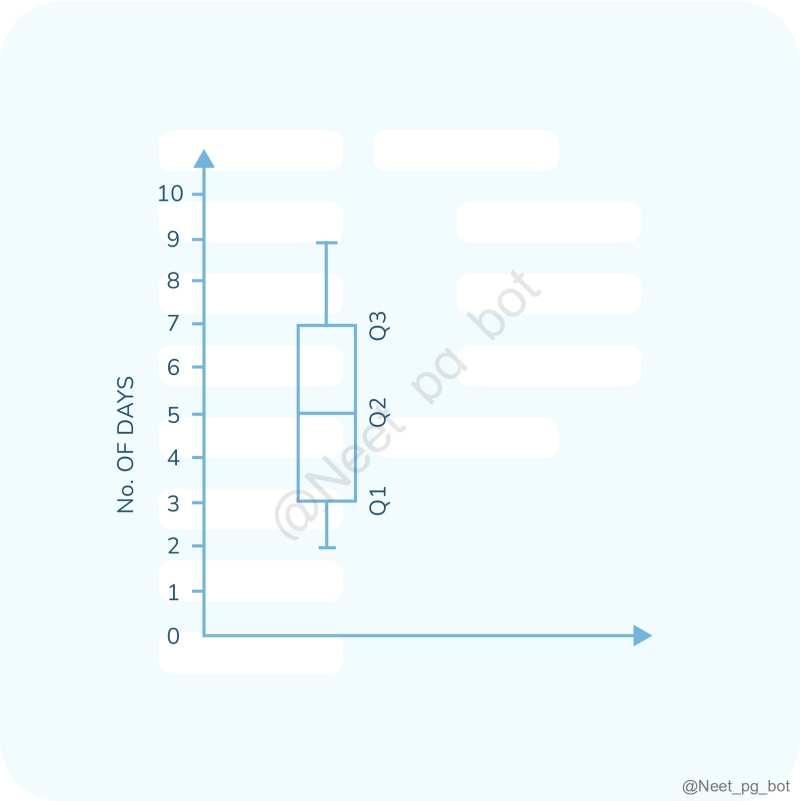
Q8: A hospital conducted a study on the recovery times (in days) of patients after a specific surgical procedure. The data was summarized using a box and whisker plot as shown below: Which of the following statements best describes the skewness of the recovery time data shown in the plot above? (Q841098)

A. The data has no skewness.

B. The data is positively skewed.

C. The data is negatively skewed.

D. The data is both positively and negatively skewed.



See Answer in Part B → Q8

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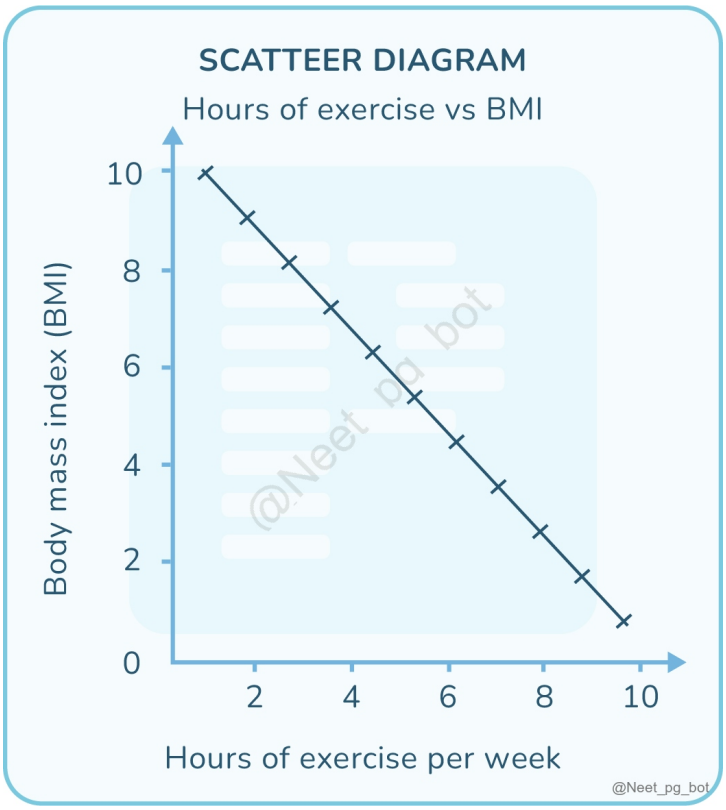
Q9: A study is conducted to examine the relationship between hours of exercise per week and body mass index (BMI) among adults. Data from 30 participants are collected and plotted, with hours of exercise on the x-axis and BMI on the y-axis. The resulting scatter diagram is as shown below. What type of correlation is depicted, and what is the correlation coefficient (r) value? (Q841095)

A. Positive correlation; r = 1

B. Negative correlation; r = -1

C. No correlation; r = 0

D. Weak negative correlation; r = -0.5



See Answer in Part B → Q9

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Q10: A clinic wants to analyze the cumulative number of patients who have completed a new vaccination program over the past year to evaluate the program's uptake and identify any trends in vaccination rates. Which type of graph should they use? (Q841091)

A. Line Chart

B. Ogive

C. Pie Chart

D. Box Plot

See Answer in Part B → Q10

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Q11: A teacher measured the heights of students in her class and wanted to visualize the distribution of these heights. She is considering using either a histogram or a frequency polygon for this purpose. Which of the following statements correctly distinguishes between a histogram and a frequency polygon? (Q841090)

A. A histogram uses bars to represent frequencies of height intervals, while a frequency polygon uses dots connected by straight lines.

B. A histogram displays cumulative frequencies of student heights, whereas a frequency polygon displays individual height measurements.

C. A histogram can only display continuous data like heights, while a frequency polygon can only display categorical data.

D. A histogram provides a clearer representation of changes in student heights over time compared to a frequency polygon.

See Answer in Part B → Q11

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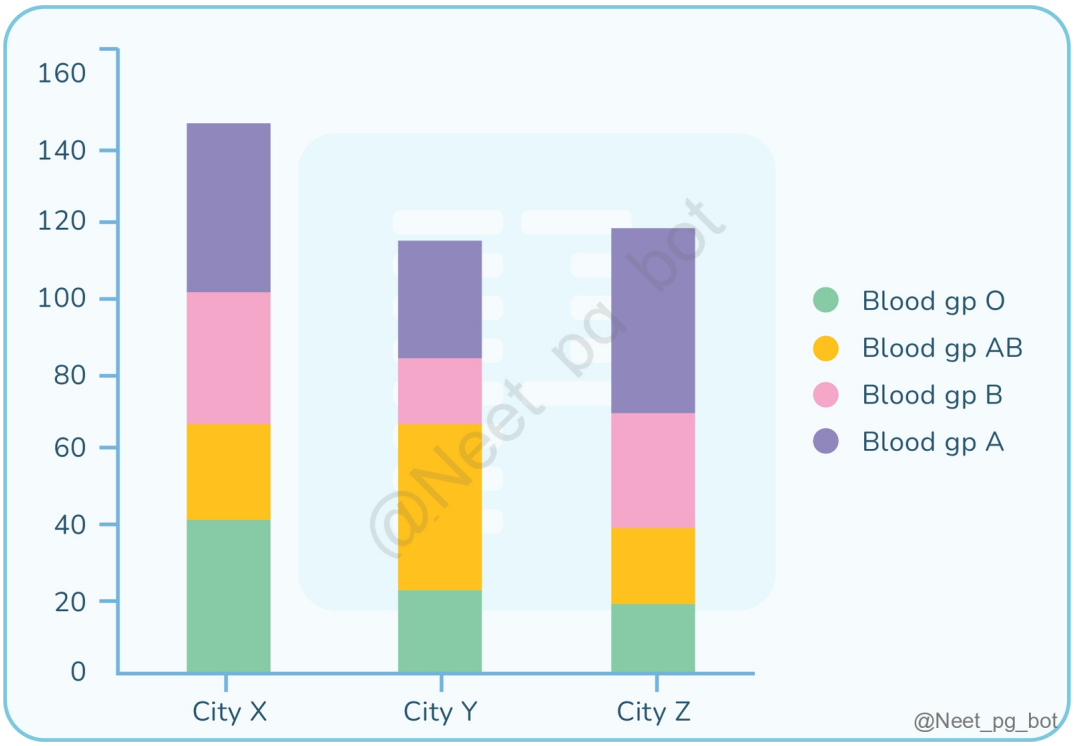
Q12: Given below is a graphical representation of different blood groups of people in three different cities, what is the type of graphical representation used here? (Q841087)

A. Simple Bar Diagram

B. Compound Bar Diagram

C. Component Bar Diagram

D. Histogram



See Answer in Part B → Q12

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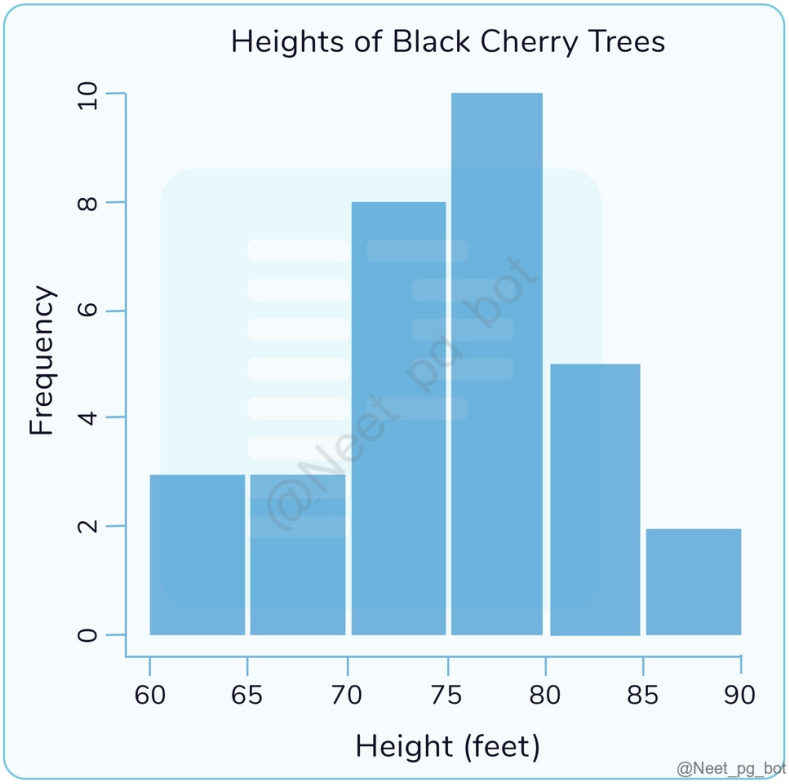
Q13: What is this graphical representation of frequency of quantitative data called? (Q840934)

A. Histogram

B. Bar Diagram

C. Pictograph

D. Box and Whisker Plot



See Answer in Part B → Q13

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Q14: A hospital administrator wants to determine if there is a significant association between the type of hospital ward (General, Intensive Care, and Pediatric) and the number of patients who experienced postoperative infections. The data collected over a month is as follows: Ward Patients with infections Patients without infections Total General 20 80 100 Intensive Care 30 70 100 Pediatric 10 90 100 Total 60 240 300 Using the Chi-Square test, what is the expected number of patients with infections in the General Ward if there is no association between the ward type and infection status? (Q840932)

A. 15

B. 20

C. 30

D. 60

See Answer in Part B → Q14

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Q15: Which one of the following tests is used to study the association between the use of oral contraceptive pills (OCP) and breast cancer? (Q840930)

A. Paired T-test

B. Chi-Square Test

C. Unpaired T-test

D. ANOVA

See Answer in Part B → Q15

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Q16: A contingency table used in a Chi-square (χ^2) test contains 3 rows and 4 columns. What is the appropriate degree of freedom (d.f.)? (Q892266)

A. 12

B. 7

C. 6

D. 9

See Answer in Part B → Q16

@Neet_pg_bot

Q17: A researcher constructs a contingency table and plans to apply a Chi-square (χ^2) test. Which of the following formulas is used to calculate the degree of freedom (d.f.) for this test? (Q892263)

A. n–1

B. (c−1)(r−1)

C. c+r−2

D. c×r

See Answer in Part B → Q17

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Q18: While comparing two independent group means using statistical testing, a researcher interprets the probability (P value) of the observed difference. At what threshold is a result considered “more significant”? (Q892262)

A. P < 0.10 (1 in 10)

B. P < 0.05 (1 in 20)

C. P < 0.01 (1 in 100)

D. P > 0.05

See Answer in Part B → Q18

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Q19: A researcher compares the mean values of a variable between a control group and an experimental group using the standard error of the difference between two means. What is the primary conceptual goal of this calculation? (Q892261)

A. To determine if the variables have a strong linear correlation

B. To calculate the total dispersion of the combined population

C. To determine if the samples represent two different populations (“universes”)

D. To find the most frequent value in the distribution

See Answer in Part B → Q19

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Q20: In constructing a contingency table for a Chi-square (χ^2) test, a researcher needs to calculate the expected frequency (E) for each cell. Which of the following formulas is used to determine the expected value? (Q892259)

A. Average of observed values in that row

B. Grand total minus observed value

C. (Row total × Column total) ÷ Grand total

D. (Observed value)² ÷ Degree of freedom

See Answer in Part B → Q20

@Neet_pg_bot

Q21: A researcher wants to compare the mean values across multiple independent groups to determine whether any group differs significantly from the others. Which of the following best defines the statistical test used? (Q892258)

A. A test used to compare proportions between two groups

B. A test used to compare means between two independent groups

C. A test used to compare means among three or more groups

D. A test used for categorical data only

See Answer in Part B → Q21

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Q22: A researcher analyses outcomes (recovered vs not recovered) across three treatment groups using a Chi-square (χ^2) test. What is the degree of freedom (d.f.) for this analysis? (Q892257)

A. 1

B. 2

C. 3

D. 6

See Answer in Part B → Q22

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Q23: In a Chi-square (χ^2) test, the calculated (observed) value is found to be greater than the critical value from the probability table for the corresponding degrees of freedom. What is the most appropriate conclusion? (Q892253)

A. The null hypothesis is true, and the difference is due to chance

B. The difference is statistically significant and unlikely to be due to chance

C. The test is invalid and must be recalculated with larger samples

D. The correlation coefficient must be used to prove causation

See Answer in Part B → Q23

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Q24: In comparing the means of two independent groups, a researcher calculates a Normal Deviate (N.D.) of 2.0. What is the most appropriate interpretation of this result? (Q892250)

A. The difference is not significant ($P > 0.05$)

B. The difference is just significant at the 5% level ($P = 0.05$)

C. The difference is highly significant ($P < 0.01$)

D. The samples represent the same population (“universe”)

See Answer in Part B → Q24

@Neet_pg_bot

Q25: A researcher compares the mean kidney weight between two independent groups of mice (control vs experimental). Which of the following must be calculated first to

assess whether the difference between the two means is statistically significant? (Q892248)

A. The coefficient of correlation (r) between the groups

B. The standard error of the difference between the two means

C. The pooled arithmetic mean of all mice

D. The range of the experimental group

See Answer in Part B → Q25

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Q26: A Chi-square (χ^2) test yields an observed value of 1.79. The critical value at d.f. = 1 and P = 0.05 is 3.84. What is the most appropriate conclusion? (Q892245)

A. The difference is significant, and the null hypothesis is rejected

B. The difference is due to chance, and the null hypothesis is true

C. The test must be repeated because the observed value is too low

D. A regression coefficient must be calculated to verify the result

See Answer in Part B → Q26

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Q27: A researcher plans to compare measurements taken from the same individuals under two conditions. Which of the following is the key requirement for applying a paired t-test? (Q892241)

A. Data must be categorical

B. Observations must be independent

C. Observations must be paired or matched

D. Sample size must exceed 100

See Answer in Part B → Q27

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Q28: In comparing the means of two independent groups, the Normal Deviate (N.D.) is calculated as the difference between means divided by the standard error of the difference. At what value is the difference considered statistically significant at P < 0.05? (Q892240)

A. N.D. < 2

B. N.D. = 0

C. N.D. > 2

D. N.D. = 1

See Answer in Part B → Q28

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Q29: A study comparing two vaccines reports an observed Chi-square (χ^2) value of 1.79. The critical value at 1 degree of freedom (P = 0.05) is 3.84. What is the correct interpretation of this result? (Q892238)

A. The null hypothesis is rejected because 1.79 is less than 3.84

B. Vaccine B is statistically superior to Vaccine A

C. The null hypothesis is accepted, and the difference is likely due to chance

D. The test is invalid because the expected number in one cell was less than two

See Answer in Part B → Q29

@Neet_pg_bot

Q30: A researcher applies a Chi-square (χ^2) test to analyse categorical data in a contingency table. Which of the following is an essential requirement for the validity

of this test? (Q892236)

A. The total sample size must exceed 1,000 individuals

B. The observed values in every cell must be equal

C. The expected number in each cell must not be less than two

D. The data must be presented as a frequency polygon

See Answer in Part B → Q30

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Q31: A researcher analyses data using a 2×2 contingency table to compare outcomes between two groups. What is the degree of freedom (d.f.) for this analysis? (Q892235)

A. 1

B. 2

C. 4

D. 0

See Answer in Part B → Q31

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Q32: A researcher compares measurements taken before and after an intervention in the same individuals. Which of the following best defines the statistical test used in this scenario? (Q892232)

A. A test comparing means between two independent groups

B. A test comparing proportions between two groups

C. A test comparing the means of the same group measured at two different times

D. A test used for categorical data only

See Answer in Part B → Q32

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Q33: A researcher analyses categorical data to determine whether an association exists between two variables. Which of the following is an example of a non-parametric test? (Q892231)

A. Student’s t-test

B. ANOVA

C. Chi-square test

D. Pearson correlation

See Answer in Part B → Q33

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Q34: A researcher compares the proportion of smokers across three different populations to determine whether the observed differences are statistically significant. Which statistical test is most appropriate for this purpose? (Q892228)

A. To calculate the arithmetic mean of a large population

B. To test the significance of the difference between two or more proportions

C. To determine the linear correlation between height and weight

D. To measure the standard deviation of a single sample

See Answer in Part B → Q34

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• [18_Biostatistics] 063 Previous Year Questions

« Back to Folder Directory

[18_Biostatistics] 063 Previous Year Questions — Quick Jump

Q1 (p. 593)	*Q2 (p. 593)*	*Q3 (p. 594)*	*Q4 (p. 595)*	*Q5 (p. 595)*	*Q6 (p. 596)*
Q7 (p. 597)	*Q8 (p. 597)*	*Q9 (p. 597)*	*Q10 (p. 598)*	*Q11 (p. 599)*	*Q12 (p. 600)*
Q13 (p. 600)	*Q14 (p. 601)*	*Q15 (p. 601)*	*Q16 (p. 601)*	*Q17 (p. 602)*	*Q18 (p. 602)*
Q19 (p. 603)	*Q20 (p. 603)*	*Q21 (p. 603)*	*Q22 (p. 604)*	*Q23 (p. 604)*	*Q24 (p. 605)*
Q25 (p. 605)	*Q26 (p. 606)*	*Q27 (p. 607)*	*Q28 (p. 607)*	*Q29 (p. 607)*	*Q30 (p. 608)*
Q31 (p. 608)	*Q32 (p. 609)*	*Q33 (p. 609)*	*Q34 (p. 609)*	*Q35 (p. 610)*	*Q36 (p. 610)*
Q37 (p. 610)	*Q38 (p. 611)*	*Q39 (p. 611)*	*Q40 (p. 612)*	*Q41 (p. 612)*	*Q42 (p. 612)*
Q43 (p. 613)	*Q44 (p. 613)*	*Q45 (p. 613)*	*Q46 (p. 614)*	*Q47 (p. 614)*	*Q48 (p. 615)*
Q49 (p. 615)	*Q50 (p. 616)*	*Q51 (p. 616)*	*Q52 (p. 616)*	*Q53 (p. 617)*	*Q54 (p. 617)*
Q55 (p. 617)	*Q56 (p. 618)*	*Q57 (p. 618)*			

Q1: In order to evaluate the nutritional status of young children residing in rural and urban areas, a research study was conducted. The study revealed that out of the total sample, comprising 30 children from rural areas and 20 children from urban areas, a significant proportion were found to be malnourished. Based on this information, which of the following statistical significance tests would be the most suitable in this scenario? (Q854837)

A. Chi-Square test

B. Paired T-test

C. Standard error of the mean

D. ANOVA

See Answer in Part B → Q1

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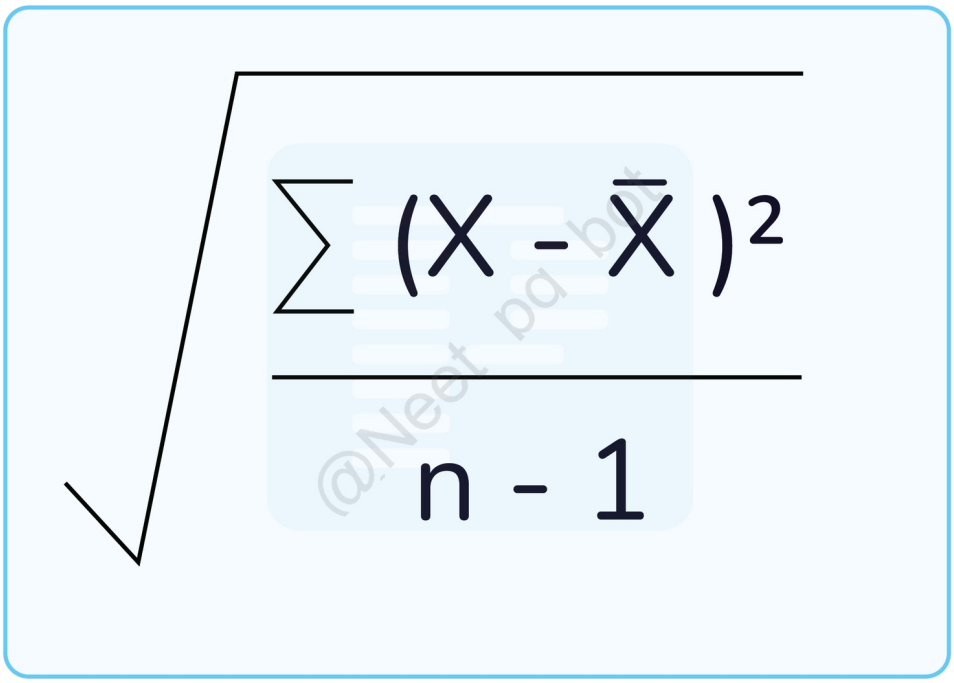
Q2: Identify the formula given below: (Q855134)

A. Standard deviation

B. Standard error

C. Median

D. Variance



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See Answer in Part B → Q2

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Q3: Which methods are used to evaluate contraceptive failure? (Q855135)

A. Pharmacological index

B. Pearl index

C. Performance index

D. Efficacy index

See Answer in Part B → Q3

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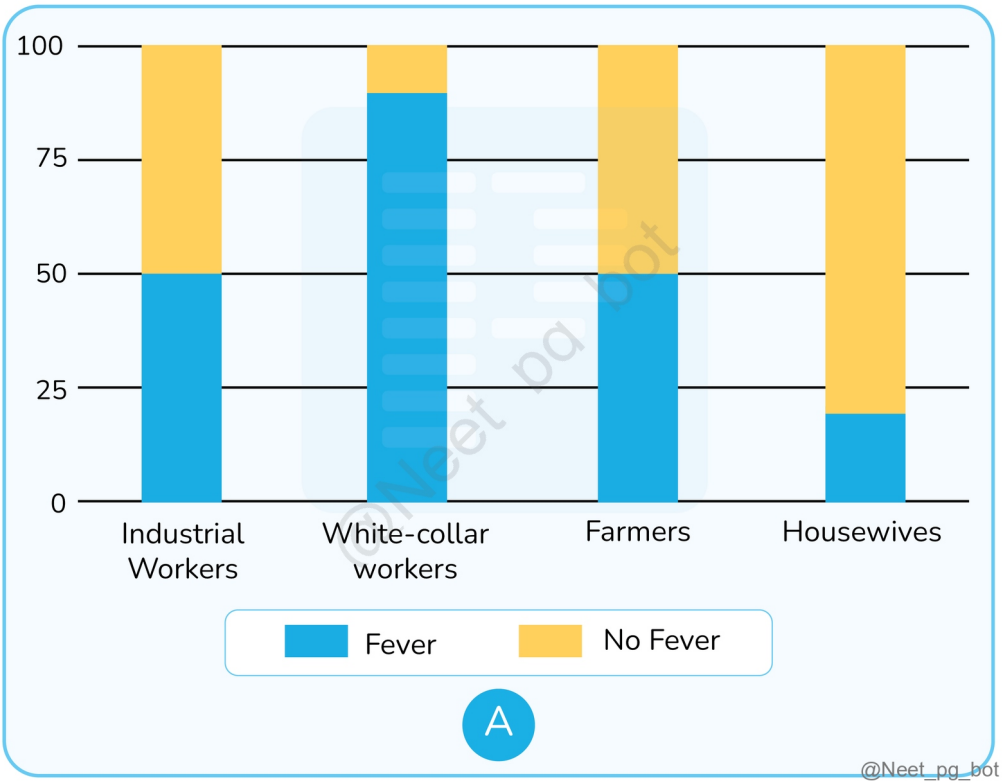
Q4: Examine the graph depicting various occupational groups and their likelihood of developing fever. Identify the group with the greatest probability of experiencing fever. (Q857139)

A. Industrial workers

B. Farmers

C. White-collar jobs

D. Housewives



See Answer in Part B → Q4

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Q5: Which method would be most effective in delivering statistical data to emphasize the significance of routine antenatal care for pregnant mothers, when educating a small, uneducated village during your rural posting? (Q857710)

A. Pictogram

B. Line diagram

C. Histogram

D. Frequency polygon

See Answer in Part B → Q5

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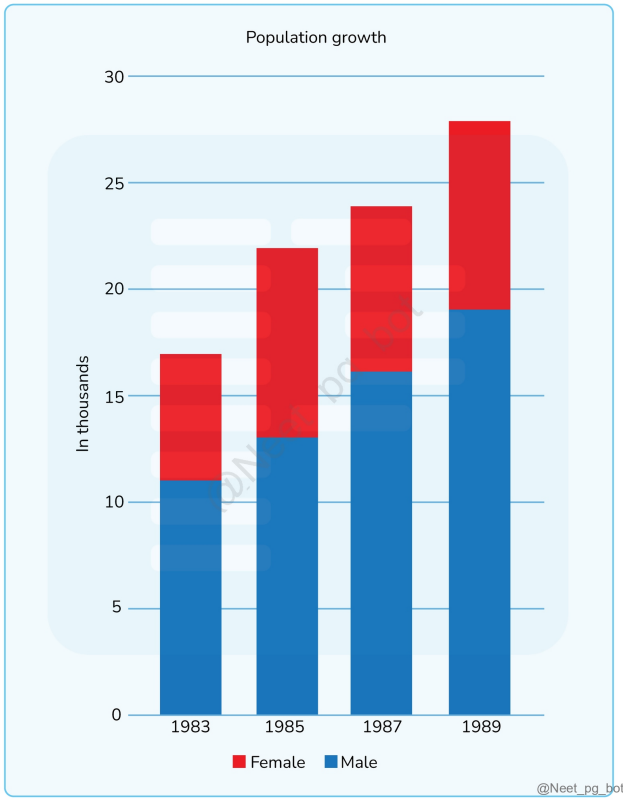
Q6: What type of statistical diagram is used in the given text to illustrate the population change between 1983 and 1989 in a specific location? (Q857741)

A. Histogram

B. Line diagram

C. Component bar graph

D. Multiple bar graphs



See Answer in Part B → Q6

@Neet_pg_bot

Q7: What is the proportion of the distribution within one standard deviation of the mean in a normal curve? (Q857757)

A. 68%

B. 34%

C. 99%

D. 95%

See Answer in Part B → Q7

@Neet_pg_bot

Q8: You are initiating hypertension services at your Primary Health Center (PHC). 50 patients in need of antihypertensive treatment have been transferred from another facility. Among them, 40 were prescribed amlodipine (5mg orally) and 10 were prescribed lisinopril (10mg orally) due to contraindications with amlodipine. Medications are supplied monthly at the PHC, and you are responsible for ordering them. How many tablets do you need to order and what should be the reorder factor? (Q855269)

A. 1000, rf=3

B. 1200, rf=2

C. 1400, rf=3

D. 1500, rf=2

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Which of the following is used for graphical representation in flow cytometry analysis? (Q855304)

A. Bar diagram, dot plot

B. Line diagram, dot plot

C. Histogram, dot plot

D. Pie chart, dot plot

See Answer in Part B → Q9

@Neet_pg_bot

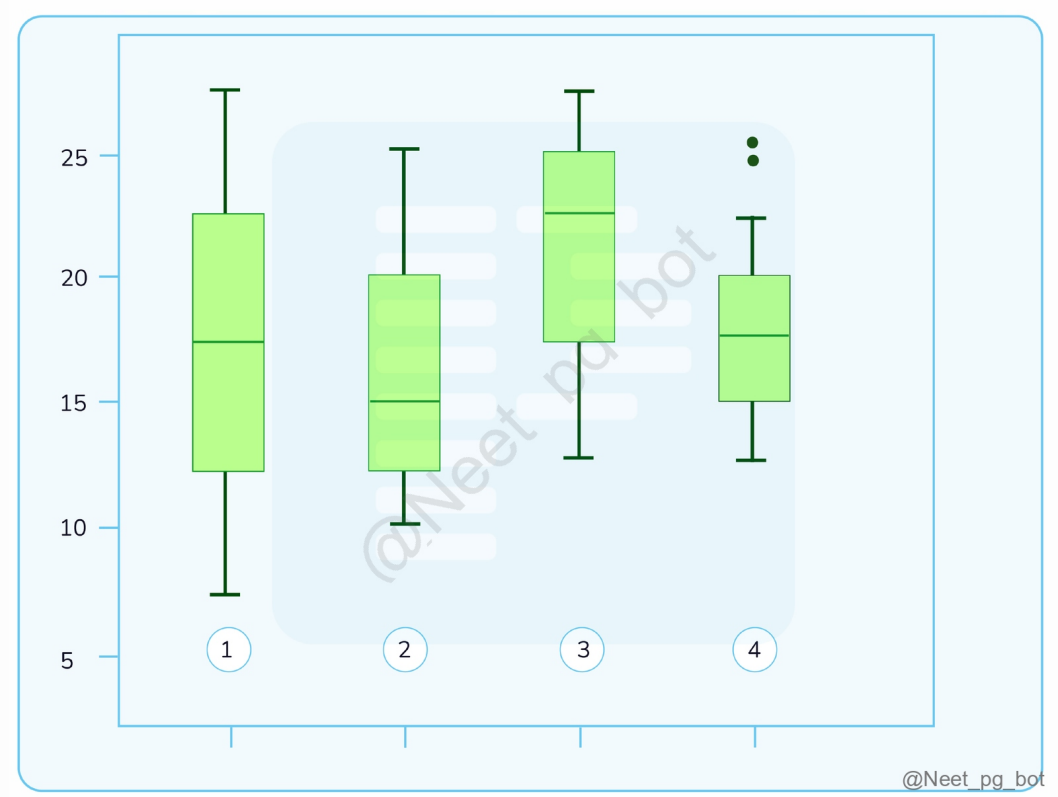
Q10: Interpret the following graph (in order from left to right): (Q855319)

A. Normal, negatively skewed, positively skewed, skewed with outliers

B. Normal, positively skewed, negatively skewed, normal with outliers

C. Normal, negatively skewed, positively skewed, normal with outliers

D. Skewed with outliers, positively skewed, negatively skewed, normal



See Answer in Part B → Q10

@Neet_pg_bot

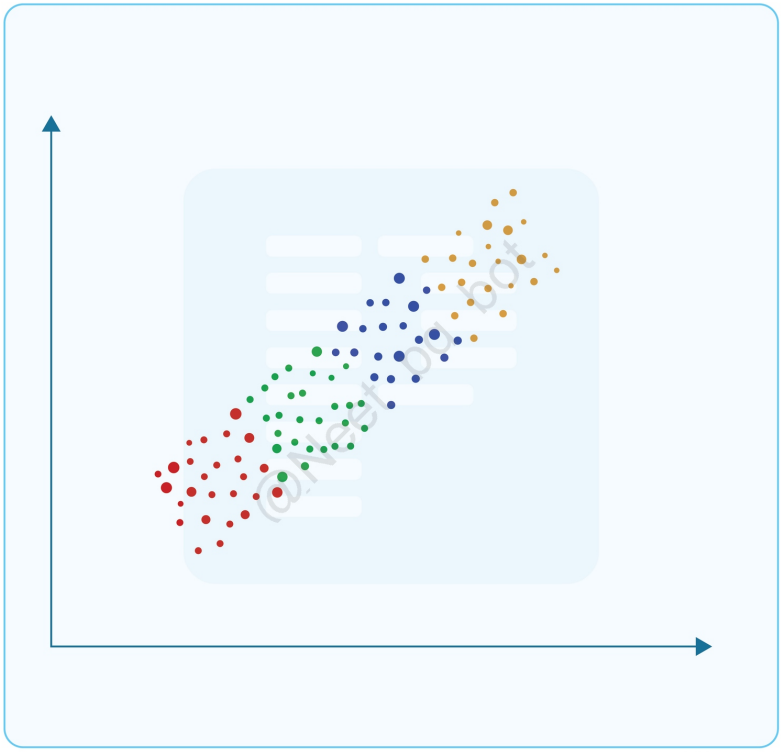
Q11: A homogenous sample of 4 groups was taken as shown below. The height and weight of each group had a correlation coefficient of 0.6. What will be the total coefficient of correlation of the whole group? (Q856594)

A. Equal to 0.6

B. Less than 0.6

C. More than 0.6

D. Skewed coefficient of 0.6



See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which one of the following is not a component of meta-analysis? (Q856611)

A. Selection

B. Analysis

C. Randomization

D. Abstraction

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Glasgow coma scale is a type of? (Q856881)

A. Nominal scale data

B. Ordinal scale data

C. Alphanumerical data

D. Interval scale data

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which one of the options listed below is a non-parametric test? (Q856461)

A. Student t test

B. Friedman test

C. ANOVA

D. Pearson

See Answer in Part B → Q14

@Neet_pg_bot

Q15: What is the term used to describe a probability distribution that represents the likelihood of a specific number of events occurring within a specific time period? (Q856465)

A. Binomial distribution

B. Gaussian distribution

C. Poissons distribution

D. Normal distribution

See Answer in Part B → Q15

@Neet_pg_bot

Q16: 5-year old Ram and 3-year-old Sham are Rama Devi's sons. Sham developed a rash, but Rama Devi ignored it, assuming it to be an allergy. After 10 days, Ram also developed a rash along with a fever. Out of fear, Rama Devi took Ram to the primary health center (PHC). The healthcare workers at the PHC suspected it to be measles. Choose all correct options from among the following: 1. Ram is an index case. 2. Sham is a primary case 3. Ram got the infection from Sham 4. Ram could have received post-exposure prophylaxis if his mother had brought him to the hospital when Sham got the rash. (Q855130)

A. 1, 2, 3 and 4 are correct

B. 1 only is correct

C. 1 and 4 are correct

D. 1 and 3 are correct

See Answer in Part B → Q16

@Neet_pg_bot

Q17: In a population study, if the mean value is 200 and the standard deviation is 20, what percentage of the population will fall within one standard deviation of the mean? (Q854842)

A. 68%

B. 95%

C. 38%

D. 99.7%

See Answer in Part B → Q17

@Neet_pg_bot

Q18: The variation in a data set is compared with that of another data set using? (Q854848)

A. Variance

B. Coefficient of variation

C. Standard error of mean

D. Standard deviation

See Answer in Part B → Q18

@Neet_pg_bot

Q19: How is the calculation of one variable using another variable typically performed? (Q854850)

A. Coefficient of correlation

B. Coefficient of regression

C. Coefficient of variation

D. Coefficient of determination

See Answer in Part B → Q19

@Neet_pg_bot

Q20: What does a correlation coefficient of less than 0.5 signify? (Q854887)

A. Confidence interval of 95%

B. Weak correlation

C. Not statistically significant

D. Strong correlation

See Answer in Part B → Q20

@Neet_pg_bot

Q21: What is the term used to describe the value that appears most frequently in a set of data? (Q859184)

A. Median

B. Mode

C. Standard deviation

D. Mean

See Answer in Part B → Q21

@Neet_pg_bot

Q22: A study was done to assess nutritional status among young children in rural and urban areas. 40 children in rural and 30 children in urban areas were malnourished. Which of the following tests of significance is the most appropriate in this case? (Q859445)

A. Chi Square test

B. Paired T test

C. Standard error of the mean

D. ANOVA

See Answer in Part B → Q22

@Neet_pg_bot

Q23: What is the most effective method for graphically representing the fluctuations in disease occurrence within a specific geographical region? (Q859447)

A. Line graph

B. Histogram

C. Ogive

D. Tree diagram

See Answer in Part B → Q23

@Neet_pg_bot

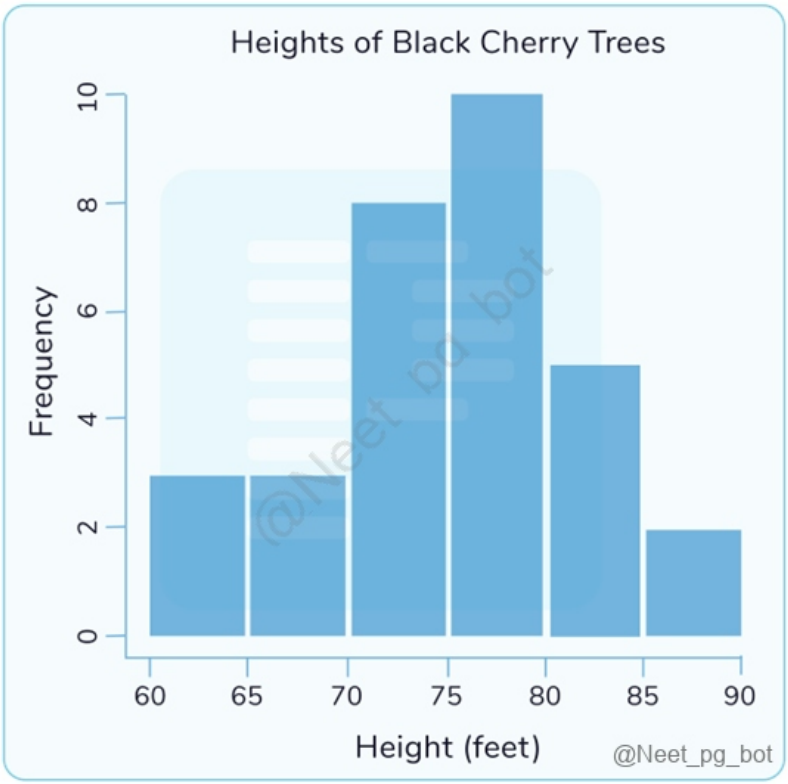
Q24: For which type of variables is the following data representation used? (Q859449)

A. Nominal

B. Discrete

C. Continuous

D. All the above



See Answer in Part B → Q24

@Neet_pg_bot

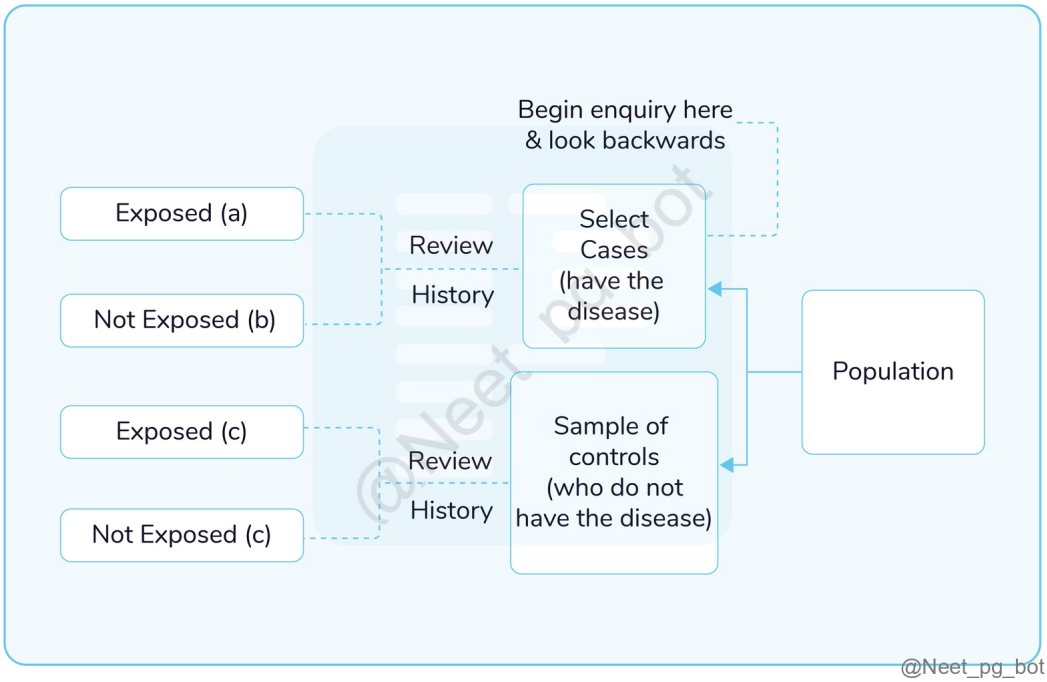
Q25: Please determine the study design based on the following information: (Q859462)

A. Prospective cohort study

B. Retrospective cohort study

C. Case control study

D. Nested case control study



See Answer in Part B → Q25

@Neet_pg_bot

Q26: A researcher is studying the difference in the incidence of asthma in children who are exposed to second-hand smoke and those who are not. If he wishes to express the additional incidence of asthma in the exposed children as a percentage, which of the following should he use? (Q859468)

A. Attributable risk

B. Relative risk

C. Odds ratio

D. None of the above

See Answer in Part B → Q26

@Neet_pg_bot

Q27: The blood pressure of 200 hypertensive patients is being compared after 3 months. One group of 100 patients received medical advice, while the other group of 100 patients were advised to make lifestyle changes. Which test of significance is used to compare the blood pressure in these two groups? (Q859960)

A. ANOVA

B. Un-paired T test

C. Chi-square test

D. Paired T test

See Answer in Part B → Q27

@Neet_pg_bot

Q28: A study conducted on 46 mothers who delivered deformed babies showed that 41 were found to have thalidomide during their early pregnancy; what kind of study is being done here? (Q860017)

A. Prospective cohort study

B. Retrospective cohort study

C. Case-control study

D. Descriptive study

See Answer in Part B → Q28

@Neet_pg_bot

Q29: In a study, the p-value obtained was 0.03. What does this imply? (Q879030)

A. There is a 3% probability that the result occurred due to chance.

B. There is 97% confidence that the null hypothesis is true.

C. The observed difference is not statistically significant.

D. The null hypothesis is rejected as the probability of chance is less than 2%.

See Answer in Part B → Q29

@Neet_pg_bot

Q30: A group of 80 people was studied to assess the effect of diet modification on mean cholesterol levels before and after the intervention. Which statistical test is most appropriate to compare the mean cholesterol levels before and after the diet modification? (Q844049)

A. Paired t-test

B. McNemar test

C. Chi-square test

D. Wilcoxon signed-rank test

See Answer in Part B → Q30

@Neet_pg_bot

Q31: In a group, the mean blood glucose level is 105 mg/dL with a standard deviation of 10 mg/dL. Assuming a normal distribution, what is the expected range of blood glucose values for approximately 95% of the population? (Q866773)

A. 85 – 125 mg/dL

B. 101 – 110 mg/dL

C. 90 – 125 mg/dL

D. 95 – 115 mg/dL

See Answer in Part B → Q31

@Neet_pg_bot

Q32: In a study, an investigator compared the mean blood pressure and standard deviation between two independent groups. Which of the following is the most appropriate statistical test to assess the significance of the difference between the two means? (Q866878)

A. Paired t-test

B. Unpaired t-test

C. Chi-square test

D. ANOVA

See Answer in Part B → Q32

@Neet_pg_bot

Q33: At a PHC, a medical officer provides treatment and counselling to diabetic patients. Their body weights are recorded before the intervention and again 6 months later, using the health register. Which of the following statistical tests is most appropriate to analyze the change in weight in this group? (Q865268)

A. Chi-square test

B. Paired t-test

C. ANOVA test

D. Independent t-test

See Answer in Part B → Q33

@Neet_pg_bot

Q34: Which of the following pairs is incorrectly matched concerning basic statistical concepts? (Q865271)

A. Standard error - Variability

B. Correlation coefficient - Relationship

C. Mean and median - Dispersion

D. Moments - Skewness

See Answer in Part B → Q34

@Neet_pg_bot

Q35: In a hospital, patients are classified into three groups based on disease severity: mild, moderate, and severe. One patient is randomly selected from each group for a study. What type of sampling method is this? (Q865349)

A. Simple random sampling

B. Systemic sampling

C. Stratified random sampling

D. Cluster sampling

See Answer in Part B → Q35

@Neet_pg_bot

Q36: In statistics, what do centiles and quartiles primarily represent? (Q865356)

A. Measures of central tendency

B. Measures of dispersion

C. Measures of position

D. Measures of correlation

See Answer in Part B → Q36

@Neet_pg_bot

Q37: Which of the following is the correct sequence of steps in a Randomized Controlled Trial (RCT)? (Q866431)

A. Follow-up → Manipulation → Assessment → Randomisation

B. Randomisation → Manipulation → Follow-up → Assessment

C. Assessment → Randomisation → Follow-up → Manipulation

D. Manipulation → Assessment → Follow-up → Randomisation

See Answer in Part B → Q37

@Neet_pg_bot

Q38: A study is conducted to compare the mean hemoglobin (Hb) levels between two independent groups. Which statistical test is most appropriate? (Q866434)

A. Paired t-test

B. Unpaired t-test

C. Chi-square test

D. ANOVA

See Answer in Part B → Q38

@Neet_pg_bot

Q39: Which of the following is used to measure the degree of objective and target achievement, and assess the quality of results obtained in a health program? (Q866461)

A. Planning

B. Surveillance

C. Monitoring

D. Evaluation

See Answer in Part B → Q39

@Neet_pg_bot

Q40: A new community intervention is initiated to reduce prenatal sepsis. Researchers allocate 20 Primary Health Centres (PHCs) to receive standard care and 20 PHCs to receive a community-based intervention. What type of study design is this? (Q866465)

A. Cross-sectional study

B. Case-control study

C. Quasi-experimental study

D. Cluster-randomized control trial

See Answer in Part B → Q40

@Neet_pg_bot

Q41: In a district-level survey, the introduction of breast cancer screening showed an increased 5-year survival rate, but autopsy data revealed no change in mortality. What type of bias does this represent? (Q866473)

A. Survival bias

B. Lead time bias

C. Berksonian bias

D. Detection bias

See Answer in Part B → Q41

@Neet_pg_bot

Q42: Which of the following is the best study design as per hierarchy of evidence? (Q852837)

A. Meta analysis

B. Case control study

C. Cohort Study

D. Large RCT

See Answer in Part B → Q42

@Neet_pg_bot

Q43: Calculate the median of the following data set: 2, 3, 4, 4, 5, 6, 7, 8. (Q843994)

A. 4

B. 4.5

C. 4.8

D. 5

See Answer in Part B → Q43

@Neet_pg_bot

Q44: On January 1, 2024, an area with a population of 10,000 had 100 TB cases. During the year, 30 patients were cured and 10 died. Twenty new TB cases were reported, and 5 of them were cured before December 31, 2024. What is the incidence and prevalence of TB cases? (Q866757)

A. 0.2 and 0.75%

B. 1.2 % and 1%

C. 1.2 % and 2 %

D. 2 % and 0.75%

See Answer in Part B → Q44

@Neet_pg_bot

Q45: A statistician wants to study the effects of medicine in three groups: humans, animals, and plants. He selects randomly out of these three groups. Which type of sampling is performed here? (Q844062)

A. Simple Random Sampling

B. Systematic Sampling

C. Stratified Random Sampling

D. Cluster Sampling

See Answer in Part B → Q45

@Neet_pg_bot

Q46: A study was undertaken to establish consumption of vegetarian and non-vegetarian diet with disease. Which statistical test should be done? (Q844109)

A. Paired t-test

B. McNemar test

C. Chi-square test

D. Wilcoxon signed-rank test

See Answer in Part B → Q46

@Neet_pg_bot

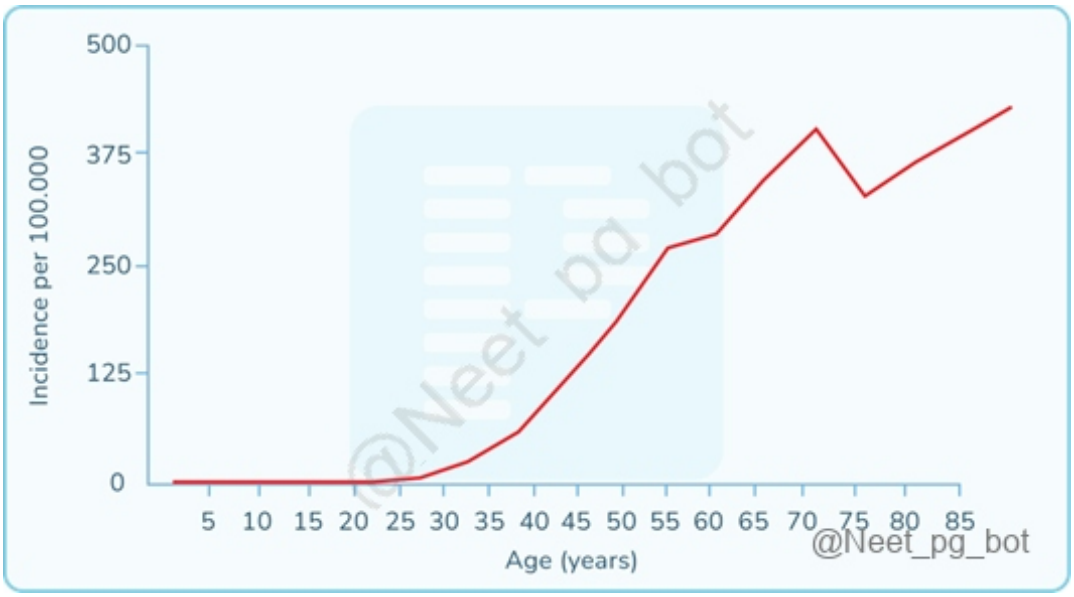
Q47: Identify the image? (Q860598)

A. Line diagram

B. Histogram

C. Scattered diagram

D. Frequency polygon



See Answer in Part B → Q47

@Neet_pg_bot

Q48: What percentage of data falls within one standard deviation of the mean in a normal distribution? (Q860004)

A. 68%

B. 95%

C. 98%

D. 99%

See Answer in Part B → Q48

@Neet_pg_bot

Q49: In biostatistics, formula given below stands for? $(\sigma) = \sqrt{[\Sigma(x - \mu^2/N]}$ (Q854752)

A. Standard Deviation

B. Sample Variance

C. Sample Mean

D. Median

See Answer in Part B → Q49

@Neet_pg_bot

Q50: 2 doctors were asked to report 100 X-rays and a Kappa value of 0.71; what is interpretation? (Q854774)

A. Good

B. Poor

C. Perfect Disagreement

D. Perfect Agreement

See Answer in Part B → Q50

@Neet_pg_bot

Q51: In order to investigate the dietary habits of the diverse population residing in the urban region of Delhi, a research study is being conducted. Which of the following methods can be utilized to acquire a representative sample for the study? (Q858071)

A. Cluster random sampling

B. Stratified random sampling

C. Simple random sampling

D. Systematic random sampling

See Answer in Part B → Q51

@Neet_pg_bot

Q52: In a patient, if a point-of-care diagnostic test with a sensitivity of 98% yields a negative test result, what does this indicate? (Q855265)

A. The patient would need another point–of–care diagnostic test for the same clinical condition

B. The prevalence of the disease is 2%.

C. The patient is less likely to have the disease

D. The patient has been wrongly ruled out due to false negatives

See Answer in Part B → Q52

@Neet_pg_bot

Q53: What is the branch of statistics dealing with method of data collection and counting? (Q855291)

A. Theoretical statistics

B. Descriptive statistics

C. Analytical statistics

D. Inferential statistics

See Answer in Part B → Q53

@Neet_pg_bot

Q54: Which of the following indicators can help determine whether the health system is important to identifying leprosy in the community? (Q855315)

A. Treatment completion rate

B. Annual new case detection rate per lac

C. Treatment initiation rate

D. Proportion of newly diagnosed patients with grade 2 disability

See Answer in Part B → Q54

@Neet_pg_bot

Q55: Which of the following statements accurately reflects the findings of the multivariate analysis presented in the table below, regarding the correlation between the risk of blindness and variables such as age, literacy rate, residence, and gender? Variables Odds ratio p-value Age <50y 1.1 <0.001 50-59y 1.2 <0.001 60-69y 1.5 <0.001 70-79y 1.6 <0.001 >80y 2.1 <0.001 Male 1.2 0.2 Female 0.3 <0.001 Rural 2.4 0.1 Urban 1 <0.001 Literate 0.4 <0.01 Illiterate 1.2 <0.01 1. The female population is at greater risk of developing blindness. 2. People dwelling in rural areas are at increased risk of developing blindness 3. The risk of developing blindness increases with age 4. Illiteracy leads to an increased risk of developing blindness (Q855321)

A. 2 and 3

B. 1 and 3

C. 1 and 2

D. 3 and 4

See Answer in Part B → Q55

@Neet_pg_bot

Q56: What is the most appropriate measure of central tendency when there is a diverse range of values within a community? (Q793625)

A. Mean

B. Mode

C. Median

D. Standard deviation

See Answer in Part B → Q56

@Neet_pg_bot

Q57: What is the best way to use a graphical representation to illustrate patterns and changes in the occurrence of diarrheal disease within a specific region? (Q793749)

A. Line graph

B. Histogram

C. Ogive

D. Tree diagram

See Answer in Part B → Q57

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• [19_Miscellaneous] 064 Previous Year Questions

« Back to Folder Directory

[19_Miscellaneous] 064 Previous Year Questions — Quick Jump

Q1 (p. 620) *Q2 (p. 620)* *Q3 (p. 621)* *Q4 (p. 621)* *Q5 (p. 622)* *Q6 (p. 622)*
Q7 (p. 622) *Q8 (p. 623)* *Q9 (p. 624)*

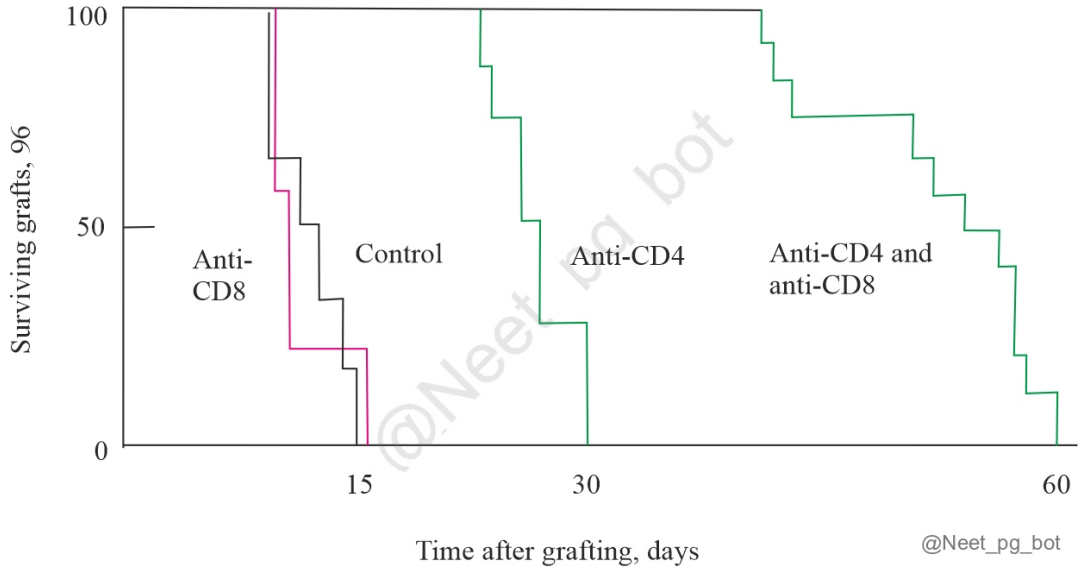
Q1: Choose the correct statement regarding graft survival: (Q839897)

A. Both CD4 and CD8 T cells play a role in graft rejection

B. Only CD8 T cells play a role in graft rejection

C. Only CD4 T cells play a role in graft rejection

D. Neither CD4 nor CD8 T cells play a role in graft rejection



See Answer in Part B → Q1

@Neet_pg_bot

Q2: In a train accident, there were 74 dead, 64 were severely injured, 20 moderately injured and 12 mildly injured. Colour coding in triage, from highest to lowest priority is: (Q859434)

A. Green-Yellow- Red-Black

B. Yellow- Red-Green-Black

C. Black-Red-Yellow- Green

D. Red-Yellow-Green-Black

See Answer in Part B → Q2

@Neet_pg_bot

Q3: What is the likely cause of hepatocellular carcinoma in a factory worker employed in a groundnut factory who does not consume alcohol and has had a prolonged duration of employment? (Q859470)

A. Beta oxalyl amino alanine

B. Smoke from factory

C. Sanguinarine

D. Aflatoxins

See Answer in Part B → Q3

@Neet_pg_bot

Q4: What is the most common cause of jaundice in this newborn presenting with conjugated hyperbilirubinemia, intrahepatic cholestasis, high alkaline phosphatase, and the presence of eosinophilic, PAS-positive cytoplasmic granules in liver biopsy specimens, suggestive of Alpha 1 AT deficiency? (Q859486)

A. Hypoplasia of the biliary tract

B. Neonatal hepatitis

C. Choledochal cyst

D. Physiological

See Answer in Part B → Q4

@Neet_pg_bot

Q5: In a triage system, the patients with the highest priority and those who are deceased are identified by color coding. (Q859917)

A. Black and red

B. Both black

C. Red and black

D. Both red

See Answer in Part B → Q5

@Neet_pg_bot

Q6: In a boarding school where students share the same canteen, one student experienced abdominal pain, jaundice, and fever. Subsequently, other students began showing similar symptoms. Which investigations should the local medical officer consider in order to arrive at a diagnosis? (Q859955)

A. IgA for hepatitis A

B. IgM for hepatitis A

C. IgM for hepatitis B

D. IgG for hepatitis B

See Answer in Part B → Q6

@Neet_pg_bot

Q7: What type of learning is demonstrated when a doctor instructs an intern on proper technique for performing the knee reflex, emphasizing its significance in clinical practice? (Q859970)

A. Cognitive learning

B. Psychomotor learning

C. Affective learning

D. Repeated learning

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A 32-year-old man presents with multiple, symmetrical, hypopigmented skin lesions over his face, trunk, and limbs. The lesions are shiny with loss of sensation. He also has diffuse skin infiltration, giving a "leonine facies" appearance. Examination shows generalized thickening of peripheral nerves and numerous acid-fast bacilli arranged in globi on slit-skin smear. What is the most likely diagnosis? (Q859988)

A. Tuberculoid leprosy

B. Leishmaniasis

C. Borderline tuberculoid leprosy

D. Lepromatous leprosy



See Answer in Part B → Q8

@Neet_pg_bot

Q9: Installation and usage of sanitary latrines by general public constitutes which level of prevention: (Q860014)

A. Health promotion

B. Specific protection

C. Early diagnosis and treatment

D. Disability limitation and rehabilitation

See Answer in Part B → Q9

@Neet_pg_bot

• [20_Biomedical Waste Management] 065 Biomedical Waste Management And Genetics And Health

« Back to Folder Directory

[20_Biomedical Waste Management] 065 Biomedical Waste Management And Genetics And Health — Quick Jump

Q1 (p. 625)	*Q2 (p. 626)*	*Q3 (p. 626)*	*Q4 (p. 626)*	*Q5 (p. 627)*	*Q6 (p. 627)*
Q7 (p. 627)	*Q8 (p. 628)*	*Q9 (p. 628)*	*Q10 (p. 629)*	*Q11 (p. 629)*	*Q12 (p. 629)*
Q13 (p. 630)	*Q14 (p. 630)*	*Q15 (p. 630)*	*Q16 (p. 631)*		

Q1: What is the following logo used to indicate in biomedical waste management? (Q841085)

A. Biohazard

B. Radiation Hazard

C. Recycling

D. Toxic Hazard



See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which color-coded container is used for disposing of infectious biomedical waste, such as contaminated dressings or swabs? (Q841089)

A. Yellow

B. Red

C. Blue

D. Black

See Answer in Part B → Q2

@Neet_pg_bot

Q3: Which color plastic bag would expired medications be discarded in according to the biomedical waste management guidelines? (Q841092)

A. Red

B. Blue

C. Yellow

D. White

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Personal Protective Equipment (PPE) like Face shields, goggles, gloves and hazmat suits are disposed of in which colour bin? (Q841093)

A. Blue

B. Yellow

C. Red

D. White

See Answer in Part B → Q4

@Neet_pg_bot

Q5: How should vacutainers with blood be disposed in a healthcare facility? (Q841094)

A. Yellow bag

B. Red bag

C. Blue bag

D. Black bag

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Which of the following chemical agents is used in the management of a mercury spill? (Q841096)

A. Sodium hypochlorite

B. Sodium thiosulphate

C. Sodium sulphate

D. Sodium nitrate

See Answer in Part B → Q6

@Neet_pg_bot

Q7: A rural clinic generates biomedical waste daily with no nearest biomedical waste treatment facility nearby. What is the most appropriate method for disposing of biomedical waste in this situation? (Q841106)

A. Landfills

B. Deep burial

C. Use of disinfectants and dispose with municipal waste

D. None of the above

See Answer in Part B → Q7

@Neet_pg_bot

Q8: A patient involved in an accident has sustained multiple injuries and a large amount of blood spills onto the floor. Which of the following is used for managing body spills? (Q841109)

A. 0.1% sodium hypochlorite solution used

B. 1% sodium thiosulphate solution used

C. 10% sodium hypochlorite solution used

D. 10% sodium thiosulphate solution used

See Answer in Part B → Q8

@Neet_pg_bot

Q9: Match the following parameters with their correct values for standard autoclaving procedures. Temperature Pressure Time a. Not less than 121°C i. 52 pounds/square inch 1. 60mins b. Not less than 135°C ii. 15 pounds/square inch 2. 30 mins c. Not less than 149°C iii. 31 pounds/square inch 3. 45 mins (Q841118)

A. a-ii-2

B. b-iii-1

C. c-i-3

D. c-i-2

See Answer in Part B → Q9

@Neet_pg_bot

Q10: Which of the following statements is false ? (Q841122)

A. The best way to dispose of sputum is incineration

B. Inertization includes mixing waste with cement and other substances before disposal

C. Contents of red bag should be incinerated

D. Screw Feed Technique is contraindicated for radiological waste

See Answer in Part B → Q10

@Neet_pg_bot

Q11: In a home quarantine setting for a COVID-19 patient, which coloured bags should be used for disposing of biomedical waste according to the specified protocol? (Q841124)

A. Red bag for used masks and tissues, yellow bag for rapid COVID-19 antigen test kits

B. Yellow bag for used masks and tissues, black bag for general waste

C. Black bag for used masks and tissues, yellow bag for rapid COVID-19 antigen test kits

D. Red bag for used masks and tissues, black bag for general waste

See Answer in Part B → Q11

@Neet_pg_bot

Q12: Which term refers to the study and practice of improving the genetic quality of the human population through genetic manipulation? (Q841329)

A. Euthenics

B. Eugenics

C. Epigenetics

D. Ethnology

See Answer in Part B → Q12

@Neet_pg_bot

Q13: Which statement does not align with the Hardy-Weinberg Principle? (Q841330)

A. Frequency remains constant through generations

B. Gene pool remains stable

C. Allele frequencies vary within a species

D. Presence of random mating and a large population size

See Answer in Part B → Q13

@Neet_pg_bot

Q14: Which of the following factors can lead to deviations from the Hardy-Weinberg equilibrium? (Q841331)

A. Genetic drift

B. Natural selection

C. Mutation

D. All of the above

See Answer in Part B → Q14

@Neet_pg_bot

Q15: Which of the following best describes prospective genetic counselling? (Q841332)

A. Identifying heterozygous individuals for a specific defect through screening

B. Seeking genetic advice after a hereditary disorder has already occurred in the family

C. Discussing options such as contraception and termination of pregnancy based on genetic information

D. Counselling individuals with congenital anomalies, mental retardation, or inborn errors of metabolism

See Answer in Part B → Q15

@Neet_pg_bot

Q16: Which of the following waste types is not suitable for disposal by incineration? (Q845081)

A. Pathological waste

B. Cytotoxic waste

C. Pressurized gas containers

D. Sharp waste

See Answer in Part B → Q16

@Neet_pg_bot

• [20_Biomedical Waste Management] 066 Previous Year Questions

« Back to Folder Directory

[20_Biomedical Waste Management] 066 Previous Year Questions — Quick Jump

Q1 (p. 632) *Q2 (p. 632)* *Q3 (p. 632)* *Q4 (p. 633)* *Q5 (p. 633)* *Q6 (p. 633)*
Q7 (p. 634)

Q1: In which of the following should a cotton swab with pus be discarded? (Q866761)

A. Yellow chlorination bag

B. Yellow non-chlorination bag

C. Red chlorination bag

D. Red non-chlorination bag

See Answer in Part B → Q1

@Neet_pg_bot

Q2: Which among the following logos will be seen in a contaminated biomedical waste management plant? (Q866772)

See Answer in Part B → Q2

@Neet_pg_bot

Q3: During a field visit to monitor training given to an ANM (Auxiliary Nurse Midwife) on safe immunization practices, you observe that she has used a syringe with a needle, a vaccine vial, and a cotton swab. After completing the immunization, which of the following statements about biomedical waste disposal is correct? (Q866798)

A. The syringe with the needle should be disposed of in a black translucent container

B. The used vaccine vial should be discarded in a blue bag

C. A used cotton swab should be discarded in a red bag

D. The needle should be bent and thrown in a red bag

See Answer in Part B → Q3

@Neet_pg_bot

Q4: Which of the following combination of biomedical waste management is correct regarding the disposal of an Expired tablet? (Q820557)

A. Red bag - hydroclaving

B. Blue bag - incineration

C. Yellow bag- incineration

D. Yellow bag - burial

See Answer in Part B → Q4

@Neet_pg_bot

Q5: As per biomedical waste management guidelines, in which colored bag should pacemakers be discarded? (Q856458)

A. Yellow

B. White

C. Black

D. Blue

See Answer in Part B → Q5

@Neet_pg_bot

Q6: Cytotoxic drug is disposed in: (Q859179)

A. Yellow bag

B. Red bag

C. Blue bag

D. Black bag

See Answer in Part B → Q6

@Neet_pg_bot

Q7: Which of the options below could have been discarded in the white bag by the compounder as biomedical waste? (Q859802)

A. Anatomical waste

B. Sharp waste

C. Glassware

D. Plastic waste

See Answer in Part B → Q7

@Neet_pg_bot

Part B — All Answers & Explanations

• [01_ Concept of Health and Disease] 001 Concept Of Disease Well-Being

« Back to Folder Directory

[01_ Concept of Health and Disease] 001 Concept Of Disease Well-Being — Quick Jump

Q1 (p. 635)	*Q2 (p. 636)*	*Q3 (p. 637)*	*Q4 (p. 637)*	*Q5 (p. 639)*	*Q6 (p. 639)*
Q7 (p. 640)	*Q8 (p. 641)*	*Q9 (p. 641)*	*Q10 (p. 643)*	*Q11 (p. 644)*	*Q12 (p. 645)*
Q13 (p. 645)	*Q14 (p. 646)*	*Q15 (p. 647)*	*Q16 (p. 648)*	*Q17 (p. 649)*	*Q18 (p. 649)*
Q19 (p. 650)	*Q20 (p. 651)*	*Q21 (p. 652)*	*Q22 (p. 652)*	*Q23 (p. 653)*	*Q24 (p. 654)*
Q25 (p. 655)	*Q26 (p. 655)*	*Q27 (p. 656)*	*Q28 (p. 657)*	*Q29 (p. 658)*	

Q1: Which aspect of a disease does the Case Fatality Rate (CFR) primarily measure ? (Q840546)

A. Infectivity

B. Pathogenicity

C. Virulence

D. Transmissibility

Correct Answer: C. Virulence

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Case Fatality Rate (CFR) is closely related to virulence, representing the killing power of a disease. It is calculated as the ratio of deaths to cases , without specifying a time interval, using the formula: CFR is a proportion, not a rate. CFR is typically used for acute infectious diseases (e.g., food poisoning, cholera, measles) but is less useful for chronic diseases due to the long and variable period from onset to death. The CFR for the same disease can vary across different epidemics due to agent, host, and environmental changes. CSR (Case survival rate) = 100-CFR Virulence (Option C) The degree of severity or harmfulness of a disease, measuring the proportion of severe or fatal cases. Infectivity (Option A) The ability of a pathogen to establish an infection and spread among a population. Pathogenicity (Option B) The ability of a microorganism to cause disease determines whether an infection will manifest as an illness. Transmissibility (Communicability) (Option

D) The ability of a disease to be transmitted from one host to another indicates how easily it spreads. This is measured by Secondary attack rate.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 66

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which theory of disease causation emphasises the role of genetic predisposition and environmental factors in the development of diseases? (Q840544)

A. Miasma Theory

B. Germ Theory

C. Multifactorial Theory

D. Epidemiological Triad Theory

Correct Answer: C. Multifactorial Theory

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Multifactorial Theory of disease causation emphasizes that diseases are not caused by a single factor but by a combination of genetic predisposition, environmental influences, lifestyle choices, culture, and physiological factors. Theory Description Miasma Theory (Option A) Suggests that diseases are caused by " bad air " or miasmas, disease occurrence is associated with environmental conditions. Germ Theory (Option B) States that microorganisms (germs) are the primary cause of many diseases, given by Louis Pasteur. Epidemiological Triad Theory (Option D) Describes the interaction between the agent, host, and environment.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page no: 40

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: How much weightage is placed on health outcomes to calculate NITI Aayog's annual health index? (Q846674)

A. 65%

B. 70%

C. 12%

D. 18%

Correct Answer: B. 70%

Explanation: Health index of India (HIl) / NITI Aayog’s index is based on 3 parameters. Parameter Weightage Health outcomes (NFHS-5 indicators) 70% Governance and information (CMO/DTO/senior officials) 12% Key inputs and processes(FRU/CHC/PHC) 18%

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 17. https://social.niti.gov.in/hlt-ranking.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following is not included in the Global Hunger Index? (Q840555)

A. Infant mortality rate

B. Child undernutrition

C. Child mortality rate

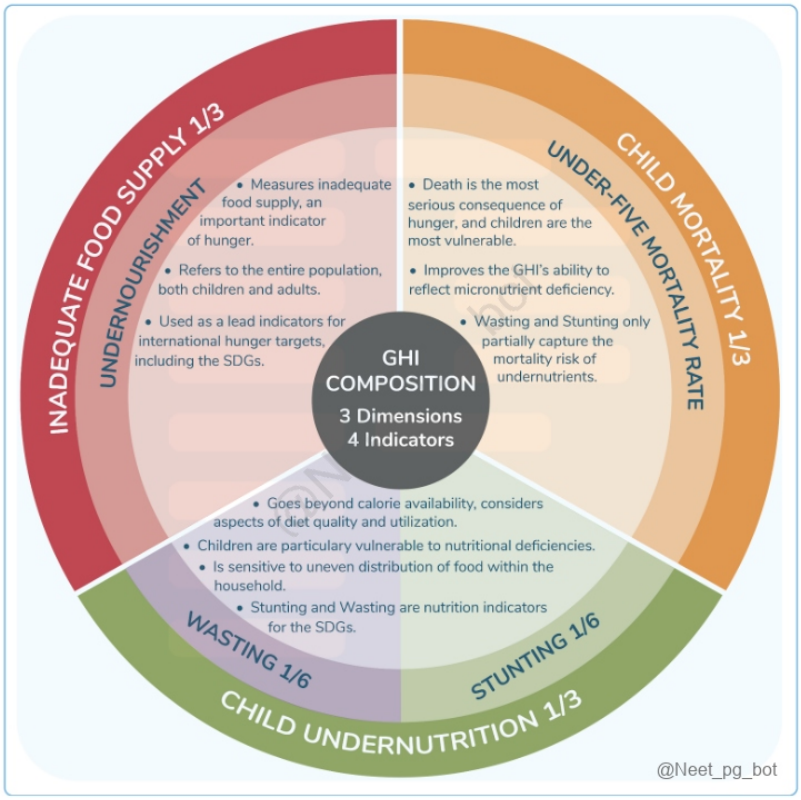
D. Food availability

Correct Answer: A. Infant mortality rate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Global Hunger Index (GHI) does not include the Infant mortality rate. It measures three dimensions of hunger: Food availability (Option D) Child's nutritional status (Option B) Child mortality due to undernutrition (Option C) It includes three equally weighted indicators(arithmetic mean): The proportion of people who are food energy-deficient (FAO estimates) Prevalence of underweight children under 5 years (WHO data) Mortality rate of children under 5 years (UNICEF reports) In 2022, India's GHI rank was 107 out of the 121 countries with sufficient data to calculate 2022 GHI scores. With a score of 29.1, India has a serious level of hunger.



References:

https://www.who.int/data/nutrition/nlis/info/global-hunger-index-(ghi)

↑ *Back to this question in Part A*

Q5: How does the Multidimensional Poverty Index (MPI) offer a more comprehensive view of poverty than traditional income-based measures? (Q840554)

A. By measuring only the income levels of households.

B. By focusing solely on the employment status of individuals.

C. By including various indicators of health, education, and living standards.

D. By evaluating the GDP per capita of the country.

Correct Answer: C. By including various indicators of health, education, and living standards.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Multidimensional poverty index (MDPI) complements traditional monetary poverty measures by simultaneously capturing the acute deprivations in: Health Education Living standards of the person MDPI is interpreted in the range of 0-1. The use of MDPI is the measure of acute poverty. India's MDPI is 0.121, with a 27.5% poor population. The Human Poverty Index (HPI) was replaced by the MDPI in 2010, as it was not specific to any group of people. Individuals are classified as multidimensionally deprived if they fall short in at least one dimension or in a combination of indicators that total the weight of a full dimension. Households are considered poor if deprived in indicators adding up to 1/3 or more . Dimensions of Poverty Indicator Health Nutrition (1/6) Child mortality (1/6) Education Years of schooling (1/6) School attendance (1/6) Standard of living Cooking Fuel (1/18) Sanitation (1/18) Drinking Water (1/18) Electricity (1/18) Housing (1/18) Assets (1/18)

References:

https://hdr.undp.org/content/2023-global-multidimensional-poverty-index-mpi#/indicies/MPI

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following is not an indicator of the human poverty index? (Q840553)

A. The proportion of people not surviving until the age of 40 years

B. Occupation and income

C. Percentage of underweight children

D. No access to safe water supply and sanitation

Correct Answer: B. Occupation and income

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Human Poverty Index (HPI) does not typically consider occupation and income. It focuses more on deprivation in basic human capabilities and social indicators rather than solely on income or occupation. The Human Poverty Index (HPI) was developed to measure relative poverty, which refers to the lack of access to other facilities and services. Indicators of HPI: Longevity: The proportion of people not surviving until the age of 40 years). Knowledge: Adult Literacy Rate Standard of living: No access to safe water supply and sanitization and % of children underweight. HPI 1 is used for developing countries, and HPI 2 is used for developed countries. In 2010, HPI was replaced by the Multidimensional Poverty Index(MDPI).

References:

hdr.undp.org/data-center/human-development-index#/indicies/HDI

https://communitymedicine4asses.wordpress.com/2019/12/24/human-poverty-index-hpi-and-multidimensional-poverty-index-mpi/

https://en.wikipedia.org/wiki/Poverty_threshold#:~:text=In%20September%202022%2C%20the%20World,for%20upper%2Dmiddle%20income%20countries.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A public health researcher analyses data to understand gender disparities in human development within a specific region. The researcher is particularly interested in the components used to calculate the Gender Development Index (GDI). All of the following are components of the GDI except? (Q840552)

A. Life expectancy at birth for both males and females

B. Education index of both males and females

C. Infant mortality rates of both males and females

D. Standard of living for both males and females

Correct Answer: C. Infant mortality rates of both males and females

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Gender Development Index (GDI) assesses gender disparities in three fundamental areas of human development: Life expectancy at birth. Knowledge : Male adult literacy rate + Male gross enrollment ratio

and female adult literacy rate + female gross enrollment ratio. Standard of living : Estimated earned income for both males and females. As per the HDR 2022, India's GDI value is 0.852, with the GDI value for females standing at 0.582 and that for males at 0.684.

References:

hdr.undp.org/gender-development-index#/indicies/GDI

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following is true regarding the Physical quality of life index (PQLI)? (Q840551)

A. Measures life expectancy at birth

B. Measures the infant mortality rate

C. Measures gross national income (GNI) per capita

D. Lies between 0-1

Correct Answer: B. Measures the infant mortality rate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The physical quality of life index (PQLI) includes the infant mortality rate as one of its three components. Physical quality of life index (PQLI) Human Development Index (HDI) PQLI is a measure developed to assess the general well-being of a population. HDI is a composite measure that evaluates human development across three dimensions: health, education, and standard of living. Components: Life expectancy at one year of age Literacy rate Infant mortality rate (Option B) Components: Life expectancy at birth (Option A) Knowledge index or educational index = (EYS + MYS)/2 Gross national income per capita (Option C) HDI is a geometric mean of all dimension indices Evaluated on a scale of 0-100 Evaluated on a scale of 0-1 (Option D) EYS = Expected Year of School; MYS = Mean Year of School

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 17

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following diseases typically does not exhibit a large hidden portion according to the Iceberg phenomenon? (Q840550)

A. Tuberculosis

B. Measles

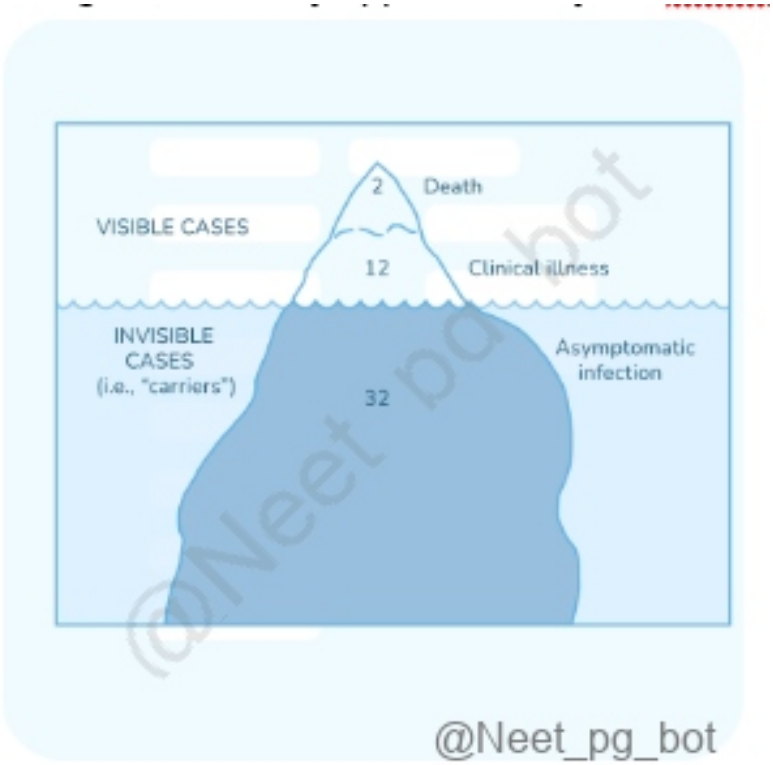
C. HIV

D. Cancer

Correct Answer: B. Measles

- *Listen (English)*
- *Listen (Hindi)*

Explanation: Measles typically does not exhibit a large hidden portion in the Iceberg phenomenon due to its highly recognizable symptoms, lack of long-term asymptomatic carriers, and prompt clinical diagnosis. Iceberg phenomenon of disease: It suggests that some diseases have a significant portion of undiagnosed or asymptomatic cases, while only a small portion is diagnosed and visible. The "tip of the iceberg" denotes diagnosed cases or apparent infections of concern to physicians, where diagnostic tests are applied. The "hidden portion" includes undiagnosed or asymptomatic individuals of concern to epidemiologists, who may appear healthy but harbor the disease's pathogenesis. Diseases that follow the Iceberg phenomenon Diseases that don't follow the Iceberg phenomenon Non-communicable diseases Cancer Protein-energy malnutrition cases Tuberculosis HIV/AIDS Measles Rabies (Highest CFR rate) Tetanus



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page no: 46 https://www.researchgate.net/figure/Iceberg-phenomenon-illustration-in-view-of-diseases_fig1_313459991&sa=D&source=docs&ust=1718649318098831&usg=AOvVaw10IGDu53y-UD8mVZQT_gCh

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following diseases does NOT follow the spectrum of disease principle? (Q840549)

A. Leprosy

B. Influenza

C. Rabies

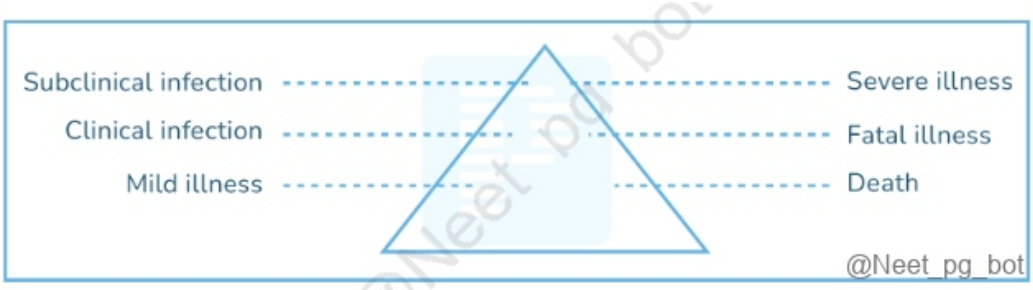
D. Tuberculosis

Correct Answer: C. Rabies

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Rabies progresses rapidly from initial infection to severe neurological symptoms and death without distinct stages of varying severity. Diseases like Leprosy (Option A), Influenza (Option B), and Tuberculosis (Option D) have distinct stages of varying severity. Spectrum of Disease: It represents the range of variations in disease manifestations. This difference in manifestation reflects individual differences in immunity and susceptibility. Leprosy exemplifies the spectrum of disease principles, showing varying severities. Significance: The spectrum of disease includes both subclinical and clinical cases, facilitating comprehensive disease study.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page no: 45

↑ *Back to this question in Part A*

Q11: Why is the web of causation models considered beneficial for public health interventions? (Q840547)

A. It identifies a single cause for targeted intervention.

B. It suggests that only one factor needs to be addressed for disease control.

C. It highlights multiple points where interventions can reduce disease occurrence.

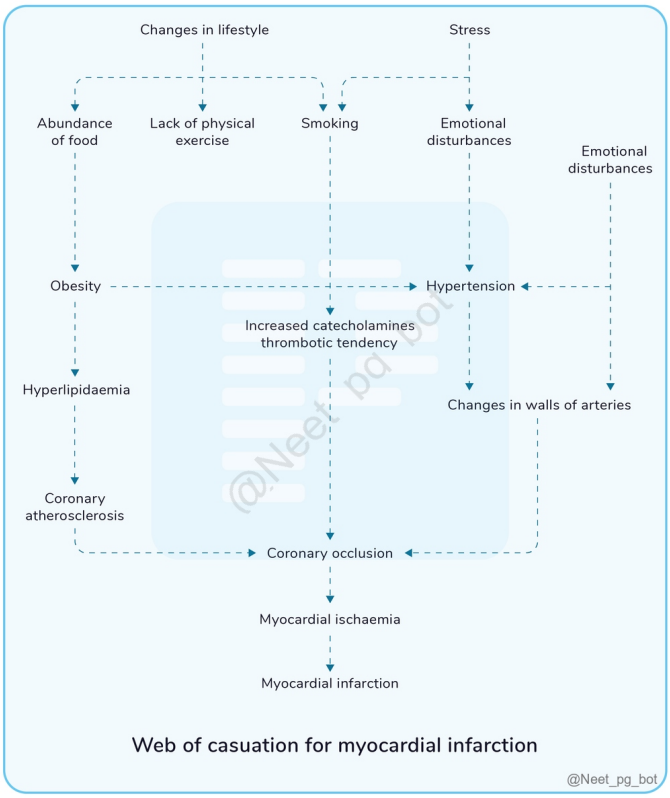
D. It eliminates the need for further research.

Correct Answer: C. It highlights multiple points where interventions can reduce disease occurrence.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The web of causation model is beneficial because it identifies the complex interrelationships of multiple factors contributing to disease. It is ideal for studying chronic diseases where the disease agent is often unknown.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page no: 41

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: In the new ICD-11, gender incongruence has been moved from mental health conditions to which new chapter? (Q890873)

A. Traditional medicine

B. Sexual health

C. Immune system disorders

D. Addictive disorders

Correct Answer: B. Sexual health

Explanation: ICD-11 introduced a new chapter on “Conditions related to sexual health,” to which gender incongruence has been moved from the mental disorders chapter. This reclassification reflects the understanding that gender incongruence is not a mental health condition and helps reduce stigma associated with gender-related states. ICD-11 was adopted by the World Health Assembly in 2019 and came into effect on 1 January 2022 . It includes over 55,000 entities and about 120,000 clinical terms and was designed for digital health applications . Important updates in ICD-11 include the new chapter on sexual health , a chapter on traditional medicine , reclassification of stroke as a neurological disorder , coding of allergy under diseases of the immune system , and the addition of addictive behaviours such as gaming disorder . Traditional medicine (Option A): ICD-11 introduced a separate chapter for traditional medicine , mainly to classify diagnostic patterns used in traditional systems of medicine (such as Chinese, Japanese, and Korean medicine). Gender incongruence is not classified in this chapter. Immune system disorders (Option C): This chapter includes conditions such as primary immunodeficiencies, autoimmune diseases, and allergies . Gender incongruence is unrelated to immune system disorders. Addictive disorders (Option D): ICD-11 added new addictive behaviours, such as gaming disorder, under mental, behavioural or neurodevelopmental disorders. Gender incongruence was specifically removed from the mental disorders chapter and moved to the sexual health chapter instead.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 56, 57, 58

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Maternal and neonatal tetanus was declared eliminated in India in which year, as certified by WHO? (Q890870)

A. 2014

B. 2015

C. 2016

D. 2017

Correct Answer: B. 2015

Explanation: Maternal and neonatal tetanus (MNT) was officially validated as eliminated in India by WHO in May 2015. Elimination was achieved through strategies such as tetanus toxoid immunisation of pregnant women, promotion of institutional deliveries, and adoption of clean delivery practices (the “five cleans”). Important Elimination/Eradication Years India: Guinea worm disease - 2000 Polio - 2014 Maternal & Neonatal Tetanus - 2015 Yaws - 2016 Infective trachoma - 2017 Worldwide: Smallpox - 1980 Wild poliovirus type 2 - 2015 Wild poliovirus type 3 - 2019

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 365, 366

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Prescribing spectacles for refractive error is an example of: (Q890869)

A. Disability limitation (tertiary prevention)

B. Secondary prevention

C. Primary prevention

D. Health promotion

Correct Answer: A. Disability limitation (tertiary prevention)

Explanation: Prescribing spectacles for refractive error is an example of tertiary prevention because it limits disability caused by an existing impairment. Tertiary prevention includes all measures aimed at reducing or limiting impairments and disabilities and promoting adjustment to existing disease . It is applied in the late pathogenesis phase when disease or impairment is already present. Refractive error represents an impairment of visual function . Without correction, this impairment can lead to disability , such as difficulty in reading or performing daily activities, and may eventually result in handicap , affecting social and occupational functioning.

Prescribing spectacles corrects the visual defect and restores functional ability , thereby limiting disability Secondary prevention (Option B): Secondary prevention involves early diagnosis and prompt treatment of disease in its incipient stage , typically through screening and case-finding programmes. In this context, eye examination to detect refractive error represents secondary prevention. Primary prevention (Option C): Primary prevention involves action taken prior to the onset of disease to prevent its occurrence. Examples include measures that promote general health or protect against specific diseases before they develop. Health promotion (Option D): Health promotion refers to general measures aimed at improving overall health and well-being , such as health education and lifestyle improvement. It is not a targeted intervention to correct an established impairment.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 48, 49, 50

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Prevention of disability by appropriate treatment (before disability occurs) is an example of: (Q890866)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primordial prevention

Correct Answer: B. Secondary prevention

Explanation: Prevention of disability by appropriate treatment before disability occurs represents secondary prevention. Secondary prevention involves early diagnosis and prompt treatment of disease at its incipient stage in order to halt disease progression and prevent complications . By detecting disease early and providing adequate treatment, secondary prevention aims to arrest the disease process, restore health, and prevent complications such as disability . Screening programmes and early treatment strategies are common interventions used in secondary prevention. If disability has already developed, measures aimed at limiting disability and promoting rehabilitation fall under tertiary prevention . Primary prevention (Option A): Primary prevention involves action taken before disease onset to remove the possibility that the disease will occur. It operates in the pre-pathogenesis phase and includes measures such as immunisation, sanitation, environmental protection, and lifestyle modification. Tertiary prevention (Option C): Tertiary prevention is applied after the disease has progressed and aims to reduce impairments, limit disabilities, and promote rehabilitation , helping patients adjust to chronic or irreversible conditions. Primordial prevention (Option D): Primordial prevention focuses on preventing the emergence of risk factors in populations where they have not yet appeared, often through individual and mass health education and broader lifestyle interventions.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 48, 50, 51

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Pap smear for early detection of cervical cancer is an example of: (Q890865)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primordial prevention

Correct Answer: B. Secondary prevention

Explanation: A Pap smear is an example of secondary prevention because it is a screening test used for early detection of cervical cancer and its precancerous lesions. Secondary prevention is defined as an action that halts the progress of disease at its incipient stage and prevents complications . The main interventions in secondary prevention are early diagnosis and adequate treatment , commonly achieved through screening tests and case-finding programmes . Screening programmes such as Pap smear aim to detect unrecognised disease in asymptomatic individuals , when pathological changes have begun, but symptoms have not yet appeared. Early detection and treatment help arrest the disease process, restore health, and prevent complications . In many diseases, early diagnosis and treatment also reduce morbidity and mortality , and in infectious diseases, may reduce communicability , thereby protecting others in the community. Thus, Pap smear screening represents secondary prevention , as it seeks out disease in its preclinical stage and allows timely intervention before progression to invasive cancer. Primary prevention (Option A): Primary prevention refers to action taken prior to the onset of disease to remove the possibility that the disease will occur . It operates in the pre-pathogenesis phase and includes health promotion and specific protection , such as immunisation, sanitation, environmental protection, and lifestyle modification. For cervical cancer, HPV vaccination is an example of primary prevention. Tertiary prevention (Option C): Tertiary prevention is applied when the disease has progressed beyond its early stages. It aims to reduce impairments and disabilities, minimise suffering, and promote rehabilitation , such as surgery, radiotherapy, or chemotherapy, in patients with established cervical cancer. Primordial prevention (Option D): Primordial prevention focuses on preventing the emergence of risk factors in populations where they have not yet appeared. It often involves individual and mass health education , particularly directed toward children, to discourage harmful lifestyle habits that predispose to disease.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 48-51, 448

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Use of iodised salt in iodine-deficient areas (e.g., hilly regions) is an example of: (Q890862)

A. Primordial prevention

B. Primary prevention

C. Secondary prevention

D. Tertiary prevention

Correct Answer: B. Primary prevention

Explanation: Use of iodised salt is an example of primary prevention because it provides specific protection against iodine deficiency disorders before the disease occurs. Primary prevention refers to action taken prior to the onset of disease to remove the possibility that the disease will occur . It operates in the pre-pathogenesis phase and includes health promotion and specific protection measures. Salt iodisation is a specific protective measure that supplies iodine to populations living in iodine-deficient areas, thereby preventing iodine deficiency disorders such as goitre and cretinism . Since this intervention is applied before the disease develops , it represents primary prevention . Primordial prevention (Option A): Primordial prevention aims to prevent the emergence of risk factors in populations where they have not yet appeared. It commonly involves lifestyle and environmental modifications , such as discouraging smoking or promoting healthy dietary habits from childhood. Secondary prevention (Option C): Secondary prevention involves early diagnosis and prompt treatment of disease in its early or preclinical stage, usually through screening and case-finding programmes . Tertiary prevention (Option D): Tertiary prevention is applied after the disease has progressed and aims to reduce impairments, limit disabilities, and promote rehabilitation , helping patients adjust to chronic or irreversible conditions.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 48, 774

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Asymptomatic patients are the target population for: (Q890861)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primordial prevention

Correct Answer: B. Secondary prevention

Explanation: Secondary prevention targets asymptomatic individuals with disease in the preclinical or incipient stage. It is defined as an action that halts the progress of the disease at its early stage and prevents complications . The main interventions include early diagnosis and prompt treatment , typically achieved through screening tests and case-finding programmes . In secondary prevention, the aim is to detect unrecognised disease before symptoms appear , when pathological changes have begun but are still potentially reversible. Early detection and adequate treatment can arrest disease progression, restore health, and prevent complications . In infectious diseases, early diagnosis and treatment may also reduce communicability , thereby protecting others in the community. Primary prevention (Option A): Primary prevention refers to action taken prior to the onset of disease to remove the possibility that the disease will occur . It operates in the pre-pathogenesis phase and includes health promotion and specific protection , such as immunisation, sanitation, environmental protection, and lifestyle modification. Tertiary prevention (Option C): Tertiary prevention is applied when the disease process has progressed beyond its early stages. It aims to reduce impairments and disabilities, minimise suffering, and promote rehabilitation , helping patients adjust to chronic or irreversible conditions. Primordial prevention (Option D): Primordial prevention focuses on preventing the emergence or development of risk factors in populations where they have not yet appeared. It is commonly achieved through individual and mass health education , especially among children, to discourage harmful lifestyle habits such as smoking, an unhealthy diet, and physical inactivity.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 48, 49

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Adoption of a healthy lifestyle from childhood to prevent coronary artery disease in adulthood is an example of: (Q890860)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primordial prevention

Correct Answer: D. Primordial prevention

Explanation: Primordial prevention is a concept receiving special attention in the prevention of chronic diseases. It represents primary prevention in its purest sense , meaning the prevention of the emergence or development of risk factors in countries or population groups where they have not yet appeared. Many adult diseases, such as coronary artery disease, obesity, and hypertension, have their early origins in childhood , as this is the stage when lifestyle habits such as smoking, eating patterns, and physical activity are formed . Therefore, promoting healthy lifestyles from childhood aims to prevent the development of risk factors themselves. In primordial prevention, efforts are

directed toward discouraging children from adopting harmful lifestyles . The main interventions include individual and mass health education , promoting healthy behaviours before risk factors appear. Primary prevention (Option A): Primary prevention aims to prevent the onset of disease by controlling existing risk factors or increasing resistance to disease. It is applied before disease occurs but may involve individuals who already have risk factors, such as encouraging smoking cessation or treating hyperlipidaemia to prevent coronary artery disease. Secondary prevention (Option B): Secondary prevention involves early diagnosis and prompt treatment of disease in its early stage to halt or slow its progression. Examples include screening programs such as blood pressure measurement or cancer screening. Tertiary prevention (Option C): Tertiary prevention is applied after disease has developed and aims to limit disability and promote rehabilitation , such as cardiac rehabilitation following myocardial infarction or rehabilitation after stroke.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 48

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Public health surveillance is preferentially aimed at: (Q890859)

A. Direct patient care

B. Health planning

C. Individual diagnosis

D. Quarantine enforcement

Correct Answer: B. Health planning

Explanation: Public health surveillance involves the systematic and continuous collection, analysis, interpretation, and dissemination of health-related data for public health action. By observing trends in time, place, and persons , surveillance helps identify health problems and provides information needed for health planning, policy development, and evaluation of disease prevention and control programmes . The final phase of surveillance is the application of this information to health promotion and disease prevention, and control . Direct patient care (Option A): Surveillance focuses on population-level health information rather than providing clinical services to individual patients. Direct patient care is the responsibility of clinical medicine, not surveillance systems. Individual diagnosis (Option C): Diagnosis refers to identifying a disease in an individual patient to guide treatment. Surveillance instead analyzes aggregated data to understand disease patterns and trends in populations. Quarantine enforcement (Option D): Quarantine is a disease control measure applied to individuals exposed to communicable diseases. While surveillance data may guide decisions about quarantine during outbreaks, enforcement itself is an intervention and not a function of surveillance.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Sentinel surveillance helps in: (Q890857)

A. Identifying cases free of disability

B. Identifying missing cases to supplement routine notifications

C. Directly treating patients

D. Eradicating diseases

Correct Answer: B. Identifying missing cases to supplement routine notifications

Explanation: Sentinel surveillance is used when routine disease notification systems fail to identify all cases of infection or disease. It involves selected reporting units (such as interested and competent physicians or institutions) that report cases occurring in their areas. This method helps identify missing or unreported cases , thereby supplementing routine notification systems . Data obtained from sentinel sites may be extrapolated to estimate disease prevalence in the larger population . Sentinel surveillance can minimise reporting bias and provide more detailed and reliable information than traditional notification systems. Identifying cases free of disability (Option A): Surveillance is generally concerned with the presence of disease or the severity of disability (morbidity), not specifically identifying those who are healthy or "free of disability." Directly treating patients (Option C): Like all forms of surveillance, sentinel surveillance is a data collection and analysis tool. While the clinics acting as sentinel sites do treat patients, the surveillance system itself does not provide treatment; it provides the information needed to plan where treatment resources should go. Eradicating diseases (Option D): Eradication requires universal surveillance (active search for every single case) to ensure the pathogen is gone everywhere. Sentinel surveillance only looks at selected reporting sites rather than the entire population, which is insufficient for the total elimination or eradication of a disease.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Surveillance of a disease does not have a direct role in: (Q890851)

A. Health planning

B. Providing information about public health disasters

C. Breaking the chain of transmission

D. Detecting new and changing disease trends

Correct Answer: C. Breaking the chain of transmission

Explanation: Breaking the chain of transmission is not a direct function of surveillance. Surveillance is defined as the systematic and continuous collection, analysis, interpretation, and dissemination of health-related data for use in planning, implementing, and evaluating public health practice. Surveillance generates information that guides interventions such as isolation, treatment, immunisation, vector control, and environmental measures , which are the actions that actually interrupt disease transmission. Thus, surveillance supports control measures but does not itself directly interrupt transmission . The direct roles of surveillance include: Providing information for health planning and policy decisions (Option A). Identifying public health problems and potential disasters (Option B) , including early detection of outbreaks through reporting systems and mortality data. Detecting new and changing disease trends (Option D) by analysing patterns in time, place, and person.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: The analysis of routine measurements aimed at detecting changes in the health status or environment of a population is called: (Q890843)

A. Surveillance

B. Monitoring

C. Sentinel surveillance

D. Systematic review

Correct Answer: B. Monitoring

Explanation: Monitoring refers to the performance and analysis of routine measurements aimed at detecting changes in the health status of a population or in environmental conditions . It involves the regular observation and measurement of specific indicators to identify trends or deviations over time. Monitoring helps assess whether health programs and environmental conditions are progressing as expected and allows early detection of unfavourable changes . Common examples of monitoring include air pollution monitoring, water quality monitoring, growth monitoring in children, and monitoring of nutritional status . These routine measurements help identify changes in health or environmental conditions so that appropriate public health actions can be taken when necessary . Surveillance (Option A): Surveillance is the continuous and systematic collection, analysis, interpretation, and dissemination of health data for the purpose of planning, implementing, and evaluating public health actions. It is broader than monitoring and is often described as “information for action.” Sentinel

surveillance (Option C): This is a special type of surveillance in which selected reporting sites such as particular hospitals or physicians collect data on specific diseases. It is used to monitor trends and detect early warning signals when universal surveillance is not feasible. Systematic review (Option D): A systematic review is a research method used in evidence-based medicine that involves identifying, critically appraising, and synthesising results from multiple studies addressing a specific research question. It is not a method for routine measurement of population health status .

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 46, 47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: Which disease is referred to as the "silent epidemic of the century"? (Q890840)

A. Hypertension

B. Diabetes

C. Alzheimer's disease

D. Depression

Correct Answer: C. Alzheimer's disease

Explanation: Alzheimer’s disease is often described as the “silent epidemic of the century” because of its gradual onset, progressive course, and rapidly increasing prevalence worldwide , particularly with the ageing of populations. The disease develops insidiously over many years , often without obvious early symptoms, and progressively leads to memory loss, cognitive decline, and impairment of daily functioning . The term “silent epidemic” highlights the growing global burden of dementia , much of which is due to Alzheimer’s disease. According to global estimates, over 55 million people worldwide live with dementia , and Alzheimer’s disease accounts for the majority of these cases . The number of affected individuals is expected to rise substantially as life expectancy increases , making it a major public health challenge of the 21st century. Hypertension (Option A): Hypertension is commonly referred to as the “silent killer” because it often produces no symptoms until serious complications such as stroke, heart disease, or kidney failure occur . Diabetes (Option B): Diabetes mellitus is a major chronic disease with a large global burden, but it is not typically referred to as the silent epidemic of the century in standard epidemiological terminology. Depression (Option D): Depression is a common mental health disorder and a leading cause of disability worldwide, but it is not commonly described by this specific term .

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 52

https://pubmed.ncbi.nlm.nih.gov/7049032/

https://pubmed.ncbi.nlm.nih.gov/35400333/

https://pubmed.ncbi.nlm.nih.gov/12739527

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: If a disease has zero incidence in a region, it can be said that the disease has been: (Q890838)

A. Eliminated from the region

B. Eradicated globally

C. Controlled

D. Reached the iceberg phenomenon

Correct Answer: A. Eliminated from the region

Explanation: Disease elimination refers to the reduction to zero incidence of a specified disease in a defined geographical area as a result of deliberate public health efforts , although continued intervention measures are required to prevent re-establishment of transmission. Even when no new cases occur in that region, the causative agent may still exist elsewhere , so ongoing measures such as vaccination, surveillance, vector control, or screening programs must continue to maintain elimination. Therefore, elimination represents an intermediate stage between disease control and global eradication . Elimination is usually achieved through high levels of herd immunity, strong surveillance systems, effective treatment of cases, and public health interventions that interrupt the chain of transmission . Several diseases have been eliminated from specific countries or regions , although they may still exist elsewhere in the world. Eradicated globally (Option B): Eradication refers to the permanent reduction to zero of the worldwide incidence of an infection , after which no further intervention measures are required . The classic example is smallpox , which has been eradicated globally. Controlled (Option C): Disease control refers to the reduction of disease incidence, prevalence, morbidity, or mortality to a locally acceptable level through deliberate public health efforts. In this situation, the disease still occurs , but its impact is reduced and managed. Reached the iceberg phenomenon (Option D): The iceberg phenomenon describes a situation in which the visible clinical cases represent only a small proportion of the total cases , while many infections remain subclinical, latent, or undiagnosed . It refers to the hidden disease burden rather than the absence of disease.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 46

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: Which factor aids the most in disease elimination? (Q890836)

A. Isolation

B. Quarantine

C. Herd immunity

D. Surveillance

Correct Answer: C. Herd immunity

Explanation: Herd immunity (also called community immunity) occurs when a large proportion of a population becomes immune to an infectious disease , usually through vaccination or previous infection , thereby providing indirect protection to individuals who are not immune. When the number of immune individuals is sufficiently high, the chain of transmission is interrupted , making it difficult for the infectious agent to spread within the community. For many vaccine-preventable diseases, achieving high levels of herd immunity is a key factor in disease elimination . Herd immunity works by reducing the number of susceptible individuals in the population. As a result, even if an infected person enters the community, the probability of transmitting the infection to susceptible individuals becomes low. Immunisation programs are therefore the primary strategy used to build herd immunity and support disease elimination efforts. Isolation (Option A): Isolation refers to the separation of infected persons during the period of communicability to prevent transmission to healthy individuals. Although useful in controlling spread, it is a case-based measure and alone cannot achieve population-level elimination. Quarantine (Option B): Quarantine involves restricting the movement of healthy individuals who have been exposed to a communicable disease during the incubation period. It helps limit spread during outbreaks but is not the main long-term strategy for disease elimination. Surveillance (Option D): Surveillance is the continuous, systematic collection, analysis, interpretation, and dissemination of health data . It helps monitor disease trends and evaluate control programs, but it does not directly interrupt the transmission of infection.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 110, 133, 134

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: Reduction of new cases of an infectious disease to zero in a defined geographical area through deliberate efforts, but requiring continued measures, is called: (Q890835)

A. Eradication

B. Elimination

C. Control

D. Surveillance

Correct Answer: B. Elimination

Explanation: Disease elimination refers to the reduction to zero incidence of a specified disease in a defined geographical area as a result of deliberate public health efforts , while continued intervention measures are required to prevent re-establishment of transmission. Although new cases no longer occur in that region, the causative agent may still exist elsewhere , so ongoing control measures such as vaccination, surveillance, and public health interventions must continue to maintain the elimination status. Thus, elimination represents an intermediate stage between disease control and eradication . Eradication (Option A): This refers to the permanent reduction to zero of the worldwide incidence of an infection , after which continued intervention measures are no longer required . A classic example is smallpox , the only human disease successfully eradicated globally. Control (Option C): Disease control refers to the reduction of incidence, prevalence, morbidity, or mortality of a disease to a locally acceptable level through deliberate public health efforts. Continued interventions are necessary to maintain this reduction. Surveillance (Option D): Surveillance is the continuous, systematic collection, analysis, interpretation, and dissemination of health data needed for planning, implementing, and evaluating public health practice. It is a monitoring tool , not a level of disease reduction.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 46, 47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: A person loses a foot in an accident, is unable to walk, and subsequently becomes unemployed. Which of the following correctly matches the events? (Q890833)

A. Accident - Impairment; Loss of foot - Disease; Cannot walk - Handicap; Unemployed - Disability

B. Accident - Disease; Loss of foot - Impairment; Cannot walk - Disability; Unemployed - Handicap

C. Accident - Disability; Loss of foot - Impairment; Cannot walk - Handicap; Unemployed - Disease

D. Accident - Handicap; Loss of foot - Disability; Cannot walk - Impairment; Unemployed - Disease

Correct Answer: B. Accident - Disease; Loss of foot - Impairment; Cannot walk - Disability; Unemployed - Handicap

Explanation: The disability sequence described by WHO follows the progression: Disease → Impairment → Disability → Handicap . This sequence explains how a pathological event can lead to structural damage, functional limitation, and eventually social disadvantage. Disease/Disorder: This is the initial pathological event. In this example, the accident represents the disease or disorder that initiates the sequence. Impairment: This refers to any

loss or abnormality of psychological, physiological, or anatomical structure or function . The loss of a foot represents the structural abnormality caused by the accident. Disability: Disability is defined as any restriction or lack of ability to perform an activity in the manner considered normal for a human being . The inability to walk represents the functional limitation resulting from the impairment. Handicap: Handicap refers to a social disadvantage resulting from an impairment or disability that limits or prevents the fulfilment of a normal role in society . In this example, becoming unemployed represents the social consequence of the disability.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 50

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: Which of the following is not a component of the epidemiological triad for tuberculosis? (Q890830)

A. Host factors

B. Agent factors

C. Environmental factors

D. Duration of illness

Correct Answer: D. Duration of illness

Explanation: Duration of illness is not a component of the epidemiological triad. It relates to the clinical course or natural history of the disease rather than the causal interaction between agent, host, and environment that determines disease occurrence. The epidemiological triad is a model used to explain disease causation through the interaction of three key components: agent, host, and environment . It emphasises that disease occurs due to the combined influence of these three factors rather than the agent alone. Host factors (Option A): These include characteristics that affect an individual's susceptibility to disease, such as malnutrition, immune status, age, genetic factors, and coexisting illnesses . In tuberculosis, individuals with weakened immunity or poor nutritional status are more likely to develop active disease after infection. Agent factors (Option B): These refer to the specific causative organism responsible for the disease. In tuberculosis, the agent is Mycobacterium tuberculosis . Characteristics such as virulence, infectivity, and drug resistance influence the occurrence and severity of the disease. Environmental factors (Option C): These include external conditions that facilitate transmission of the disease. For tuberculosis, important environmental factors include overcrowding, poor ventilation, poverty, and poor housing conditions , which increase the likelihood of airborne spread.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 39

↑ *Back to this question in Part A*

• [01_ Concept of Health and Disease] 002 Disease Control Monitoring And Surveillance

« Back to Folder Directory

[01_ Concept of Health and Disease] 002 Disease Control Monitoring And Surveillance — Quick Jump

Q1 (p. 660)	*Q2 (p. 661)*	*Q3 (p. 662)*	*Q4 (p. 663)*	*Q5 (p. 664)*	*Q6 (p. 664)*
Q7 (p. 665)	*Q8 (p. 666)*	*Q9 (p. 667)*	*Q10 (p. 667)*	*Q11 (p. 668)*	*Q12 (p. 669)*
Q13 (p. 670)	*Q14 (p. 671)*	*Q15 (p. 672)*			

Q1: All of the following diseases are targeted by India for elimination in the future, except? (Q840595)

A. Neonatal tetanus by 2025

B. HIV/AIDS by 2024

C. TB by 2025

D. Malaria by 2030

Correct Answer: A. Neonatal tetanus by 2025

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: India has already eliminated neonatal tetanus in May 2015. The World Health Organization defines the elimination of neonatal tetanus as the incidence of less than one case per 1,000 live births annually in every district nationwide. Elimination of a disease is defined as interrupting modes of transmission of disease in the environment, although the causative agent persists in the community. Diseases that have been eliminated from India. DISEASE YEAR Leprosy 2005 Occurrence of less than 1 case per 10,000 at subnational and district level. Maternal and neonatal tetanus May, 2015 Occurrence of less than 1 case per 1,000 live births annually. Polio Last case in 2011 February 24, 2012 India was removed from the list of polio-endemic countries by WHO March 27, 2014 India is certified polio-free by the Regional Certification Commission (RCC), WHO Dracunculiasis (Guinea worm infection) 2000 Zero cases continuously for three consecutive years. Yaws 2004 Infectious trachoma 2017 Prevalence in children aged 1–9 years of less than 5% , sustained for at least two years without ongoing mass antibiotic treatment, in each formerly endemic district. Diseases targeted to be eliminated from India. DISEASE TARGETED YEAR Kala-azar 2023 by India 2030 by WHO Incidence less than 1 case per 10,000 population at the Block PHC level. Filariasis 2027 by India 2030 by WHO Less than 1% microfilariae carrier rate Measles 2023 Absence of endemic measles transmission in a defined geographical area > 12 months HIV/AIDS 2024 Tuberculosis 2025 Malaria 2030 Zero indigenous cases and deaths due to malaria for 10 years in the whole country

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 46

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Termination of all modes of transmission of which of the following has not been achieved? (Q840597)

A. Smallpox

B. Wild poliovirus type 2

C. Wild poliovirus type 3

D. Dracunculiasis

Correct Answer: D. Dracunculiasis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Dracunculiasis (Guinea worm infection) has not been eradicated because all modes of transmission have not been completely terminated. Eradication of the disease refers to the complete termination of all modes of transmission of the disease and is a global occurrence. It exhibits an 'all or none' phenomenon , where the agent is completely exterminated and no longer exists in the environment. Extinction of a disease occurs when, after eradication, the agent is no longer maintained under supervision in CDC or WHO laboratories. Eradication of diseases in India Eradicated Diseases Targeted for eradication Smallpox (1980) Wild poliovirus 2 (2015) Wild poliovirus 3 (2019) Wild poliovirus 1 Measles Dracunculiasis Leprosy

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 46, 240

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Match the following level of prevention with their correct definition. Level of prevention Definition 1) Primary a) Prevention of establishment of risk factors in a population. 2) Secondary b) Prevention of the development of disease in a high-risk group/individual. 3) Tertiary c) Prevention or limitation of disability in a diseased individual. 4) Primordial d) Prevention of the progression of diseases that are in their early stages. (Q840600)

A. 1-c, 2-b, 3-d, 4-a

B. 1-b, 2-d, 3-c, 4-a

C. 1-b, 2-d, 3-a, 4-c

D. 1-a, 2-c, 3-b, 4-d

Correct Answer: B. 1-b, 2-d, 3-c, 4-a

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Levels of prevention Definition Primordial Prevention of establishment of risk factors. It aims to discourage people from adopting harmful habits. Avoiding smoking Primary Health promotion and specific protection. Prevention of onset of disease in a high-risk group/individual. It aims to protect the health of those who are at risk. Reduces the incidence of the disease. Quit smoking Secondary Disease progression can be prevented at

an early stage (Disease is reversible). It aims to reduce the prevalence of the disease by early identification and prompt treatment of diseases, and it also prevents complications. Screening for diabetes. Tertiary Prevention or limitation of impairment and disability in a diseased patient who has developed complications due to the disease and the disease has become irreversible. It aims to minimize a patient's suffering and maximize potential years of useful life. Disability limitation and rehabilitation. Quaternary Prevention of the risk of overmedicalization of a patient or population. Aims to prevent prescription of unnecessary medications and invasive medical interventions.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 48, 49

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following is a mode of intervention for the secondary level of prevention? (Q840602)

A. Immunisation program

B. Health education

C. Rehabilitation programs

D. Early diagnosis and treatment

Correct Answer: D. Early diagnosis and treatment

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Secondary prevention involves detecting and treating diseases early, before symptoms or complications arise, to prevent progression and minimize health impacts. Early diagnosis and treatment are a secondary level of prevention as the disease has already been established in the patient, but it is in its early stages without any complication, and thus, it is reversible, examples include screening tests for diseases (diabetes). It focuses on reducing the prevalence of disease by prompt treatment and shortening the disease duration. Immunization program (Option A) prevents the onset of infectious diseases through vaccination, a primary prevention strategy . Health education (Option B) promotes knowledge and behaviour change to prevent disease and promote health, a primary prevention strategy. Rehabilitation programs (Option C) aid recovery and restore functioning after illness or injury, focusing on tertiary prevention.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 48, 49.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following modes of intervention is not a primary level of prevention? (Q840606)

A. Administration of MR vaccination to children

B. Examination of school students to identify signs of anemia

C. Iodization of common salt

D. Implementing strict laws regarding drinking and driving

Correct Answer: B. Examination of school students to identify signs of anemia

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Examining school students to identify signs of anemia is considered secondary prevention because it helps detect the disease early on among those who already have anemia. On the other hand, primary prevention targets the prevention of disease development in the high-risk population. Primary prevention includes: Health promotion: Health education camps on exercise and lifestyle diseases. Mental health promotion and counselling in schools and colleges. Implementing strict laws against drinking and driving to prevent road traffic accidents due to impaired driving (Option A). Specific protection: Administration of MR vaccination to children prevents measles and rubella infection via active immunization, as the risk of infection is high during childhood (Option B). Iodization of salt helps prevent endemic goiter, especially in the Himalayan region, where the diet lacks iodine (Option C).

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 48, 49.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Choose the correct statements from the following: a)BCG vaccine for TB- primary b) Reconstructive surgery- secondary c)OCP for contraception- primary d) Crutches for polio- secondary (Q840607)

A. a,c

B. a,b,c,d

C. b,c,d

D. a,c,d

Correct Answer: A. a,c

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Secondary prevention focuses on the early detection and prompt treatment of diseases to prevent their progression to more advanced or severe stages. This includes screening and early diagnosis . Primary prevention focuses on interventions to prevent the onset of disease. Level of Prevention Goals Examples Primordial To prevent the establishment of risk factors Lifestyle modification Health promotion Primary Interventions to prevent the onset of disease Vaccinations (statement a) Health education Family planning (statement c) Use of mosquito nets Pre-placement examination Secondary Early detection and prompt treatment of disease to prevent complications Screening tests (e.g., mammograms, PAP smears) Self-examinations Health camps with screening DOTS for TB; ART for HIV; MDT for leprosy. Treatment Tertiary Interventions to manage and reduce complications of existing disease to prevent disability or death Rehabilitation Physical therapy Chronic disease management programs Reconstructive surgery

References:

Park's Textbook of Preventive and Social Medicine, 26th edition, Page: 48

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Arrange the following events in the correct sequence: Impairment Disability Functional Limitation Handicap Disease (Q840609)

A. 5 → 1 → 3 → 2 → 4

B. 3 → 1 → 5 → 4 → 2

C. 5 → 1 → 2 → 3 → 4

D. 2 → 5 → 1 → 3 → 4

Correct Answer: A. 5 → 1 → 3 → 2 → 4

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: If a patient seeks medical attention at an advanced stage of disease pathogenesis, the interventional approach shifts towards limiting disability. The primary goal is to prevent the progression from disease-induced impairment to a handicapped state. The sequence of events leading to disability and handicap is as follows: Disease → Impairment → Functional Limitation → Disability → Handicap Disease is the initial pathological condition. Impairment refers to a problem in body function or structure. Functional Limitation is the restriction in

performing fundamental physical actions. Disability is the restriction or lack of ability to perform an activity in the manner considered normal for a human being. Handicap refers to a disadvantage that limits or prevents the fulfilment of a normal social role for an individual.

References:

Park's Textbook of Preventive and Social Medicine, 26th edition, Page: 50

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: In a rural village, trachoma remains a significant public health concern. A public health officer is tasked with implementing a comprehensive prevention strategy for trachoma. Match each intervention with the appropriate level of prevention: 1. Primary Prevention a. Coordinates surgical treatment for blindness 2. Secondary Prevention b. Promotes facial cleanliness and sanitation. 3. Tertiary Prevention c. Ensures antibiotics are prescribed only to confirmed cases. 4. Quaternary Prevention d. Conduct regular eye screenings. (Q840612)

A. 1-b, 2-d, 3-a, 4-c

B. 1-d, 2-a, 3-b, 4-c

C. 1-c, 2-b, 3-d, 4-a

D. 1-a, 2-c, 3-d, 4-b

Correct Answer: A. 1-b, 2-d, 3-a, 4-c

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Levels of Prevention in Trachoma: Levels of Prevention Description Measures Primary Prevention Interventions before the onset of the disease to avert its occurrence by addressing the pre-pathogenesis phase. Promotes facial cleanliness and sanitation to prevent trachoma. Secondary Prevention Aim to halt disease progression in its early stages and prevent complications through timely diagnosis (e.g., screening, case-finding) and prompt, appropriate treatment. Conduct regular eye screenings to detect and treat trachoma early. Tertiary Prevention Focuses on minimizing the impact of existing health conditions by reducing impairments and disabilities , alleviating suffering, and promoting adjustment to irreversible states. Coordinates surgical treatment for those with trachoma-related blindness. Quaternary Prevention Promoting evidence-based practices to prevent over diagnosis and offering ethically validated treatment options Ensures antibiotics are prescribed only to confirmed cases to avoid unnecessary treatment.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Page: 48

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following interventions is an example of rehabilitation? (Q840613)

A. HPV vaccination in a reproductive-age woman.

B. Organising physical therapy sessions for stroke survivors.

C. Administering insulin to manage diabetes.

D. Conducting regular screenings to detect early signs of diabetes-related neuropathy.

Correct Answer: B. Organising physical therapy sessions for stroke survivors.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Rehabilitation aims to restore physical function, mobility, and overall quality of life for individuals recovering from stroke-related impairments and disabilities. Disability Limitation Rehabilitation Preventing progression from impairment to handicap. Restoring and maximizing functional abilities. Maintain the current level of function and prevent further deterioration. Achieve the highest possible level of functional independence and quality of life. Targeted medical treatment, assistive devices, and environmental modifications. Coordinated multidisciplinary efforts (medical, social, educational, vocational). E.g. Medical treatment. Assistive devices. Environmental modifications. E.g. Organizing physical therapy sessions for stroke survivors. HPV vaccination in a reproductive-age woman (Option A) is a primary prevention against HPV infection and associated cancers. Administering insulin to manage diabetes (Option C) is a tertiary prevention method that manages complications and improves the quality of life in diabetes patients. Conducting regular screenings for early signs of diabetes-related neuropathy (Option D) is an example of secondary prevention aimed at early detection and intervention to prevent complications in individuals with diabetes.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Page: 50-51

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: For which of the following diseases is "mass prophylaxis" more commonly employed than "mass treatment"? (Q840617)

A. Lymphatic filariasis

B. Malaria

C. Cholera

D. Onchocerciasis

Correct Answer: C. Cholera

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Mass prophylaxis Mass Treatment Description It involves administering preventive treatment to an entire population to prevent disease occurrence. It involves treating an entire population or community to control or eliminate a disease. Level of prevention Primary prevention strategy. (To prevent disease onset in individuals who have not yet been infected). Secondary prevention strategy. (Aim to reduce the prevalence of a disease and prevent further transmission). Examples Mass vaccination during outbreaks to prevent the spread of diseases such as: Cholera Hepatitis A Lymphatic filariasis (Anti-filarial drugs) (Option A ruled out) Malaria (Anti-malarial drugs) (Option B ruled out) Onchocerciasis (Ivermectin) (Option D ruled out)

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Page: 46

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following international declarations or charters is primarily associated with outlining the principles and strategies for health promotion? (Q840621)

A. Alma-Ata Declaration

B. Jakarta Declaration

C. Ottawa Charter

D. Helsinki Declaration

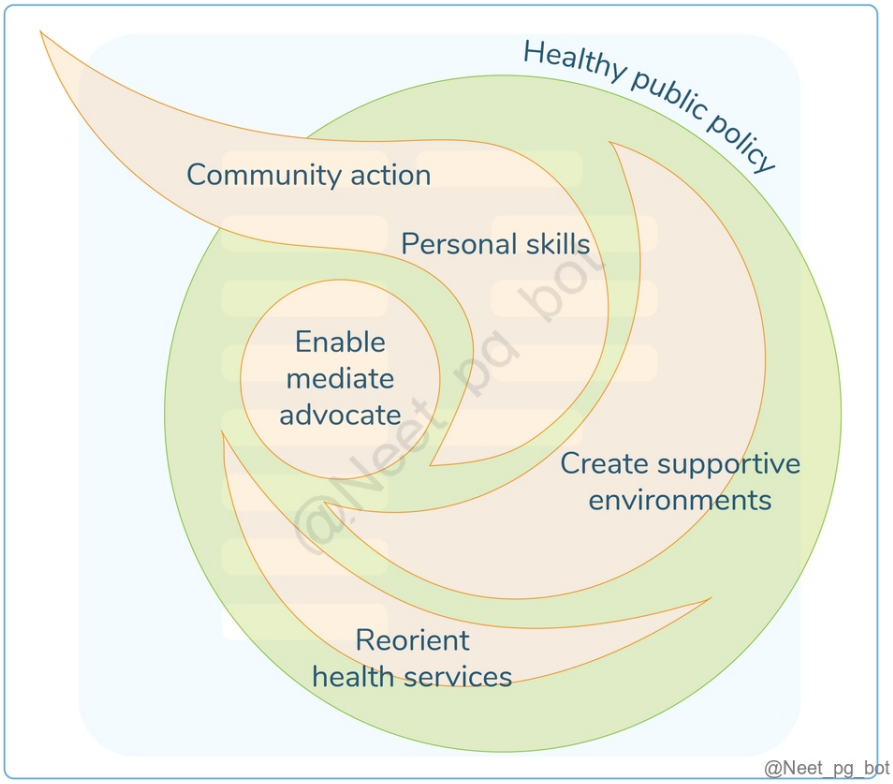
Correct Answer: C. Ottawa Charter

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Ottawa Charter is the foundational document for health promotion, outlining key strategies and principles such as building healthy public policy, creating supportive environments, strengthening community

action, developing personal skills, and reorienting health services. {{caption_text}} The Declaration of Alma-Ata (Option A), adopted in 1978, aimed to achieve Health for All by 2000 through Primary Health Care (PHC). Key points include: PHC is essential, accessible, and community-based health care. Recognition of health as a human right with a focus on equity. Emphasis on community participation and inter-sectoral collaboration. Call for global support and cooperation to strengthen health systems, especially in developing countries. The Jakarta Declaration on Health Promotion (Option B) (1997) set a vision for health promotion in the 21st century, emphasizing that the determinants of health include peace, shelter, education, social security, social relations, food, income, women's empowerment, a stable ecosystem, sustainable resource use, social justice, human rights, and equity. Helsinki Declaration (Option D) is primarily concerned with ethical principles for medical research involving human subjects, not health promotion strategies.



References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Page: 37

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which term describes the systematic collection, analysis, and interpretation of health data for the planning, implementing, and evaluating public health practices? (Q840623)

A. Monitoring

B. Surveillance

C. Evaluation

D. Impact assessment

Correct Answer: B. Surveillance

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Surveillance is the systematic collection, analysis, and interpretation of health data to plan, implement, and evaluate public health practice. Surveillance can be active, passive, sentinel surveillance Monitoring (Option A) involves the continuous (short-term) measurement and analysis of specific parameters or indicators related to the environment, population health status, performance of health services/professionals, patient compliance, or activity implementation. It is the analysis of daily routine activities, process-oriented, and done internally. Evaluation (Option C) is the systematic assessment of an intervention or program's design, implementation, and outcomes. It is a periodic assessment that is outcome-oriented and conducted via an external audit. Impact Assessment (Option D) evaluates the effects or outcomes of an intervention or policy on a population or environment.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Page: 46-47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which surveillance method involves routine reporting and data collection without active efforts to enhance reporting? (Q840628)

A. Active surveillance

B. Passive surveillance

C. Sentinel surveillance

D. Syndromic surveillance

Correct Answer: B. Passive surveillance

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Passive Surveillance relies on routine reporting from healthcare providers or institutions without additional efforts to enhance reporting Active Surveillance (Option A) involves proactive data collection, where health authorities actively search for cases of diseases. The 4 diseases that are actively screened in India: Polio: AFP (Acute Flaccid Paralysis) by SMO (Senior Medical Officer) Malaria: By MPW (Multipurpose Worker) Kala Azar (Visceral Leishmaniasis): Depending on the region or program specifics, various healthcare personnel may be involved in the surveillance and reporting. Tuberculosis: By ASHA (Accredited Social Health Activist) worker Sentinel Surveillance (Option C) involves monitoring a specific subset of the population or healthcare facilities representing the larger population. E.g., HIV/AIDS screening done in ANC, Blood banks, and STD Clinics. Syndromic surveillance (Option D) monitors non-specific health indicators or syndromes (e.g., fever surveillance for malaria, cough for 2w for TB, Flu symptoms for COVID) to detect potential outbreaks or public health emergencies early, analyzing symptom data patterns.

References:

Park's Textbook of Preventive and Social Medicine, 26th edition, Page: 47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: What is the main objective of evaluating healthcare establishments? (Q840631)

A. Monitoring patient satisfaction levels

B. Assessing the efficacy and efficiency of health services

C. Expanding healthcare facilities

D. Reducing operational costs

Correct Answer: B. Assessing the efficacy and efficiency of health services

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The objectives of evaluating Healthcare establishments: The main objective of evaluating healthcare establishments is to assess the efficacy and efficiency of health services. This evaluation helps determine how well healthcare services are being delivered, whether healthcare goals are being met, and whether resources are being utilized optimally. It involves examining the quality of care provided, patient outcomes, and the cost-effectiveness of the services. While monitoring patient satisfaction levels is important, it is just one aspect of the overall evaluation process aimed at improving the effectiveness and efficiency of healthcare delivery.

References:

Park's Textbook of Preventive and Social Medicine, 26th edition, Page: 47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following measures is implemented for individuals who are already ill and potentially infectious? (Q840635)

A. Isolation

B. Quarantine

C. Social distancing

D. Contact tracing

Correct Answer: A. Isolation

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Isolation separates individuals who are already ill and potentially infectious from others for the maximum period of communicability to prevent disease spread. It can occur either in healthcare facilities or at home, depending on illness severity and resource availability. It is a defensive strategy. Quarantine (Option B) separates and restricts the movement of individuals exposed to a contagious disease for a maximum known incubation period, but not yet symptomatic to monitor for symptoms and prevent potential disease spread upon becoming infectious. Isolation and quarantine are examples of primary prevention. Social distancing (Option C) is a public health measure involving maintaining physical distance and avoiding crowded places or gatherings. It aims to prevent the transmission of infectious diseases but applies broadly, not specifically to individuals already ill. Contact tracing (Option D) is the process of identifying and monitoring individuals in close contact with an infected person. It is used to identify potential secondary cases and implement appropriate measures, such as quarantine or testing, to prevent further transmission.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Page: 132

↑ *Back to this question in Part A*

@Neet_pg_bot

• [01_ Concept of Health and Disease] 003 Health Indicators

« Back to Folder Directory

[01_ Concept of Health and Disease] 003 Health Indicators — Quick Jump

Q1 (p. 673) *Q2 (p. 674)* *Q3 (p. 674)* *Q4 (p. 675)* *Q5 (p. 676)* *Q6 (p. 677)*
Q7 (p. 678) *Q8 (p. 678)* *Q9 (p. 679)* *Q10 (p. 680)* *Q11 (p. 681)* *Q12 (p. 681)*
Q13 (p. 682) *Q14 (p. 683)*

Q1: Which of the following mortality indicators is a positive mortality indicator? (Q840671)

A. Age-specific mortality rate

B. Proportional mortality rate

C. Expectation of life

D. Year of potential life lost

Correct Answer: C. Expectation of life

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Mortality indicators: Crude death rate CDR = (Total no. or deaths in a community/ MYP (Mid-year population) in the same area) x 100 The mid-year population is taken on 1st July Limitation: It does not consider the age and sex of the population Age-specific death rate (Option A) ASDR = (Total no. of deaths in a particular age group (eg. 20-24yrs) a given area in a year/ MYP of the age group in the same area and year) x 1000 Expectation of life (Option C) Life expectancy at birth: A positive mortality indicator· Average no. of years a newborn is expected to live, considering the current age-specific mortality rates in a community. Important component to calculate the Human Development Index (HDI). Life expectancy at one year is PQLI. In 2021, life expectancy in India is 69.7 years . Infant mortality rate IMR = (Total number of deaths (0-1-year-old) in a given year / Total number of live births in the same year) x 1000. It is a health status indicator. Under-five mortality rate U5MR = (Total number of deaths (0-5 years old) in a given year /Total number of live births in one year) x 1000 Maternal Mortality Rate Maternal Mortality Rate (MMR) = (Total no. of maternal deaths/women in the reproductive age group [15-49 years]) x 100,000 Maternal Mortality Ratio (MMR) Maternal Mortality Ratio (MMR) = (Total no. of maternal deaths/Live Births) x 100,000 Adult mortality rate Probability of dying between 15 to 60 years of life Year of potential life lost (Option D) Premature death measurement. If life expectancy is 75 years, and death happens at age 30, then 45 years of potential life is lost Proportional mortality rate (Option B) The simplest measure of the burden of disease (Total deaths due to disease 'x'/ Total deaths in a community)■ x 100 Case fatality rate CFR = (Deaths due to diseases ‘z’ / total no of cases of disease ‘z’) x 100

References:

Park Textbook of Preventive Medicine, 27th Edition, Page 26, 64, 635

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following is true regarding maternal mortality rate? (Q840675)

A. The reproductive age group is taken between ages 15 to 50 years

B. Pregnancy-related deaths are counted up to 6 weeks postpartum

C. Most common direct cause of maternal mortality is anemia

D. Most common indirect cause of maternal mortality is hemorrhage(Post-partum hemorrhage).

Correct Answer: B. Pregnancy-related deaths are counted up to 6 weeks postpartum

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Pregnancy-related deaths are counted up to 6 weeks (OR) 42 days postpartum. The reproductive age group is taken from 15 to 49 years, not 50 years (Option A). Direct obstetric deaths are deaths due to obstetric complications of the pregnant state((Pregnancy, labor, and puerperium). Deaths due to obstetric hemorrhage or hypertensive disorders of pregnancy come under direct causes. The most common direct cause of maternal mortality is hemorrhage (Post-partum hemorrhage). (Option C) Indirect obstetric deaths are those resulting from previous existing diseases or diseases during pregnancy, aggravated by the physiological changes of pregnancy, and not due to direct obstetric deaths. Causes include anemia and existing cardiac or renal causes. The most common indirect cause of maternal mortality is anemia (Option D). MMR Maternal Mortality Rate (MMR) = (Total no. of maternal deaths/women in the reproductive age group [15-49 years]) x 100,000 Maternal Mortality Ratio (MMR) = (Total no. of maternal deaths/Live Births) x 100,000 Indicator of quality of healthcare delivery services Maternal deaths: Deaths during antenatal period/ delivery /postnatal period (up to 6 weeks post-delivery), excluding accidental causes.

References:

Park Textbook of Preventive Medicine, 27th Edition, Pg 635,636,637

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: All of the following are morbidity indicators except? (Q840680)

A. Notification rate

B. Incidence

C. Attendance rate

D. Expectation of life

Correct Answer: D. Expectation of life

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Expectation of life is a positive mortality indicator. Morbidity indicators: This is used to measure burden of illness Incidence (Option B) Prevalence Notification rate (Option A) Attendance rate at OPD (Option C) Admission, readmission, and discharge rates Hospital stay duration rates Rate of absence from school/work due to sickness They are not as effective at measuring subclinical illnesses.

References:

Park Textbook of Preventive Medicine, 27th Edition, pg 26
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8841197/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following statements best describes DALY? (Q840684)

A. It measures years lost to disability alone

B. It measures years lost to death alone

C. It measures years lost to disability and death

D. None of the above

Correct Answer: C. It measures years lost to disability and death

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: DALY or Disability-adjusted Life Years measures years of life lost to disability, and premature death both. Disability Indicators: Quality-adjusted Life Years (QALY) Quality and quantity of life lived. Assesses number of years of life added due to the intervention and hence the benefit and value for money of the intervention QALY - 1 year of life lived in perfect health Positive indicator of the cost-effectiveness of an intervention. Scored between 0 (death) and 1 (perfect health). Disability-adjusted Life Years (DALY) DALY= Years of life lost to premature death + years lived with disability 1 DALY: 1 year of healthy life lost It is a measure of the burden of disease and the effectiveness of intervention Year of life lost (YLL): Calculated from the number of deaths at each

age multiplied by the expected remaining years of life according to a global standard life expectancy. Years lost to disability (YLD): Where the number of incident cases due to injury and illness is multiplied by the average duration of the disease and a weighting factor reflecting the severity of the disease on a scale from 0 (perfect health) to 1 (dead). DALY = YLL + YLD Health Adjusted Life Expectancy (HALE) The average number of years a newborn is expected to live in full health considering the current age-specific mortality rate. Healthy Life Expectancy HALE = Life Expectancy at birth + adjustment of time spent in poor health HALE = LE-DALY Life Expectancy Average no. of years a newborn is expected to live, considering the current age-specific mortality rate. Sullivan's index (or DFLE) Disability-free life expectancy (DFLE) with the current pattern of mortality and disability.

References:

Park Textbook of Preventive Medicine, 27th Edition, Page 26

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following is not a healthcare delivery indicator? (Q840698)

A. Population per Sub Centre

B. Doctor nurse ratio

C. Bed occupancy rates

D. Population- bed ratio

Correct Answer: C. Bed occupancy rates

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Bed occupancy rate is a health care utilization indicator, not a health care delivery indicator. Other health indicators: Nutritional Indicators Prevalence of low birth weight Anthropometric measurement of pre-school children Height and weight of children at the time of school entry Health Care Delivery Indicators Doctor population ratio Doctor-nurse ratio (Option B) Population- bed ratio (Option D) Population per Sub Centre (Option A) Population per trained birth attendant Health Care Utilization Indicators Services being utilized Percentage of children fully immunized Percentage of eligible couples using family planning methods Bed occupancy rates Bed turnover ratio (Indicates efficiency of the healthcare delivery system) Average length of stay in hospital Environmental Indicators Percentage of the population has access to safe water supply and sanitation Percentage of households with a water source at home or within 15 m of the home Indicators of social and Mental Health Suicide rate Mental illness Socioeconomic Indicators Rate of population increase Per capita GNP Level of unemployment Dependency ratio Literacy rate Family size Housing Per capita calorie availability Health Policy Indicator Proportion of GNP (Gross National Product) spent on health (Income from abroad) GDP: Gross Domestic Product (Income within a country) Quality of Life Indicators PQLI HDI

References:

Park Textbook of Preventive Medicine, 27th Edition, Page 26

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: According to the WHO definition, health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. In recent years, this definition has been modified to also include: (Q889263)

A. Spiritual well-being

B. Ability to lead a socially and economically productive life

C. Environmental well-being

D. Genetic well-being

Correct Answer: B. Ability to lead a socially and economically productive life

Explanation: The modern interpretation of the WHO definition emphasises the ability to lead a socially and economically productive life . This reflects the functional and dynamic concept of health beyond the mere absence of disease. The WHO Constitution (1948) initially described health as a state of complete physical, mental, and social well-being, moving beyond the mere absence of disease. An operational definition was later needed for measurement purposes. In a broad sense, health was viewed as adequate functioning; in a narrow sense, as normal function without evidence of disease. The modern modification highlights the crucial dimension of the ability to lead a socially and economically productive life , shifting the focus from a static “complete well-being” concept to a practical and functional resource for living. Health is recognised as a fundamental human right , and well-being is considered an entitlement for all individuals. Health is intersectoral and integral to development , meaning it is not solely the result of medical care but is influenced by social, economic, environmental, and political determinants. Health is central to quality of life and is considered a major social investment, enabling individuals to contribute productively to society. Maintaining health involves individual, state, and international responsibility , making it a global social goal rather than merely a personal concern. Spiritual well-being (Option A): Although spiritual health has been proposed as an additional dimension (notably discussed in WHO forums in 1998), it has not been formally incorporated into the official WHO definition. Environmental well-being (Option C): Environmental factors are recognised as important determinants of health, but “environmental well-being” is not part of the formal WHO definition of health. Genetic well-being (Option D): Genetics influence susceptibility to disease, but there is no recognised “genetic well-being” component in the WHO definition. Modern public health focuses on gene-environment interaction rather than defining a state of genetic health.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 14

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: The biomedical concept of disease is based on which theory, postulated by Louis Pasteur? (Q889264)

A. Ecological concept

B. Psychosocial concept

C. Germ theory of disease

D. Holistic concept

Correct Answer: C. Germ theory of disease

Explanation: The germ theory of disease forms the basis of the biomedical concept. Postulated by Louis Pasteur (and later expanded by Robert Koch), it states that specific microorganisms cause specific diseases . The biomedical model views the human body as a biological machine, and disease as a deviation from normal structure or function . It emphasizes: A specific causative agent Pathological changes in tissues Diagnosis and curative treatment This model was highly successful in the control of infectious diseases and dominated medical thought in the late 19th and early 20th centuries. Limitations of the Biomedical Concept: Focuses primarily on biological factors Ignores social, psychological, environmental, and cultural determinants Inadequate for explaining chronic diseases, malnutrition, lifestyle disorders, and environmental health problems Ecological concept (Option A): Views disease as a disturbance in the dynamic equilibrium between agent, host, and environment . Disease results from maladjustment rather than a single causative germ. Psychosocial concept (Option B): Recognises that health and disease are influenced by social, psychological, cultural, economic, and political factors , expanding beyond purely biological

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 13

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: "Number of days of restricted activity" is classified as which type of health indicator? (Q889267)

A. Mortality indicator

B. Morbidity indicator

C. Disability indicator

D. Health utilization indicator

Correct Answer: C. Disability indicator

Explanation: Disability indicators measure the impact of illness on functional ability , rather than simply the presence of disease or death. Disability rates have emerged as crucial health indicators because death rates alone do not reflect the full impact of illness and injury. These indicators are based on the premise that health implies the ability to perform a full range of daily activities . Disability indicators are classified into two types: Event-type indicators - measure specific events or periods of disability. These include: Number of days of restricted activity Bed disability days Work-loss or school-loss days during a specified period Person-type indicators - classify individuals based on their limitations, such as: Limitation of mobility (e.g., confined to bed or house) Limitation of activity, including the ability to perform activities of daily living (ADL) such as eating, washing, and dressing In addition to disability indicators, broader composite measures of health status include: HALE (Health-Adjusted Life Expectancy): Measures the equivalent number of years a person can expect to live in full health, adjusting life expectancy for time spent in poor health. QALY (Quality-Adjusted Life Years): Combines both quality and quantity of life lived; 1 QALY equals one year in perfect health. DALY (Disability-Adjusted Life Years): Measures overall disease burden as the sum of years of life lost (YLL) and years lived with disability (YLD) . Mortality indicator (Option A): Measures death rates in a population (e.g., crude death rate, infant mortality rate). It does not assess disability or functional status. Morbidity indicator (Option B): Measures the occurrence of disease (incidence and prevalence). It reflects disease frequency, not the level of activity restriction caused by illness. Health utilisation indicator (Option D): Measures the use of healthcare services (e.g., hospital admission rates, bed occupancy rate, immunisation coverage). It reflects service utilisation rather than individual health status.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 26

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Health Adjusted Life Expectancy (HALE) estimates: (Q889269)

A. Life expectancy at birth

B. Years a newborn is expected to live in full health based on current rates of ill health and mortality

C. Disability-free life expectancy

D. Years lost to premature death

Correct Answer: B. Years a newborn is expected to live in full health based on current rates of ill health and mortality

Explanation: HALE (Health-Adjusted Life Expectancy) is defined as the average number of years that a newborn can expect to live in full health . It is derived from life expectancy at birth but adjusts for time spent in states of less-than-full health , using current rates of ill health and mortality . Thus, HALE reflects both the quantity and quality of life in a population. Life expectancy at birth (Option A): This refers to the average number of years a newborn is expected to live if current mortality rates remain constant . It measures only the length of life and does not account for morbidity, disability, or reduced health states. Disability-free life expectancy (Option C): Also known as active life expectancy or Sullivan's Index , this measure estimates the expected years of life lived without disability . It generally uses a binary classification (disabled vs. not disabled) and therefore does not account for varying degrees of health states in the way HALE does. Years lost to premature death (Option D): This refers to Years of Life Lost (YLL) , which measures the mortality component of disease burden . YLL is one of the components used to calculate Disability-Adjusted Life Years (DALYs) and does not estimate expected healthy lifespan.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 26

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: The simplest measure for estimating the burden of a disease in the community is: (Q889272)

A. Case fatality rate

B. Incidence rate

C. Crude death rate

D. Proportional mortality rate

Correct Answer: D. Proportional mortality rate

Explanation: Proportional Mortality Rate (PMR) indicates the relative importance of a specific disease as a cause of death in a community . It shows what proportion of the total deaths are due to a particular disease. Proportional Mortality Rate = (Number of deaths due to a specific disease / Total number of deaths) × 100 Because it uses readily available mortality data and does not require population denominators, PMR is considered one of the simplest measures for estimating disease burden in a community. Case fatality rate (Option A): This measures the killing power or severity of a disease. It represents the proportion of individuals with a particular disease who die from it. Thus, it reflects disease severity among affected individuals , not the overall burden of that disease in the community. Incidence rate (Option B): This measures the number of new cases of a disease occurring in a population during a specified period . It indicates the risk of developing the disease but does not represent the mortality burden or the relative importance of the disease as a cause of death. Proportional mortality rate (Option D): This represents the proportion of total deaths attributed to a specific cause . It is useful for comparing the relative contribution of different diseases to overall mortality, but it does not indicate the actual risk of dying from

that disease in the population.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 25

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: All of the following are health utilisation rates except: (Q889279)

A. Proportion of infants immunised

B. Proportion of women receiving antenatal care

C. Bed disability days

D. Bed occupancy rate

Correct Answer: C. Bed disability days

Explanation: Bed disability days are an event-type disability indicator that measures the number of days a person is confined to bed due to illness or injury, reflecting morbidity burden rather than service utilisation . Health utilisation rates measure the extent to which health services are actually used by the population . They are usually expressed as the proportion of people in need of a service who receive it during a specified period (commonly one year). These indicators provide information about health service coverage and performance and indirectly reflect the health needs and health status of a population . Utilization of health services is influenced not only by need but also by factors such as availability and accessibility of services , affordability , and the attitude of individuals toward health care and the health system . Common examples of utilisation rates include: Proportion of infants fully immunised (Option A) against vaccine-preventable diseases Proportion of pregnant women receiving antenatal care (Option B) Percentage of the population using family planning methods Bed occupancy rate (Option D) Average length of hospital stay (days of care rendered ÷ discharges) Bed turnover ratio (discharges ÷ average number of beds)

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pages 26, 27

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: For optimum utilisation of health services in a hospital, the bed turnover interval must be: (Q889287)

A. Always slightly positive

B. Zero

C. Always negative

D. Maximised

Correct Answer: A. Always slightly positive

Explanation: Bed Turnover Interval (TOI) is the average time a hospital bed remains vacant between the discharge of one patient and the admission of the next patient . It is an indicator of hospital bed utilisation and reflects how efficiently inpatient facilities are used. Bed Turnover Interval = (Number of vacant bed days / Number of discharges) For optimum utilisation of hospital services, the bed turnover interval should be low and slightly positive , allowing a short period for cleaning, preparation of the bed, and administrative arrangements before admitting the next patient, while avoiding unnecessary idle time of beds. Zero interval (Option B): This would imply immediate admission after discharge , leaving no time for bed preparation or infection control measures. Always negative (Option C): A negative turnover interval is not practically possible , since a bed cannot be occupied before it is vacated. Maximised (Option D): A large turnover interval indicates that beds remain vacant for longer periods , reflecting under-utilisation of hospital resources .

References:

https://www.researchgate.net/publication/268986835_Improving_hospital_bed_occupancy_and_resource_utilization_through_queuing_modeling_and_evolutionary_computation

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: The best indicator of the availability, utilisation, and effectiveness of health care, and a very sensitive indicator of overall health status, is: (Q889289)

A. Crude death rate

B. Infant mortality rate

C. Under-5 mortality rate

D. Maternal mortality rate

Correct Answer: B. Infant mortality rate

Explanation: Infant Mortality Rate (IMR) is the ratio of deaths of infants under 1 year of age in a given year to the total number of live births in the same year, usually expressed per 1000 live births . It is one of the most widely accepted indicators of health status, reflecting not only the health of infants but also the overall health status of a

population and the socio-economic conditions under which people live . Infant Mortality Rate = (Number of deaths of infants under 1 year of age in a given year / Number of live births in the same year) × 1000 IMR is also a sensitive indicator of the availability, utilisation, and effectiveness of health care services , particularly maternal and perinatal care . Infant survival depends on several factors, including maternal health, antenatal care, safe delivery, newborn care, nutrition, sanitation, immunisation, and access to health services. Because of these multiple determinants, IMR serves as a key indicator of the overall health and development of a community . Crude death rate (Option A): This measures the total number of deaths in a population per year per 1000 population. It is strongly influenced by the age structure of the population , making it a relatively insensitive indicator of health status. Under-5 mortality rate (Option C): This measures deaths among children below five years of age per 1000 live births . It reflects child survival and socio-economic conditions, but IMR is traditionally considered the more sensitive indicator of health care availability and effectiveness . Maternal mortality rate (Option D): This measures maternal deaths related to pregnancy, childbirth, or within 42 days of termination of pregnancy per 100,000 live births . Although it reflects the quality of obstetric care and women's health, it does not represent the overall health status of the entire population as comprehensively as IMR.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 25

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which measure is used to assess the cost-effectiveness (value for money) of a medical intervention, combining both quality and quantity of life? (Q889295)

A. DALY

B. QALY

C. HALE

D. PQLI

Correct Answer: B. QALY

Explanation: QALY (Quality-Adjusted Life Years) is a measure that combines both the quantity of life gained and the quality of life during those years . It is widely used in cost-utility analysis to assess the cost-effectiveness (value for money) of medical interventions . In QALY calculations, each year of life is assigned a quality weight ranging from 1 (perfect health) to 0 (death) . Years lived with illness or disability are given values between 0 and 1 depending on the quality of health. The benefit of an intervention is therefore measured as additional years of life gained, adjusted for the quality of those years . DALY (Option A): Disability-Adjusted Life Years measure the burden of disease rather than the benefit of an intervention. DALY represents the total loss of healthy life due to disease and is calculated as: DALY = Years of Life Lost (YLL) + Years Lived with Disability (YLD) . HALE (Option C): Health-Adjusted Life Expectancy is a population-level indicator that estimates the average number of years a person can expect to live in full health , adjusting life expectancy for time spent in poor health. It is not

used to evaluate the cost-effectiveness of individual medical interventions. PQLI (Option D): Physical Quality of Life Index is a social development indicator based on infant mortality rate, life expectancy at age one, and literacy rate . It reflects overall socio-economic development rather than the clinical effectiveness or economic value of medical treatments.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 26

↑ *Back to this question in Part A*

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• [01_ Concept of Health and Disease] 004 Previous Year Questions

« Back to Folder Directory

[01_ Concept of Health and Disease] 004 Previous Year Questions — Quick Jump

Q1 (p. 685)	*Q2 (p. 685)*	*Q3 (p. 686)*	*Q4 (p. 687)*	*Q5 (p. 688)*	*Q6 (p. 689)*
Q7 (p. 690)	*Q8 (p. 691)*	*Q9 (p. 691)*	*Q10 (p. 692)*	*Q11 (p. 693)*	*Q12 (p. 693)*
Q13 (p. 694)	*Q14 (p. 694)*	*Q15 (p. 695)*	*Q16 (p. 696)*	*Q17 (p. 697)*	*Q18 (p. 698)*
Q19 (p. 699)	*Q20 (p. 699)*				

Q1: Which of the following demographic indicators is used to compare the life expectancy of two different countries? (Q793769)

A. QALY

B. DALY

C. HDI

D. HPI

Correct Answer: C. HDI

Explanation: Correct Option C - HDI: Used to compare life expectancy between nations. HDI Calculation - Minimum Maximum MYS (mean years of schooling) 0 y 13.1 y Expected years of schooling 0 y 18 y Education index 0 0.978 Income (PPP) 100$ 107,721$ Live expectancy at birth 20 y 83.4 y Combination of indicators PQLI HDI 0 < PQLI < 100 0 < HDI < +1 India 65 India 0.640 .5 to .8 is medium country development Incorrect Options: Option A - QALY: Measures effectiveness of medical interventions. Option B - DALY: Measures disease burden. Option D - HPI: Measures poverty in developing nations.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: The average life expectancy for a woman in Japan is 87 years. Due to recent advances in testing for cervical cancer, there is an increase in life expectancy by 15 years. The healthcare utility value is 0.8. Which of the following can be calculated

from the parameters given? (Q855619)

A. HALE

B. DALY

C. DFLE

D. QALY

Correct Answer: D. QALY

Explanation: djusted Life Year) is calculated using life expectancy, healthcare utility values, and quality of life measures. Formula: QALY = Additional Life Years × Utility Value Additional Life Years = Life expectancy with intervention - Life expectancy without intervention Additional life expectancy = 15 years Utility value = 0.8 Thus, QALY = 15 × 0.8 = 12 QALYs . HALE (Health-Adjusted Life Expectancy) (option A) : HALE adjusts life expectancy by subtracting years of poor health based on population health data. The problem does not provide detailed morbidity or population health metrics necessary to calculate HALE. DALY (Disability-Adjusted Life Year) (option B) : DALY measures the burden of disease by summing years of life lost (YLL) due to premature death and years lived with disability (YLD). The parameters do not include data about years of disability or disease burden, making DALY calculation impossible. DFLE (Disability-Free Life Expectancy) (option C) : DFLE estimates the number of years a person can live without disability. No information on disability or its absence is provided, so DFLE cannot be calculated.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 26

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the options below aids in determining the severity of a disease? (Q859211)

A. Proportional mortality rate

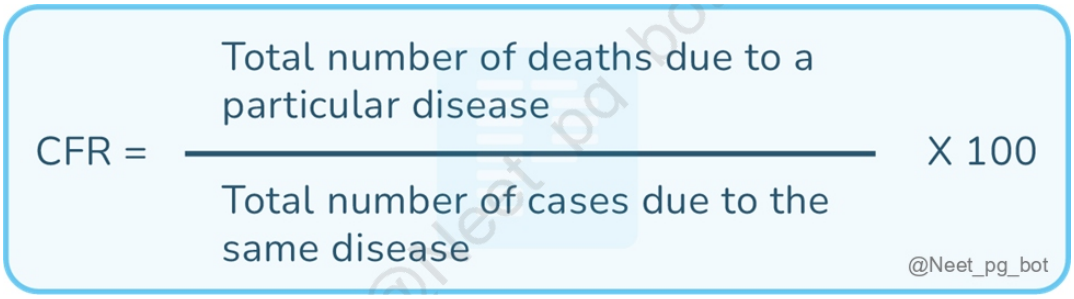
B. Incidence

C. Case fatality rate

D. Prevalence

Correct Answer: C. Case fatality rate

Explanation: The Case Fatality Rate (CFR) is closely related to virulence, representing the killing power of a disease. It is calculated as the ratio of deaths to cases , without specifying a time interval, using the formula: {{caption_text}} CFR is typically used for acute infectious diseases (e.g., food poisoning, cholera, measles) but is less useful for chronic diseases due to the long and variable period from onset to death. The CFR for the same disease can vary across different epidemics due to agent, host, and environmental changes. Proportional mortality rate (Option A): Measures deaths from a specific cause relative to all deaths, not directly predicting disease severity. This option is incorrect. Incidence (Option B): Tracks new cases over time, not directly related to disease severity. This option is incorrect. Prevalence (Option D): Total cases at a specific time, not indicating disease severity. This option is incorrect.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg no.66

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: In Sustainable Development Goal 3, the target 3.1 aims to reduce the Maternal Mortality Ratio by 2030 to_____ (per 1 lakh live births)? (Q858453)

A. <70

B. < 100

C. < 50

D. <130

Correct Answer: A. <70

Explanation: Correct Option A - <70 In Sustainable Development Goal 3, target 3.1 aims to reduce the Maternal Mortality Ratio by 2030 to < 70 (per 1 lakh live births) "Transforming our world: the 2030 agenda for sustainable development" was adopted by the United Nations General Assembly on 25 th September 2015. It has 17 goals and 169 targets, including a specific goal 3 for health with 13 targets. Incorrect Options: Option B, C & D are incorrect

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 40

↑ *Back to this question in Part A*

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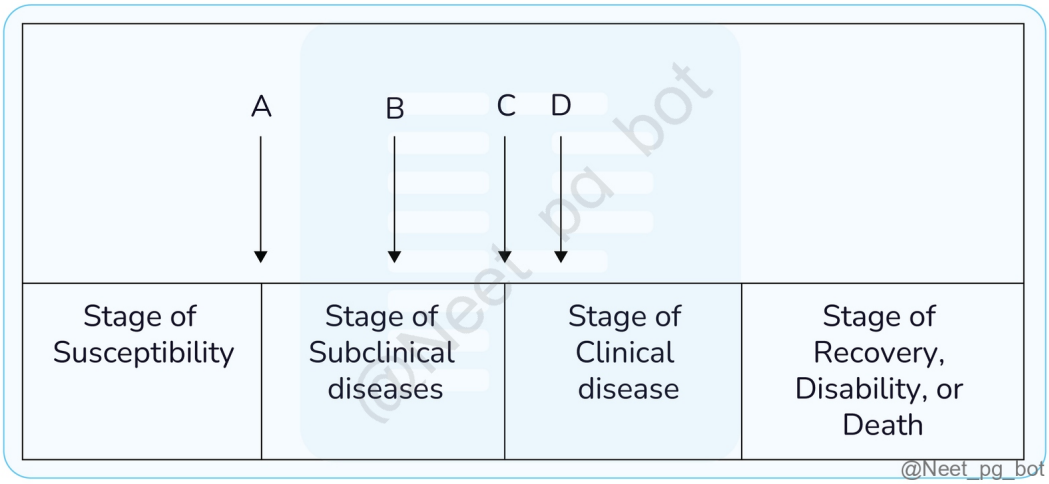
Q5: What does the point labeled C denote? (Q856592)

A. Onset of symptoms

B. Onset of pathological changes

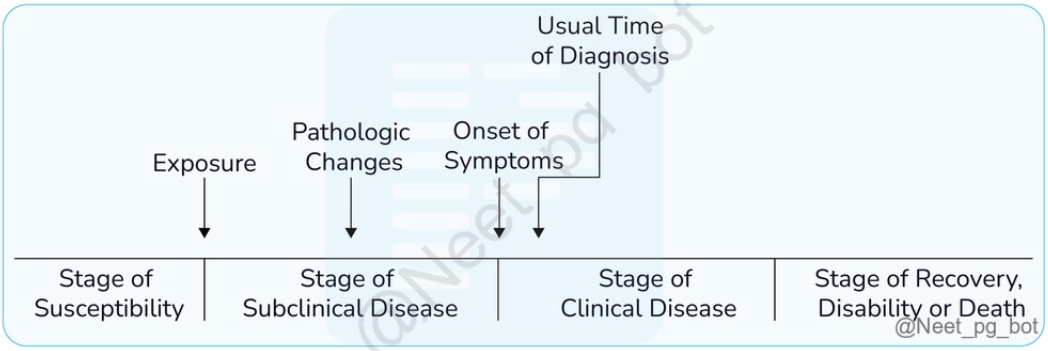
C. Usual time of diagnosis

D. Exposure to etiologic agent



Correct Answer: A. Onset of symptoms

Explanation: Correct Option: A) Onset of symptoms The onset of symptoms marks the transition from subclinical disease to the clinical disease stage. Incorrect Options: Onset of pathological changes (Option B): Onset of pathological changes occurs before the subclinical stage Usual time of diagnosis (Option C): Usual time of diagnosis varies and can happen at any stage. Exposure to etiologic agent (Option D): Exposure to the etiologic agent precedes the subclinical stage.



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page no: 13

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: When quarantine was introduced in the 14th century for plague, how many days were people who were suspected to have the infection quarantined for? (Q857754)

A. 14 days

B. 35 days

C. 40 days

D. 28 days

Correct Answer: C. 40 days

Explanation: - 40 days The term "quarantine" originates from the Italian word "quaranta," meaning 40 . In the 14th century, during the outbreak of the bubonic plague, authorities in maritime cities like Venice implemented a rule that ships arriving from infected ports had to anchor for 40 days before passengers and crew could disembark. This 40-day isolation period was chosen for religious and practical reasons, as it was believed to be long enough to determine whether someone had the disease. Public health strategies: Isolation separates individuals who are already ill and potentially infectious from others for the maximum period of communicability to prevent disease spread. It can occur either in healthcare facilities or at home, depending on illness severity and resource availability. It is a defensive strategy. Quarantine separates and restricts the movement of individuals exposed to a contagious disease for a maximum known incubation period, but not yet symptomatic to monitor for symptoms and prevent potential disease spread upon becoming infectious. Isolation and quarantine are examples of primary prevention. Social distancing is a public health measure involving maintaining physical distance and avoiding crowded places or gatherings. It aims to prevent the transmission of infectious diseases but applies broadly, not specifically to individuals already ill. Contact tracing is the process of identifying and monitoring individuals in close contact with an infected person. It is used to identify potential secondary cases and implement appropriate

measures, such as quarantine or testing, to prevent further transmission.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pg 132

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following indicators is the best to know the overall burden of disease? (Q857725)

A. Quality-adjusted life years (QALY)

B. Health-adjusted life expectancy (HALE)

C. Disability-adjusted life years (DALY)

D. Disability-free life expectancy (DFLE)

Correct Answer: C. Disability-adjusted life years (DALY)

Explanation: isability Indicators: Quality-adjusted Life Years (QALY) (Option A) Quality and quantity of life lived. Assesses number of years of life added due to the intervention and hence the benefit and value for money of the intervention QALY - 1 year of life lived in perfect health Positive indicator of the cost-effectiveness of an intervention. Scored between 0 (death) and 1 (perfect health). Disability-adjusted Life Years (DALY) DALY= Years of life lost to premature death + years lived with disability 1 DALY: 1 year of healthy life lost It is a measure of the burden of disease and the effectiveness of intervention Year of life lost (YLL): Calculated from the number of deaths at each age multiplied by the expected remaining years of life according to a global standard life expectancy. Years lost to disability (YLD): Where the number of incident cases due to injury and illness is multiplied by the average duration of the disease and a weighting factor reflecting the severity of the disease on a scale from 0 (perfect health) to 1 (dead). DALY = YLL + YLD Health Adjusted Life Expectancy (HALE) (Option B) The average number of years a newborn is expected to live in full health considering the current age-specific mortality rate. Healthy Life Expectancy HALE = Life Expectancy at birth + adjustment of time spent in poor health HALE = LE-DALY Life Expectancy Average no. of years a newborn is expected to live, considering the current age-specific mortality rate. Sullivan’s index (or DFLE) (Option D) Disability-free life expectancy (DFLE) with the current pattern of mortality and disability.

References:

Park’s Textbook of Preventive and Social Medicine, 27th ed pg 26

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A public health worker is going out into the community once every 15 days for collection of blood smears for malaria surveillance. What type of surveillance is this? (Q857088)

A. Sentinel

B. Active

C. Passive

D. None of the above

Correct Answer: B. Active

Explanation: ctive surveillance involves proactive efforts to collect data. In the scenario, the worker regularly collects blood smears for malaria surveillance, indicating proactive data collection. Surveillance is the systematic collection, analysis, and interpretation of health data to plan, implement, and evaluate public health practice. Types: Passive Surveillance: relies on routine reporting from healthcare providers or institutions without additional efforts to enhance reporting (Option C) Active Surveillance involves proactive data collection, where health authorities actively search for cases of diseases. The 4 diseases that are actively screened in India: Polio: AFP (Acute Flaccid Paralysis) by SMO (Senior Medical Officer) Malaria: By MPW (Multipurpose Worker) Kala Azar (Visceral Leishmaniasis): Depending on the region or program specifics, various healthcare personnel may be involved in the surveillance and reporting. Tuberculosis: By ASHA (Accredited Social Health Activist) worker Sentinel Surveillance involves monitoring a specific subset of the population or healthcare facilities representing the larger population. E.g., HIV/AIDS screening done in ANC, Blood banks, and STD Clinics (Option A) Syndromic surveillance monitors non-specific health indicators or syndromes (e.g., fever surveillance for malaria, cough for 2w for TB, Flu symptoms for COVID) to detect potential outbreaks or public health emergencies early, analyzing symptom data patterns.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pg 47

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Match the following stages with their relevant descriptions: 1. Pre-pathogenesis a. Normal course without any intervention 2. Pathogenesis b. Appearance of clinical signs and symptoms 3. Natural history of a disease c. Reaching normalcy with the help of the community 4. Rehabilitation d. Period before the onset of the disease (Q855128)

A. 1-c, 2-d, 3-a, 4-d

B. 1-d, 2-b, 3-a, 4-c

C. 1-b, 2-d, 3-c, 4-d

D. 1-a, 2-c, 3-d, 4-b

Correct Answer: B. 1-d, 2-b, 3-a, 4-c

Explanation: Pre-pathogenesis (1-d) : This is the period before the onset of the disease, where there are no signs or symptoms of the disease. It's the stage before any pathogenic agents have affected the individual. Pathogenesis (2-b) : This stage involves the development of the disease after exposure to the causative agent, and it is marked by the appearance of clinical signs and symptoms. Natural history of a disease (3-a) : This refers to the normal course of the disease without any intervention, from its initial exposure to its potential resolution or progression. Rehabilitation (4-c) : Rehabilitation refers to the process of reaching normalcy or improving function with the help of the community or medical interventions after the disease has caused some impact.

References:

Park’s Textbook of Preventive and Social Medicine, 25th edition, page 41, 42, 51

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following explains Social factors and disease causation ? (Q793849)

A. Sociology

B. Social pathology

C. Society

D. Community

Correct Answer: B. Social pathology

Explanation: Correct Option B - Social pathology: Examines social causes and effects of diseases. Incorrect Options: Option A - Sociology: Studies social behavior but not disease causation. Option C - Society: Influences health outcomes but not a field of study for disease causation. Option D - Community: Important for health outcomes but not a specific field for disease

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: The time interval between acquiring an infection and reaching the period of maximum infectivity is known as? (Q866469)

A. Generation time

B. Communicable period

C. Incubation period

D. Serial interval

Correct Answer: A. Generation time

Explanation: Generation time is the period from the infection of a primary case to the time that case reaches maximum infectiousness, crucial for understanding transmission dynamics. Incorrect Options: Option B - Communicable period is the duration during which the infected person can transmit infection. Option C - Incubation period is from infection to onset of symptoms. Option D - Serial interval is time between onset of symptoms in successive cases.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: A 35-year-old man is unemployed because he is unable to walk after an accident . His unemployment is classified as a: (Q793720)

A. Disability

B. Handicap

C. Disease/disorder

D. Impairment

Correct Answer: B. Handicap

Explanation: Correct Option B - Handicap: Man's inability to walk after an accident has left him unable to work. Incorrect Options: Option A - Disability: Doesn't address his inability to work. Option C - Disease/disorder: Focuses on illness rather than work limitation. Option D - Impairment: Doesn't specify work limitation.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: According to the NACO guidelines, what level of prevention is achieved when an HIV patient undergoes counselling and screening for TB at an ICTC clinic? (Q793621)

A. Primordial

B. Primary

C. Secondary

D. Primary & secondary

Correct Answer: D. Primary & secondary

Explanation: Correct Option D - Primary and Secondary: NACO guidelines recommend both primary and secondary prevention measures for TB screening at ICTC clinics for HIV patients. Primary prevention involves counseling to address risk factors. Secondary prevention entails screening for early diagnosis and treatment. Incorrect Options: Option A - Primordial: Not applicable. Option B - Primary prevention: Incomplete; counseling also serves as secondary prevention. Option C - Secondary prevention: Incomplete; screening also serves as primary prevention.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A government plans to outline tobacco control laws. What is the level of prevention here? (Q857969)

A. Primordial prevention

B. Primary prevention

C. Secondary prevention

D. Tertiary prevention

Correct Answer: B. Primary prevention

Explanation: The government's plan to outline tobacco control laws is considered primary prevention because the laws are intended to prevent the initiation of tobacco use and thereby reduce the risk of diseases associated with tobacco use, such as cancer, heart disease, and respiratory conditions. Primary prevention focuses on reducing risk factors before any disease or injury occurs. Tobacco control laws aim to prevent the onset of smoking-related health problems by discouraging the use of tobacco. Primordial prevention (Option A): is incorrect because primordial prevention focuses on preventing the development of risk factors in the first place, like promoting a healthy environment or addressing social determinants. While tobacco control laws aim to prevent smoking, they are more specifically aimed at reducing existing risk factors (tobacco use), making primary prevention a more accurate term. Secondary prevention (Option C): is incorrect because secondary prevention focuses on early detection and intervention after the risk factors have been established. Tobacco control laws, however, aim to prevent the risk factor (tobacco use) from even emerging. Tertiary prevention (Option D): is incorrect because tertiary prevention deals with management and rehabilitation of individuals who already have diseases or conditions, which is not the focus of tobacco control laws. These laws are intended to prevent the occurrence of tobacco-related diseases in the first place.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 48, 49

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Hand washing during COVID-19 is what level of prevention? (Q857967)

A. Primordial prevention

B. Primary prevention

C. Secondary prevention

D. Tertiary prevention

Correct Answer: B. Primary prevention

Explanation: Handwashing during COVID-19 is a form of primary prevention because it aims to prevent the onset of illness by reducing the risk of infection . Primary prevention involves actions taken to prevent the occurrence of disease or injury before it happens, and hand hygiene is an effective strategy to reduce transmission of the virus. Primordial prevention (Option A): is incorrect because primordial prevention focuses on preventing the emergence of risk factors for disease, such as promoting healthy behaviors in early childhood or ensuring access to a healthy environment. Handwashing is a more immediate preventive measure rather than an early-stage intervention. Secondary prevention (Option C): is incorrect because secondary prevention focuses on early detection and screening for disease, as well as early intervention to reduce the severity or complications of an already established disease. Handwashing prevents disease transmission, not early disease detection. Tertiary prevention (Option D): is incorrect because tertiary prevention deals with the management and rehabilitation of individuals with already

established diseases to prevent further complications and improve quality of life. Handwashing is not related to disease management but to prevention.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 48, 49.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: The years of potential life lost could be attributed to: (Q855419)

A. Years lost to morbidity

B. Years lost due to premature death

C. Years lost to disability

D. Years lost to poor quality of life

Correct Answer: B. Years lost due to premature death

Explanation: Years of potential life lost due to premature death. Example: If a 30-year-old dies, potentially losing 45 years of life (assuming a life expectancy of 75). YPLL is a mortality indicator, less sensitive in developed nations with better disease control. Mortality indicators: Crude death rate CDR = (Total no. or deaths in a community/ MYP (Mid-year population) in the same area) x 100 The mid-year population is taken on 1st July Limitation: It does not consider the age and sex of the population Age-specific death rate ASDR = (Total no. of deaths in a particular age group (eg. 20-24yrs) a given area in a year/ MYP of the age group in the same area and year) x 1000 Expectation of life Life expectancy at birth: A positive mortality indicator· Average no. of years a newborn is expected to live, considering the current age-specific mortality rates in a community. Important component to calculate the Human Development Index (HDI). Life expectancy at one year is PQLI. In 2021, life expectancy in India is 69.7 years . Infant mortality rate IMR = (Total number of deaths (0-1-year-old) in a given year / Total number of live births in the same year) x 1000. It is a health status indicator. Under-five mortality rate U5MR = (Total number of deaths (0-5 years old) in a given year /Total number of live births in one year) x 1000 Maternal Mortality Rate Maternal Mortality Rate (MMR) = (Total no. of maternal deaths/women in the reproductive age group [15-49 years]) x 100,000 Maternal Mortality Ratio (MMR) Maternal Mortality Ratio (MMR) = (Total no. of maternal deaths/Live Births) x 100,000 Adult mortality rate Probability of dying between 15 to 60 years of life Year of potential life lost Premature death measurement. If life expectancy is 75 years, and death happens at age 30, then 45 years of potential life is lost Proportional mortality rate The simplest measure of the burden of disease (Total deaths due to disease 'x'/ Total deaths in a community)■ x 100 Case fatality rate CFR = (Deaths due to diseases ‘z’ / total no of cases of disease ‘z’) x 100 Disability Indicators: Quality-adjusted Life Years (QALY) (Option D ruled out) Quality and quantity of life lived. Assesses number of years of life added due to the intervention and hence the benefit and value for money of the intervention QALY - 1 year of life lived in perfect health Positive indicator of the cost-effectiveness of an intervention. Scored between 0 (death) and 1 (perfect health). Disability-adjusted Life Years (DALY) (Option C ruled out) DALY= Years of life lost to

premature death + years lived with disability 1 DALY: 1 year of healthy life lost It is a measure of the burden of disease and the effectiveness of intervention Year of life lost (YLL): Calculated from the number of deaths at each age multiplied by the expected remaining years of life according to a global standard life expectancy. Years lost to disability (YLD): Where the number of incident cases due to injury and illness is multiplied by the average duration of the disease and a weighting factor reflecting the severity of the disease on a scale from 0 (perfect health) to 1 (dead). DALY = YLL + YLD Health Adjusted Life Expectancy (HALE) The average number of years a newborn is expected to live in full health considering the current age-specific mortality rate. Healthy Life Expectancy HALE = Life Expectancy at birth + adjustment of time spent in poor health HALE = LE-DALY Life Expectancy Average no. of years a newborn is expected to live, considering the current age-specific mortality rate. Sullivan's index (or DFLE) Disability-free life expectancy (DFLE) with the current pattern of mortality and disability. Years lost to morbidity (Option A): YPLL refers to premature death, not morbidity.

References:

Park'sTextbook of Preventive and Social Medicine 27th ed pg 26, 64, 635

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Fetal cardiac monitoring comes under which level of prevention? (Q860023)

A. Primordial

B. Primary

C. Secondary

D. Tertiary

Correct Answer: C. Secondary

Explanation: Secondary prevention aims to detect and address a disease early before it causes significant complications. Level of Prevention Goals Examples Primordial (Option A ruled out) To prevent the establishment of risk factors Lifestyle modification Health promotion Primary (Option B ruled out) Interventions to prevent the onset of disease Vaccinations Health education Family planning Use of mosquito nets Pre-placement examination Secondary (Option C) Early detection and prompt treatment of disease to prevent complications Screening tests (e.g., mammograms, PAP smears) Self-examinations Health camps with screening DOTS for TB; ART for HIV; MDT for leprosy. Tertiary (Option D ruled out) Interventions to manage and reduce complications of existing disease to prevent disability or death Rehabilitation Physical therapy Chronic disease management programs Reconstructive surgery

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 13

↑ *Back to this question in Part A*

Q18: Which of the following is not a part of the global hunger index? (Q860536)

A. U5MR

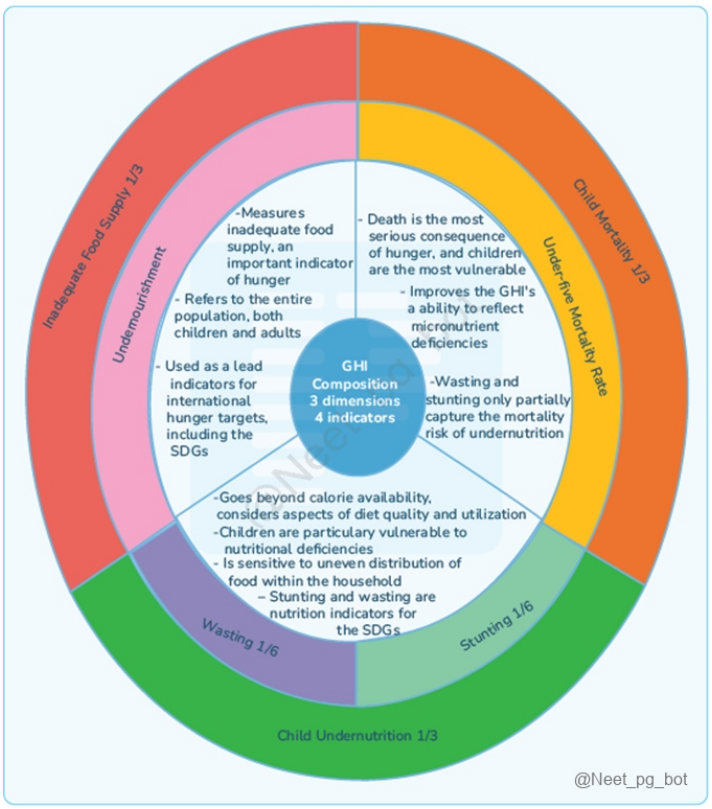
B. Malnutrition

C. Inadequate food supply

D. Infant mortality rate

Correct Answer: D. Infant mortality rate

Explanation: The Global Hunger Index (GHI) does not include the Infant mortality rate. It measures three dimensions of hunger: Food availability (Option C) , Child's nutritional status (Option B) and Child mortality due to undernutrition It includes three equally weighted indicators: The proportion of people who are food energy-deficient (FAO estimates) Prevalence of underweight children under 5 years (WHO data) Mortality rate of children under 5 years (UNICEF reports) (Option A)



References:

https://www.who.int/data/nutrition/nlis/info/global-hunger-index-(ghi)

↑ *Back to this question in Part A*

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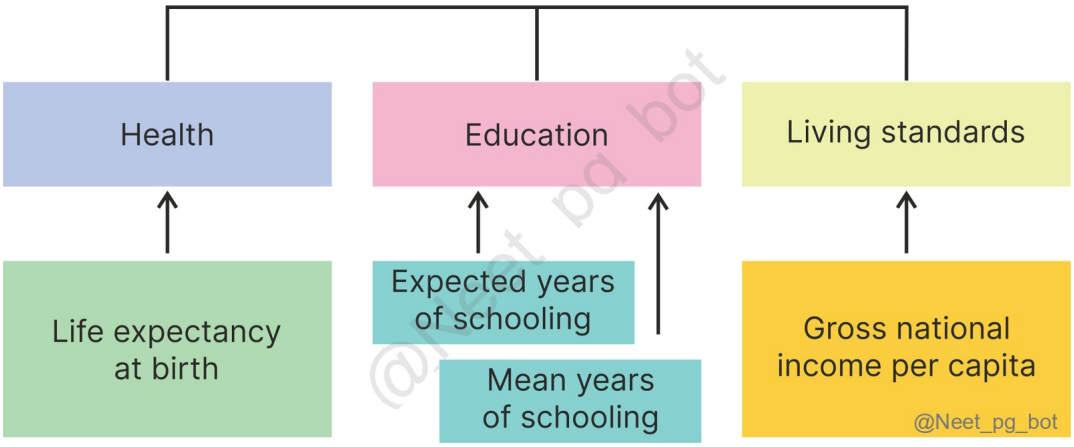
Q19: Identify the index? (Q844080)

A. Human developmental index

B. POLI

C. Human poverty index

D. Multidimensional poverty index



Correct Answer: A. Human developmental index

Explanation: Correct Option A - Human developmental index: The Human Development Index (HDI) is a composite statistic used to rank countries based on human development levels. It is calculated by assessing three key dimensions of human development: Life Expectancy at Birth : Reflects the ability to live a long and healthy life. Education : Measured by the mean years of schooling for adults aged 25 years or more and the expected years of schooling for children entering school. Gross National Income (GNI) per Capita : Reflects the standard of living and economic conditions in a country, adjusted for purchasing power parity (PPP). Incorrect Options: Options B, C and D are incorrect as given above.

↑ *Back to this question in Part A*

@Neet_pg_bot

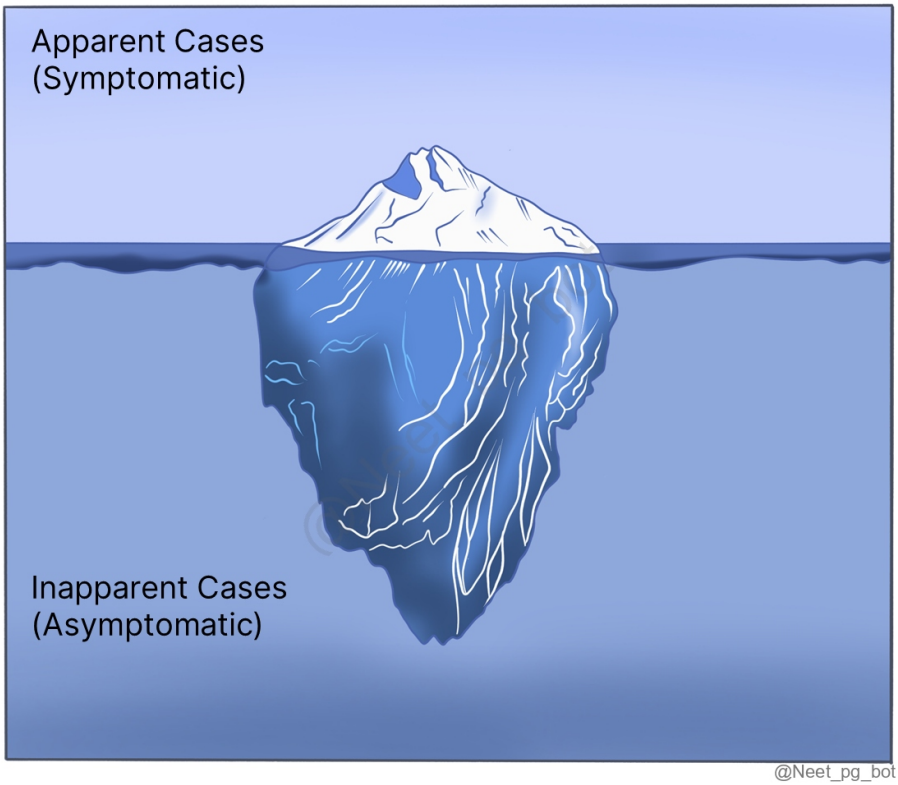
Q20: Which of the following diseases has the maximum submerged portion of the iceberg? (Q843998)

A. Influenza

B. Chicken pox

C. Tetanus

D. Rabies



Correct Answer: A. Influenza

Explanation: Correct Option A - Influenza: Influenza has the maximum submerged portion of the iceberg because a large number of infected individuals may be asymptomatic or exhibit mild symptoms, resulting in underreporting and unrecognized cases. This large reservoir of mild or asymptomatic cases contributes significantly to the spread of the disease. Incorrect Options: Option B - Chickenpox: Like influenza, chickenpox can have a large submerged portion where mild or atypical cases go unreported, especially in individuals with prior immunity or vaccination. However, most cases present with recognizable symptoms like rash. Option C - Tetanus: Tetanus has a small submerged portion because it generally presents with noticeable and severe symptoms. It does not spread from person to person, so there is no asymptomatic carrier state contributing to its epidemiological iceberg. Option D - Rabies: Rabies has the least submerged portion of the iceberg because it is almost always symptomatic and progresses to severe outcomes once symptoms appear. Nearly all cases are identified due to the seriousness of the disease.

↑ *Back to this question in Part A*

@Neet_pg_bot

• [02_Epidemiology] 005 Basics Of Epidemiology

« Back to Folder Directory

[02_Epidemiology] 005 Basics Of Epidemiology — Quick Jump

Q1 (p. 701)	*Q2 (p. 702)*	*Q3 (p. 702)*	*Q4 (p. 703)*	*Q5 (p. 704)*	*Q6 (p. 705)*
Q7 (p. 706)	*Q8 (p. 707)*	*Q9 (p. 708)*	*Q10 (p. 709)*	*Q11 (p. 710)*	*Q12 (p. 711)*
Q13 (p. 711)	*Q14 (p. 712)*	*Q15 (p. 713)*	*Q16 (p. 713)*	*Q17 (p. 714)*	*Q18 (p. 715)*
Q19 (p. 715)	*Q20 (p. 716)*	*Q21 (p. 717)*	*Q22 (p. 717)*	*Q23 (p. 718)*	*Q24 (p. 719)*
Q25 (p. 720)					

Q1: What are rate, ratio, and proportion commonly referred to as in the context of epidemiology? (Q841290)

A. Tools for risk assessment

B. Tools for biostatistical analysis

C. Basic tools of measurement in epidemiology

D. Measures of central tendency

Correct Answer: C. Basic tools of measurement in epidemiology

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In epidemiology, tools of measurement show disease frequency/magnitude. They are rate, ratio, and proportion. Rate : Numerator/Denominator x 1000 or 10,000 or 1,00,000 where the numerator is a part of the denominator Ratio: Numerator/Denominator where the numerator is not a part of the denominator Proportion : Numerator/Denominator x 100 where the numerator is a part of the denominator Definitions in Epidemiology Measure Definition Ratio A comparison of two numbers, e.g., male to female ratio Proportion A type of ratio where the numerator is part of the denominator, e.g., % of infected Rate A proportion with a time component, e.g., incidence rate per year These are essential for calculating incidence , prevalence , case fatality rate , etc. Tools for risk assessment (Option A): Incorrect because while rates and ratios are used in risk assessment , they are more fundamentally classified as measurement tools . Tools for biostatistical analysis (Option B): Incorrect because this is too broad and indirect—while they are used in biostatistics, their primary role in epidemiology is measurement. Measures of central tendency (Option D): Incorrect because central tendency refers to mean, median, and mode , not rate, ratio, or proportion.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 63

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A researcher studies serum cholesterol levels (continuous variable) in two independent groups of patients (100 patients in one group and 200 patients in another group). Which of the following statistical tests is most appropriate for analysis? (Q882184)

A. Paired t-test

B. Unpaired t-test

C. Chi-square test

D. ANOVA

Correct Answer: B. Unpaired t-test

Explanation: An unpaired (independent samples) t-test is used to compare the means of a continuous variable between two independent groups . In this scenario, serum cholesterol is a continuous variable, and the two patient groups are unrelated, making the unpaired t-test the most appropriate statistical test. Paired t-test (Option A): Used when measurements are taken from the same individuals before and after an intervention or in matched pairs, which is not the case here. Chi-square test (Option C): Applied for comparison of categorical variables, not continuous data like serum cholesterol levels. ANOVA (Option D): Used when comparing more than two independent groups; unnecessary when only two groups are involved.

References:

https://library.virginia.edu/data/articles/understanding-t-tests-anova-and-manova

https://medium.com/@gordon.chen07/whats-chi-square-8992f4164ebc

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 980

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following components of epidemiology is associated with descriptive epidemiology? (Q844332)

A. Disease determinants

B. Disease distribution

C. Disease frequency

D. Both A and C

Correct Answer: B. Disease distribution

Explanation: Definition of epidemiology (by John M Last) : Study of frequency, distribution and determinants of health-related states/events or disease in population groups and application of the study to control health problems. Components of epidemiology: Disease distribution : Disease distribution is according to time, place, and person. Descriptive epidemiology helps form an aetiological hypothesis. (Option B) Disease determinants : Answers to why and how of the disease [i.e. Identifying causes and risk factors of disease].Helps in testing a hypothesis. (Option A) Disease frequency : Incidence and prevalence of a disease, expressed in the form of rate, proportion, and ratio. (Option C)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 61

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A public health department is implementing a new vaccination program to prevent the spread of a contagious disease in a community. After several years of the vaccination program, which of the following outcomes is most likely to occur due to the successful vaccination program? (Q841304)

A. Prevalence of the disease remain the same

B. Increase in the prevalence of the disease

C. Decrease in the incidence of the disease

D. Incidence of the disease remain the same

Correct Answer: C. Decrease in the incidence of the disease

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A new vaccination program is implemented to prevent the spread of a contagious disease in a community, which decreases the incidence of the disease. Relationship between prevalence and incidence: Prevalence (P) ∝ Incidence (I) x Duration (D) Examples: Modality Incidence Prevalence A new preventive modality launched Decreased Decreased A new treatment modality launched Remains same Increased Improvement in treatment - Cures the person No change Decreased If a new drug is effective in reducing deaths

from the disease but not curing No change Increased If a new drug is effective in curing a disease No change Decreased

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: A research team conducted a study containing 5,000 participants who were free of diabetes at the start of the study for 10 years. During the follow-up period, 300 participants developed Type 2 diabetes. Which of the following measures best describes the outcome assessed in this study? (Q841303)

A. Includes both new and existing cases of the disease

B. Follow up not required

C. Independent of the duration of the illness

D. Estimates the burden of the disease

Correct Answer: C. Independent of the duration of the illness

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The study is measuring new cases over time → this is incidence , not prevalence. Incidence measures risk of developing disease in a disease-free population. This study is a prospective cohort study as it uses participants who are free of disease and then finds the incidence rate after 10 years. The difference between Incidence and prevalence: Incidence Prevalence Probability or chance of developing a disease. Probability or chances of already having a disease. Includes only new cases . Includes both old and new cases (Option A) . Follow-up is required of the individuals in a population to identify new cases. No follow-up is required (Option B) . Independent of the duration of the illness. Depends on the duration of the disease (P=I x D). Suited measure when studying cause and effect. Suited measure in estimating the burden of a disease or attribute (Option D) . Calculated from a cohort study. Calculated from a cross-sectional study.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 68

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: During a food festival in a small town, 200 people attended a barbecue event. Within 48 hours, 60 attendees developed symptoms of food poisoning. Local health officials want to measure the extent of the outbreak among those who attended the event. What is the term used to describe the proportion of people who developed symptoms out of all the attendees? (Q841302)

A. Attack rate

B. Secondary attack rate

C. Case fatality rate

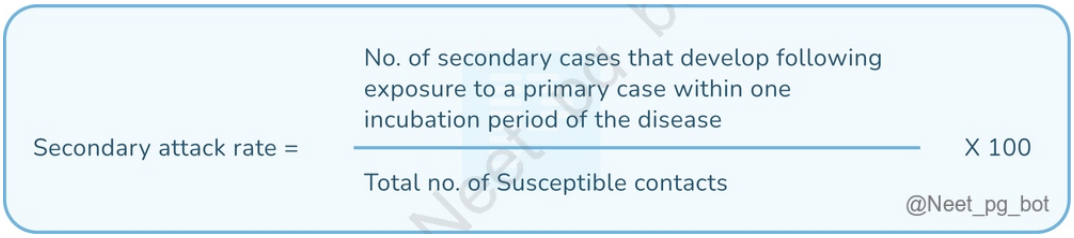
D. Prevalence rate

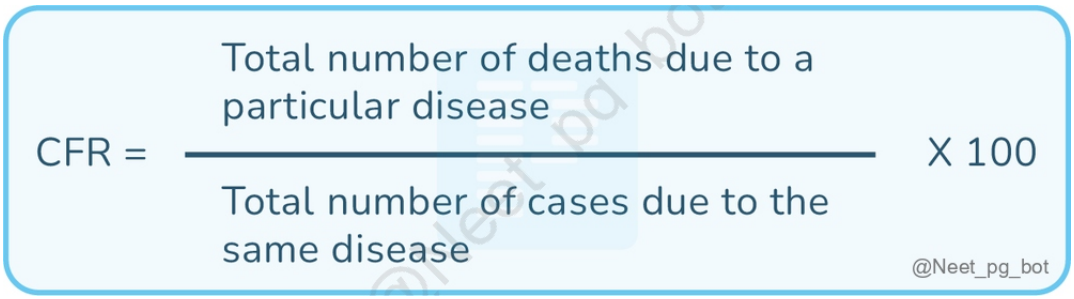
Correct Answer: A. Attack rate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The attack rate is the most appropriate measure in this scenario. It represents the proportion of exposed individuals who develop the disease during a specified time period. In this case, we want to measure the extent of food poisoning among those who attended the barbecue event. To calculate the attack rate: Number of new cases / Total number of people at risk × 100 = 60 / 200 × 100 = 30% Secondary attack rate (Option B): This is a measure of commuicability/transmisibility of a disease. It's typically used for person-to-person transmitted diseases, not for a common source outbreak like food poisoning at an event. Case fatality rate (Option C) : This is a measure of severity/virulence of a disease. It is the proportion of individuals who die from a specific disease among those diagnosed with it. It is not applicable here, as we are not provided with death data. We are focused on the extent of the outbreak, not its severity. Prevalence rate (Option D): This measures the proportion of people with a particular condition at a specific time. It's unsuitable for this acute outbreak scenario, as we're interested in new cases that developed after a specific exposure, not the total number of existing cases in the population.





References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A health survey reported 5 confirmed cases of Chronic Kidney Disease in a community of 100 people in December. By the end of January, 3 new cases of CKD were diagnosed. Prevalence was reported for Dec and Jan, particularly on Jan 31st. Which of the following statements is true in this scenario? (Q841301)

A. Point prevalence is more than period prevalence

B. Point prevalence is less than period prevalence

C. Point prevalence is equal to period prevalence

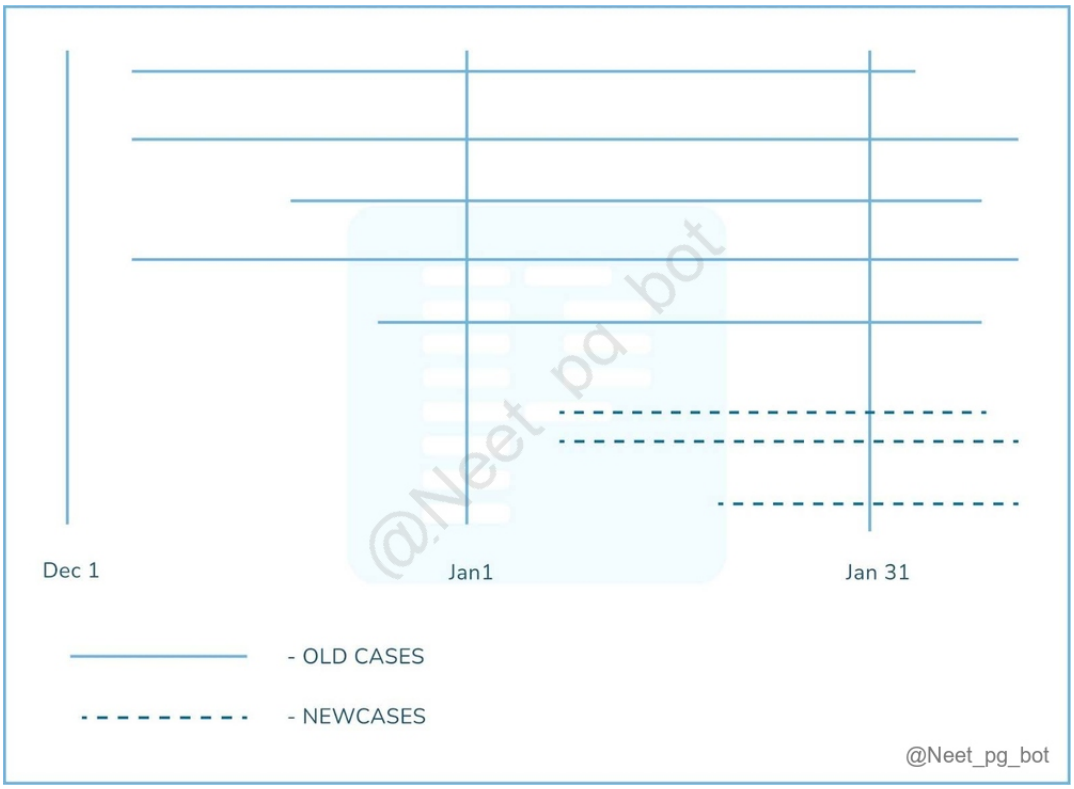
D. Point prevalence and Period prevalence cannot be compared

Correct Answer: C. Point prevalence is equal to period prevalence

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The total number of cases of CKD (8 in this scenario) will be the same in the defined period (Dec-Jan) and at a point (Jan 31st) since CKD is a chronic disease . The former CKD patients were alive in that specific time period (Dec- Jan), because CKD can lead to death due to variety of causes . Hence, Prevalence = (8/100) X 100 = 8 Prevalence:



$$\text{Period prevalence} = \frac{\text{Number of existing cases (old and new) of a specified disease during a given time interval}}{\text{Estimated mid-interval population at-risk}} * 100$$

@Neet_pg_bot

$$\text{Point prevalence} = \frac{\text{Number of all current cases (old and new) of a specified disease existing at a given point in time}}{\text{Estimated population at the same point in time}} * 100$$

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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: In a small town with a population of 2,00,000 people, a public health team is investigating an outbreak of gastroenteritis. Over one month, 1,500 new cases of gastroenteritis are reported. Calculate the incidence rate of gastroenteritis in the

above population. (Q841295)

A. 0.75 per 1,000 population

B. 1.5 per 1,000 population

C. 7.5 per 1,000 population

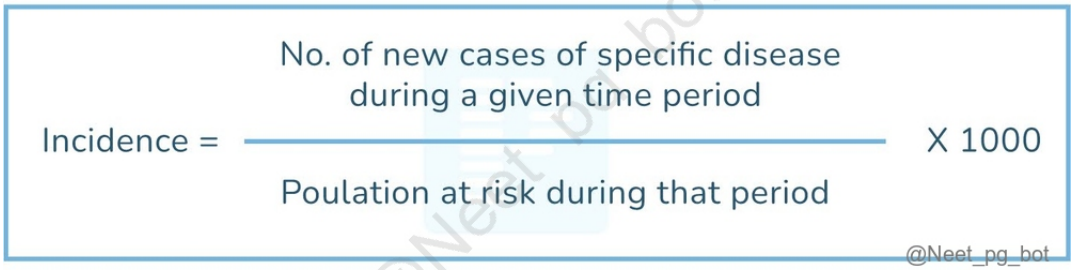
D. 15 per 1,000 population

Correct Answer: C. 7.5 per 1,000 population

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Based on the above information, the total number of new cases: is 1,500, and the population at risk: is 200,000. Therefore, Incidence = (1500/200000)x1000 = 7.5 per 1000 population.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 68

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A town with a population of 10,000 people is experiencing an influenza outbreak. Over the past two weeks, 500 cases have been reported. What is the proportion of the population affected by influenza during these two weeks? (Q841294)

A. 0.5%

B. 2%

C. 5%

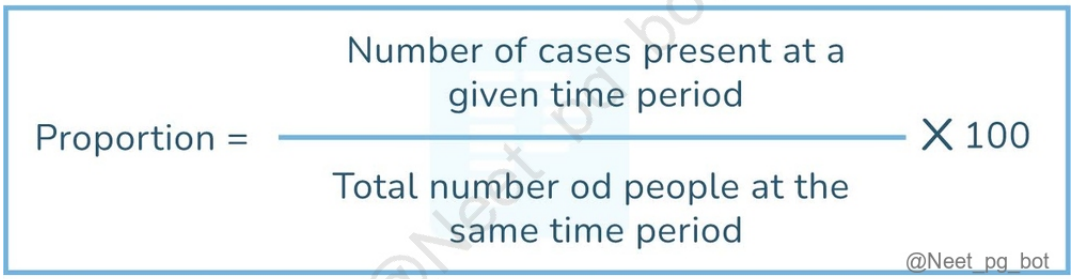
D. 10%

Correct Answer: C. 5%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Based on the given information, the number of influenza cases over two weeks was 500, and the total population was 10,000 Therefore, proportion= (500/10000)x100 = 5% Thus, 5% of the town's population was affected by influenza during the two weeks.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 63

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following is the correct formula for calculating the Sex Ratio? (Q841293)

A. (Number of females / Number of males) x 100

B. (Number of males / Number of females) x 100

C. (Number of females / Total population) x 100

D. (Number of females / Number of males) x 1000

Correct Answer: D. (Number of females / Number of males) x 1000

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A ratio compares two distinct groups by dividing the value of one group by the other, where the numerator is not part of the denominator. E.g., Sex Ratio: This ratio compares explicitly the number of females to the number of males within a population. It is typically expressed per 1000 males. Sex Ratio = (Number of females/Number of males■) × 1000 (Number of females / Number of males) x 100 (Option A): resembles the Sex Ratio but uses a multiplier of 100 instead of the standard 1000. (Number of males / Number of females) x 100

(Option B) : This inverts the relationship, calculating the number of males per 100 females rather than the standard Sex Ratio. (Number of females / Total population) x 100 (Option C) : This formula calculates the proportion of females in the total population, not the sex ratio. It is an example of a proportion where the numerator is included in the denominator.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 63 .

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following is an example of a ‘Rate’ in epidemiology? (Q841291)

A. The number of students who prefer chocolate ice cream to vanilla ice cream in a class.

B. The percentage of female students in a school.

C. The number of deaths from lung cancer per 100,000 people in a year.

D. The ratio of males to females in a population.

Correct Answer: C. The number of deaths from lung cancer per 100,000 people in a year.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A ‘Rate’ measures how often an event (like disease or death) happens in a specific group of people during a set time period. It's calculated by dividing the number of times the event happened (numerator) by the total number of people at risk (denominator) and multiplying by a standard factor, such as 1,000, 10,000, or 100,000. Example : Incidence rate = (Total number of new cases / Total population at risk) x 1000 Types of Rate Description Examples Crude Rates Actual observed rates are calculated directly from raw data without adjustments. Crude birth rate: Number of births / Total population * 1000 Specific Rates Rates that focus on specific causes Tuberculosis mortality rate: Deaths due to TB / Population at risk * 100,000 Standardised Rates Rates are adjusted to account for differences in the composition of populations when comparing different groups or populations. Age-standardized mortality rate. The number of students who prefer chocolate ice cream to vanilla ice cream in a class represents a simple comparison or proportion within a group at a specific time without considering a time period. (Option A) The percentage of female students in a school is a proportion that describes the makeup of a population at a point in time, not a rate over time. (Option B) The ratio of males to females in a population refers to a ratio that compares two distinct groups at a specific time without the element of time passage. (Option D)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 63 .

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following components of epidemiology is associated with descriptive epidemiology? (Q841289)

A. Disease determinants

B. Disease distribution

C. None of the above

D. Both A and B

Correct Answer: B. Disease distribution

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Definition of epidemiology (by John M Last) : Study of frequency, distribution and determinants of health-related states/events or disease in population groups and application of the study to control health problems. Components of epidemiology: Disease distribution : Disease distribution is according to time, place, and person. Descriptive epidemiology helps form an aetiological hypothesis Eg. case study, case series (Option B) Disease determinants : Answers to why and how of the disease [i.e., Identifying causes and risk factors of disease]. Helps in testing a hypothesis. Eg. ecological study, cross-sectional study.. case control study, cohort study (Option A) OBSERVATIONAL STUDIES EXPERIMENTAL/INTERVENTIONAL STUDIES Descriptive Analytical Case reports Ecological studies Randomised controlled trials Case series Case-control studies Field trials Cohort studies Community trials Cross-sectional studies

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 61

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following is NOT a primary use of disease incidence? (Q841297)

A. Identifying and monitoring disease trends over time

B. Evaluating the effectiveness of public health interventions

C. Helps to determine the efficacy of primary prevention of the disease

D. Determining the genetic predisposition of individuals to certain diseases

Correct Answer: D. Determining the genetic predisposition of individuals to certain diseases

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: While the incidence rate is important for many public health purposes, it is not typically used to determine individual genetic predispositions, which are usually studied through genetic and family history data. Uses of incidence rates: Identifying and monitoring disease trends over time (Option A) Evaluating the effectiveness of public health interventions (Option B) Helps to determine the efficacy of primary prevention of the disease (Option C) Used as a health status indicator.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Prevention of an acute disease like hepatitis A through vaccination will first cause: (Q890908)

A. Decrease in prevalence

B. Decrease in incidence

C. Decrease in both simultaneously

D. Increase in prevalence

Correct Answer: B. Decrease in incidence

Explanation: Incidence refers to the occurrence of new cases , while prevalence depends on both incidence and duration of disease : Vaccination prevents the occurrence of new cases , leading to an immediate reduction in incidence . Prevalence includes all existing cases (old + new) It decreases later , as: Existing cases recover or die Fewer new cases are added In acute diseases like hepatitis A: Duration is short There is no long-term accumulation of cases Therefore, the first effect of vaccination is a decrease in incidence

$$\text{Prevalence} = \text{Incidence} \times \text{Duration}$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 60-70

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: In a population of 8,000, there are 1,200 old cases and 400 new cases of a disease. What is the prevalence? (Q890906)

A. 15%

B. 18%

C. 20%

D. 25%

Correct Answer: C. 20%

Explanation: Prevalence is the proportion of all existing cases (old + new) in a population at a given time. Total cases = 1,200 + 400 = 1,600 Population = 8,000 Prevalence = (1,600/8,000) × 100 = 20%

$$\text{Prevalence} = \frac{\text{All current cases (old + new)}}{\text{Population at risk}} \times 100$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: In a population of 80,000, 5% are above 60 years of age. If the prevalence of hypertension in this age group is 2%, how many individuals above 60 years have hypertension? (Q890905)

A. 40

B. 60

C. 80

D. 100

Correct Answer: C. 80

Explanation: Prevalence is defined as the proportion of existing cases in a specified population . When prevalence is given for a subgroup , it must be applied to that subgroup only. Population above 60 years: 5% of 80,000 = 4,000 Cases of hypertension in this subgroup: 2% of 4,000 = 80 Therefore, 80 individuals above 60 years have hypertension

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Prevalence is best described as: (Q890904)

A. A rate

B. A proportion

C. An incidence measure

D. A mortality measure

Correct Answer: B. A proportion

Explanation: Prevalence refers to the total number of all existing cases (old + new) of a disease or attribute in a population at a given time or during a specified period, divided by the population at risk . It is expressed as a proportion (or percentage) Although often termed “prevalence rate,” it is technically a ratio/proportion , not a true rate It represents a snapshot of disease burden in the population Types: Point prevalence: Cases at a specific point in time Period prevalence: Cases over a defined time interval A rate (Option A): A true rate includes a time component in the denominator An incidence measure (Option C): Incidence measures new cases over time A mortality measure (Option D): Mortality refers to deaths , not existing cases

$$\text{Prevalence} = \frac{\text{All current cases (old + new)}}{\text{Population at risk}} \times 100$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 69-70

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which study designs can be used to calculate incidence? (Q890903)

A. Cross-sectional studies only

B. Cohort studies and longitudinal studies

C. Case-control studies only

D. Ecological studies only

Correct Answer: B. Cohort studies and longitudinal studies

Explanation: Incidence refers to the occurrence of new cases of disease in a population at risk over a specified period of time . To measure incidence, it is essential to: Start with a population free from the disease Follow the population over time Observe the development of new cases Cohort studies are characterised by: Selection of cohorts before disease occurrence Observation over a period of time to determine disease frequency Study proceeding from cause → effect (exposure → outcome) During follow-up: Incidence is calculated as: Allows direct estimation of: Incidence rate Relative risk Attributable risk Cross-sectional studies (Option A): Snapshot at a single point → measure prevalence , not incidence Case-control studies (Option C): Begin with existing cases and look backwards → cannot measure incidence directly Ecological studies (Option D): Use group-level data → do not track individuals over time for incidence

$$\frac{\text{New cases in exposed/unexposed}}{\text{Population at risk}}$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 78, 83

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: In a food poisoning outbreak, 55 of 70 people who ate the fruit salad became ill. What is the attack rate? (Q890902)

A. 55%

B. 78.6%

C. 70%

D. 85.5%

Correct Answer: B. 78.6%

Explanation: Attack rate is a special type of incidence rate , usually expressed as a percentage, used when a population is exposed to a risk for a limited period , such as during an epidemic or outbreak . In this case: (55/70) × 100 = 78.6% Used only when exposure is limited in time (e.g., food poisoning, epidemics) Relates cases to the exposed population , not the total population Reflects the magnitude and extent of the outbreak

$$\text{Attack rate} = \frac{\text{Number of new cases during a specified time interval}}{\text{Total population at risk during the same interval}} \times 100$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: When comparing mortality rates of two countries with different age distributions, which procedure is necessary? (Q890901)

A. Calculation of crude death rates

B. Standardisation of rates

C. Calculation of case fatality rates

D. Calculation of proportional mortality

Correct Answer: B. Standardisation of rates

Explanation: Standardisation (direct or indirect) adjusts for differences in age distribution between populations, allowing fair comparison. When comparing mortality between populations with different age compositions , the crude death rate is not a valid measure , because: Rates are comparable only when the populations are comparable Mortality is strongly influenced by age distribution To overcome this, age standardisation (adjustment) is used: It removes the confounding effect of age Produces a single adjusted rate that allows direct comparison of mortality experience Standardisation can also be done for other variables such as sex, race, and parity . Methods of Standardisation: Direct method: Applies age-specific rates of the study population to a standard population to

obtain expected deaths and an adjusted rate Indirect method (Standardised mortality ratio): Compares observed deaths with expected deaths based on a standard population Crude death rate (Option A): Not comparable due to differing age structure Case fatality rate (Option C): Measures disease severity Proportional mortality (Option D): Reflects distribution of causes, not comparable risk

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 66

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Which measure is used as a yardstick for the assessment of standards of therapy, especially in cancer studies? (Q890900)

A. Case fatality rate

B. Survival rate

C. Proportional mortality rate

D. Incidence rate

Correct Answer: B. Survival rate

Explanation: Survival rate is defined as the proportion of patients alive after a specified period (e.g., 5 years) among those diagnosed or treated. It is a method of describing prognosis in certain diseases The survival period is usually calculated from the date of diagnosis or the start of treatment It is widely used in cancer studies Survival experience serves as a yardstick for assessing standards of therapy Case fatality rate (Option A): Measures disease severity (proportion dying), not treatment outcome Proportional mortality rate (Option C): Reflects relative contribution to total deaths Incidence rate (Option D): Measures the occurrence of new cases

$$\text{Survival rate} = \frac{\text{Number of patients alive after a given period}}{\text{Total number of patients diagnosed or treated}} \times 100$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 66

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Sex-specific death rates are used for all of the following purposes except: (Q890899)

A. Comparing mortality between males and females

B. Identifying high-risk sex for a particular disease

C. Comparing mortality across different age groups

D. Studying sex-related differences in causes of death

Correct Answer: C. Comparing mortality across different age groups

Explanation: Sex-specific death rates do not account for age distribution within each sex . Therefore, they cannot be used to compare mortality across different age groups . Sex-specific death rate A sex-specific death rate is a type of specific death rate that measures the number of deaths among either males or females per unit population of the same sex over a defined period. Allows direct comparison of mortality between males and females(Option A) Helps identify which sex is at higher risk (Option B) for specific diseases or conditions Useful in studying sex-based differences in disease patterns and causes of death (Option D) Useful in studying biological, behavioural, and social differences affecting mortality Aids in identifying sex-based vulnerable groups for targeted interventions

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 65

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: A patient with chronic kidney disease due to long-standing hypertension develops septicemia following a urinary tract infection and eventually dies of septic shock. Which of the following should be written in line I (a) of the death certificate? (Q890897)

A. Septic shock

B. Septicemia

C. Urinary tract infection

D. Hypertension

Correct Answer: A. Septic shock

Explanation: The WHO death certificate records the sequence of events leading to death in Part I , arranged in reverse chronological order : Part I (a): Immediate cause of death - the final disease or condition resulting in death Part I (b): Antecedent causes - conditions leading to the immediate cause Part I (c): Underlying cause of death - the disease that initiated the chain of events Given the sequence: Hypertension → Chronic kidney disease → Urinary tract infection → Septicemia → Septic shock → Death Septic shock is the immediate cause of death Therefore, it should be entered in Part I (a) Septicemia (Option B): Antecedent cause → Part I (b) Urinary tract infection (Option C): Earlier cause → Part I (b/c) Hypertension (Option D): Underlying cause → Part I (c)

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 64

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: You are filling the death certificate of a patient who died due to cardiac tamponade following ventricular free wall rupture, which occurred after an acute myocardial infarction, secondary to longstanding hypertension. What should be written in line I (c) of the death certificate? (Q890896)

A. Cardiac tamponade

B. Ventricular free wall rupture

C. Acute myocardial infarction

D. Hypertension

Correct Answer: D. Hypertension

Explanation: The WHO death certificate records the sequence of events leading to death in Part I , arranged in reverse chronological order : Part I (a): Immediate cause of death - final event leading to death Part I (b): Antecedent cause Part I (c): Underlying cause of death - the disease that initiated the chain of events Given the sequence: Hypertension → Acute myocardial infarction → Ventricular free wall rupture → Cardiac tamponade → Death Cardiac tamponade (Option A) → Immediate cause → Part I (a) Ventricular rupture / MI (Option B/C) → Antecedent causes → Part I (b) Hypertension → Underlying cause → Part I (c)

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 64

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: Which of the following is not included in the WHO format for a death certificate? (Q890894)

A. Cause of death

B. Interval between onset and death

C. Age at the time of death

D. Sex of the deceased

Correct Answer: C. Age at the time of death

Explanation: Age at the time of death is not recorded as a separate field in the WHO format, as it is derived from the date of birth. The WHO-recommended death certificate is designed to ensure uniform recording and international comparability of mortality data . It consists of: Cause of death (Part I) (Option A): Includes a sequence from the immediate cause to the underlying cause of death , defined as the disease or injury that initiated the chain of events leading to death. Contributory conditions (Part II): Includes other significant diseases or conditions that contributed to death but were not part of the direct causal sequence. Interval between onset and death (Option B): A column is provided to record the approximate duration between onset of each condition and death, helping establish the temporal sequence. Demographic details: The certificate includes details such as name, sex (Option D), date of birth, place of residence, and place of death .

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 64

↑ *Back to this question in Part A*

@Neet_pg_bot

• [02_Epidemiology] 006 Study Designs In Epidemology - I

« Back to Folder Directory

[02_Epidemiology] 006 Study Designs In Epidemology - I — Quick Jump

Q1 (p. 721)	*Q2 (p. 721)*	*Q3 (p. 722)*	*Q4 (p. 723)*	*Q5 (p. 723)*	*Q6 (p. 724)*
Q7 (p. 725)	*Q8 (p. 726)*	*Q9 (p. 727)*	*Q10 (p. 728)*	*Q11 (p. 729)*	*Q12 (p. 730)*
Q13 (p. 731)	*Q14 (p. 732)*	*Q15 (p. 733)*	*Q16 (p. 734)*	*Q17 (p. 735)*	*Q18 (p. 735)*
Q19 (p. 736)	*Q20 (p. 737)*	*Q21 (p. 738)*	*Q22 (p. 739)*	*Q23 (p. 740)*	*Q24 (p. 742)*
Q25 (p. 743)	*Q26 (p. 744)*	*Q27 (p. 744)*	*Q28 (p. 745)*	*Q29 (p. 746)*	*Q30 (p. 747)*
Q31 (p. 747)	*Q32 (p. 748)*				

Q1: Which of the following is true about secular trends? (Q841340)

A. A roadside accident is a good example.

B. It is due to environmental factors.

C. This is due to the commonly occurring variation in herd immunity.

D. Consistent change in a particular direction over a period of time.

Correct Answer: D. Consistent change in a particular direction over a period of time.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The secular trend implies changes in the occurrence of a disease, i.e., progressive increase or decrease in incidence over a long period of time, such as years or decades. Although it may have short-term fluctuations imposed on it, secular trends imply a constant tendency to change in a particular direction of a definite movement in one direction. Examples include diabetes mellitus, coronary heart disease, and lung cancer (an increase in the number of non-communicable diseases when compared to previous years). A roadside accident follows cyclical or seasonal fluctuations (Option A)

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page 74

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A community medicine intern was asked to compare two study designs. What is the similarity between Cross-sectional study design and Ecological study design? (Q882195)

A. Both studies are done at a point of time

B. Both provide prevalence

C. Both are based on primary data

D. The unit of study is the population

Correct Answer: A. Both studies are done at a point of time

Explanation: ANSWER Option A: Both studies are done at a point of time Both cross-sectional and ecological studies are done at a point of time. The cross-sectional study is also called a snap-shot study. Option B: Both provide prevalence The cross-sectional study provides prevalence. The strength of association/prevalence cannot be calculated in an ecological study. Option C: Both are based on primary data The cross-sectional study is based on the primary data. An ecological study is based on secondary data. Option D: The unit of study is the population The unit of study in a cross-sectional study is individual. The unit of study in an ecological study is population.

References:

Park e/25 p77

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: What is an ecological fallacy or an ecological bias? (Q841408)

A. Associations observed at the group level may not hold true at the individual level.

B. Associations observed at an individual level may not hold true at the group level.

C. Associations observed at a group level will apply to individual levels.

D. Associations at the group level and individual levels are opposite to each other.

Correct Answer: A. Associations observed at the group level may not hold true at the individual level.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Ecological bias is found in ecological study designs, where the associations observed at the group level may not hold true at the individual level. Occurs in ecological (correlational) studies Caused by group-level inference Leads to wrong conclusions about individuals Ecological studies are good for hypothesis generation, not proving causation

References:

IAPSM's Textbook of Community Medicine, 2nd Edition, Page 157

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Among the following statements, which is true regarding ecological study designs? (Q841407)

A. It is expensive

B. Analysis at a population level

C. Associations observed at the group level always hold true at the individual level

D. Complex study model

Correct Answer: B. Analysis at a population level

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Ecological studies analyse associations between variables at the group or population level. Ecological studies: Aspect Description Definition It analyses associations between variables at the group or population level by using secondary data. Strengths Simple and cost-effective (Option A,D) It can suggest potential cause-effect relationships. Useful for studying large populations and trends over time. Limitations Ecological Fallacy: Associations observed at the group level may not hold true at the individual level .(Option C) Examples Study correlating average dietary fat consumption with breast cancer incidence across 20 developed countries.

References:

IAPSM’s Textbook of Community Medicine, 2nd Edition, Page 157

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following studies takes repeated observations from a population via follow-ups? (Q841406)

A. Cross-sectional

B. Longitudinal

C. Both

D. None

Correct Answer: B. Longitudinal

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In longitudinal studies, observations are repeated, while in cross-sectional studies, observations are done only once. Longitudinal studies Cross-sectional studies Observations are repeated using follow-ups in a population. Observations are done only once in the population. They are carried over a long period of time (minimum one year). They are carried over a given point/period of time. It helps to discover the occurrence of new cases (Incidence rate). It helps to discover the existence of both old and new cases (Prevalence rate). It helps to study the natural history of the disease and the risk factors. They do not help to study the natural history of the disease and the risk factors. It is time-consuming, difficult, and costly. It is not time-consuming, not difficult, and cheap.

References:

Community Medicine with Recent Advances, AH Suryakantha, 3rd Edition, Page 253

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: All of the following statements regarding cross-sectional study are true except? (Q841405)

A. Observations are done only once

B. This is cheap and not time-consuming

C. Does help to study the natural history of disease

D. Carried over a given point of time or period of time

Correct Answer: C. Does help to study the natural history of disease

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Cross-sectional studies do not help in studying the natural history of disease. Cross-sectional studies: It is also known as prevalence study. Observations are done only once in the population (Option A) . Carried over a given point of time or period of time (Option D) . This helps to find out the existence of both old and new cases (Prevalence rate). This does not help to study the natural history of the disease and the risk factors. This is not time-consuming, not difficult, and cheap (Option B) .

References:

Community Medicine with Recent Advances, AH Suryakantha, 3rd Edition, Page 253

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: In a population of 1000 individuals, 200 develop oral cancers over a 10-year period. Among the total population, 100 are regular tobacco users, from which 60 developed oral cancers. Calculate the Population Attributable Risk (PAR) of oral cancers due to tobacco use in this population. (Q841404)

A. 76%

B. 42%

C. 38%

D. 22%

Correct Answer: D. 22%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Tobacco user No Tobacco Total Disease Present 60 140 200 Disease Absent 40 760 800 Total 100 900 1000 Calculate the overall incidence rate (I total) of oral cancers in the population: Given: Total population (N) = 1000 Cases of oral cancers (C) = 200 Total = 200/1000 = 0.2 The overall incidence rate of oral cancers in the population (I total) is 0.2, or 20%. Calculate the incidence rate (I unexposed) of oral cancers in non-tobacco users: Given: Non-tobacco users = Total population (N) - Tobacco users. Cases of oral cancers among non-tobacco users = Total cases - Cases among tobacco users. Therefore, the incidence rate of oral cancers among non-tobacco users (I unexposed) is 0.1556 or 15.56%. Population Attributable Risk (PAR): PAR = (0.20.–0.1556■)/0.2 = 0.044/ 0.2 = 0.22 Population Attributable Risk (PAR) of oral cancers due to tobacco use in this population is approximately 0.22 or 22%

$$I_{unexposed} = \frac{\text{Cases among unexposed}}{\text{Total unexposed}} = \frac{140}{900} = 0.1556$$

@Neet_pg_bot

$$PAR = \frac{I_{total} - I_{unexposed}}{I_{total}}$$

@Neet_pg_bot

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 86, 87

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: In a study of 500 children, 200 were vaccinated against measles, and 300 were not. Out of the 200 vaccinated children, 10 developed measles. Among the 300 unvaccinated children, 90 developed measles. Calculate the attributable risk of developing measles due to lack of vaccination. (Q841403)

A. 0.83

B. 0.75

C. 0.64

D. 0.25

Correct Answer: A. 0.83

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Vaccinated Not Vaccinated Total Disease Present 10 90 100 Disease Absent 190 210 400 Total 200 300 500 To calculate the attributable risk (AR), we use the formula: AR = [(Incidence in Exposed) – (Incidence in Unexposed)]/ Incidence among exposed Incidence in Exposed (unvaccinated): 90/300 = 0.30 Incidence in Unexposed (vaccinated): 10/200 = 0.05 Attributable Risk:

$$AR = \frac{\text{Incidence}_{\text{unvaccinated}} - \text{Incidence}_{\text{vaccinated}}}{\text{Incidence}_{\text{unvaccinated}}} = \frac{0.30 - 0.05}{0.30} = \frac{0.25}{0.30} \approx 0.8333$$

@Neet_pg_bot

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 86, 87

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A study was conducted over 10 years to evaluate the risk of mesothelioma among people working in the ship-based industry. The study included 200 workers exposed to asbestos and 300 workers not exposed to asbestos. Among those exposed, 40 developed mesothelioma and died at the terminal stage, while only 5 of the unexposed group developed mesothelioma and died. What is the relative risk of developing mesothelioma and dying for workers exposed to asbestos compared to those not exposed? (Q841402)

A. 12.00

B. 3.33

C. 6.00

D. 2.00

Correct Answer: A. 12.00

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Exposed to Asbestos Not Exposed to Asbestos Total Mesothelioma (Disease Present) 40 5 45 No Mesothelioma (Disease Absent) 160 295 455 Total 200 300 500 Calculate the incidence rate of mesothelioma in both exposed and unexposed groups. Incidence in the exposed group: Incidence in the unexposed group: Relative

risk (RR): This is approximately 12.00.

$$\text{Incidence}_{\text{exposed}} = \frac{\text{No. of cases in exposed group}}{\text{Total exposed group}} = \frac{40}{200} = 0.2$$

@Neet_pg_bot

$$\text{Incidence}_{\text{unexposed}} = \frac{\text{No. of cases in unexposed group}}{\text{Total unexposed group}} = \frac{5}{300} = 0.0167$$

@Neet_pg_bot

$$RR = \frac{\text{Incidence}_{\text{exposed}}}{\text{Incidence}_{\text{unexposed}}} = \frac{0.2}{0.0167} \approx 11.98$$

@Neet_pg_bot

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 86

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A cohort study was conducted with green tea drinkers and non drinkers to study relation between green tea & its effect on Diabetes Mellitus. Risk ratio obtained was 0.8. Which of the following is the correct statement ? (Q841401)

A. Green tea increases risk of DM

B. Green tea reduces the risk of DM

C. Green tea has no effect on DM

D. Data is insufficient to establish causal association

Correct Answer: B. Green tea reduces the risk of DM

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Here, RR = 0.8 → 20% reduced risk of developing diabetes among green tea drinkers. RR = 1 → No effect RR < 1 → Protective effect RR > 1 → Harmful effect

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page 83

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following is true regarding the cross-product ratio? (Q841400)

A. It is also known as the incidence rate.

B. It measures the relative risk in cohort studies.

C. It provides an estimation of disease risk associated with exposure.

D. A value of > 1 indicates an inverse association or protective factor

Correct Answer: C. It provides an estimation of disease risk associated with exposure.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Odds ratio (OR) or Cross-product ratio: Measures the strength of the association between exposure and outcome (Option C) . It is a key parameter in the analysis of case-control studies Used for categorical variables. Provides relative risk estimation. Interpretation: OR > 1 Positive association or possible risk factor (Option D) OR = 1 No association OR < 1 Negative association, inverse association, or protective factor It is also known as the incidence rate■■(Option A): OR doesn't help to calculate the incidence rate It measures the relative risk in cohort studies (Option B) No , another name for relative risk is risk ratio

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page 81

↑ *Back to this question in Part A*

@Neet_pg_bot

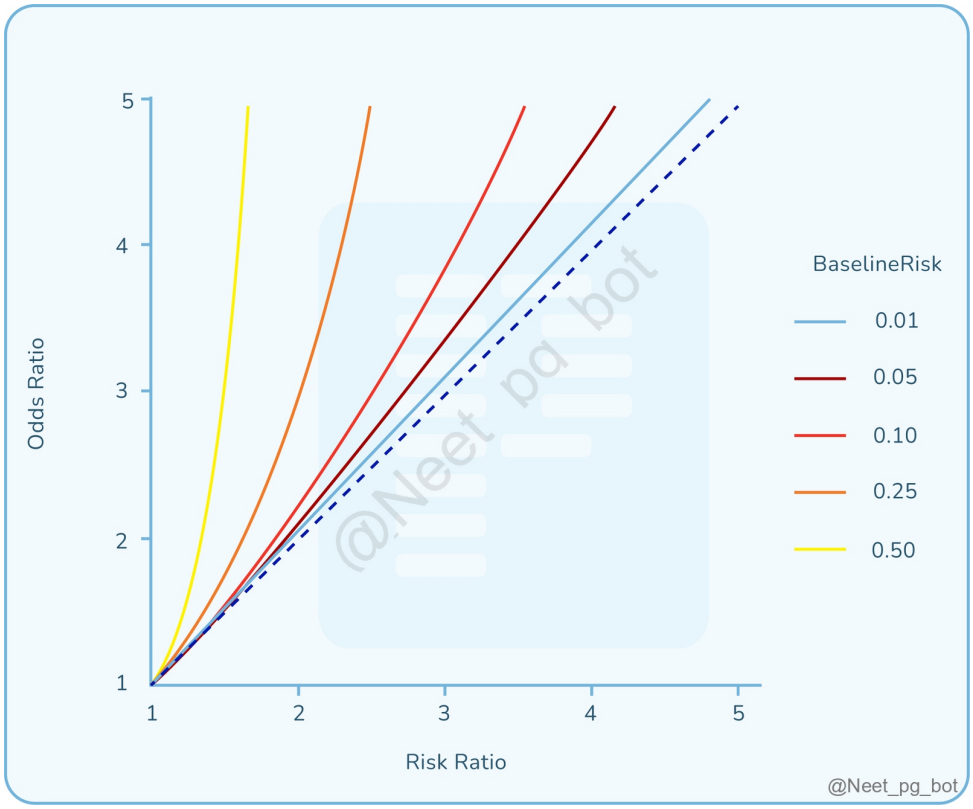
Q12: Below is a graphical representation of the odds ratio (OR) and risk ratio (RR) for various incidence rates. Which of the following is false? (Q841399)

A. As RR increases, OR increases at a higher rate for all incidence rates

B. OR always underestimates the RR

C. The yellow line represents a much larger OR than the RR

D. The red line represents a lower incidence rate.

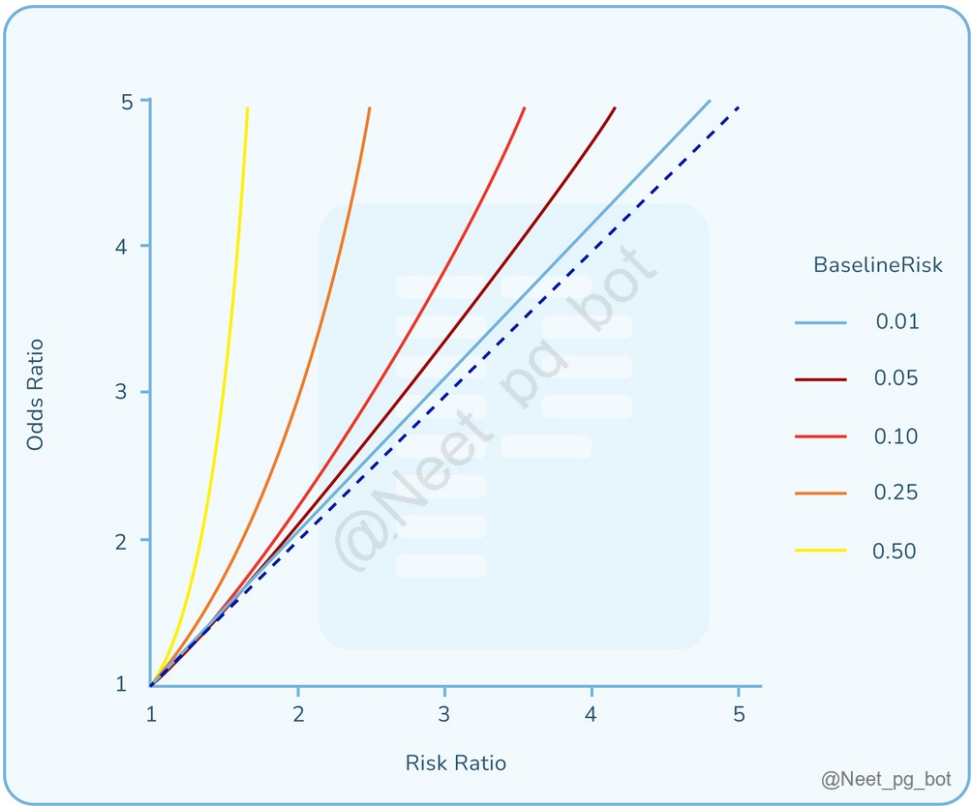


Correct Answer: B. OR always underestimates the RR

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The odds ratio always overestimates the risk ratio. The colourful lines represent incidence rates. The blue dotted line indicates OR = RR. The odds ratio provides an estimation of relative risk. As the RR increases, the OR increases at a higher rate for all incidence rates (Option A) . High incidence rate (yellow) = OR is much larger than RR (Option C) . Low incidence rate (red) = OR is similar (but still larger than RR) (Option D) . The difference between the OR and RR increases as the OR gets higher. In case of a rare disease: OR = RR



References:

https://statsbyslough.com/2015/08/27/odds-ratios-vs-risk-ratios/

Park's Textbook of Preventive Medicine, 27th Edition, Page 81

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: To investigate the association between high cholesterol levels and the development of hypertension, researchers collected data from 100 patients with hypertension and 210 patients without the disease. 60 patients had high cholesterol levels in the hypertensive group, while 30 patients had high cholesterol levels in the non-hypertensive group. Calculate the odds ratio? (Q841398)

A. 4.0

B. 1.5

C. 9.0

D. 0.25

Correct Answer: C. 9.0

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Calculation of Odds Ratio (OR): Identify the data: Cases with high cholesterol: 60 Cases without high cholesterol: 40 (100 - 60) Controls with high cholesterol: 30 Controls without high cholesterol: 180 (210 - 30) Risk Factor/Exposure High cholesterol Low cholesterol Hypertension 60 (a) 40 (b) No hypertension 30 (c) 180 (d) Odds of exposure among cases: a/d = 60/40 = 1.5 Odds of exposure among controls: = c/d = 30/180 = 0.1667 Odds ratio (OR) = (odds of exposure among cases) / (odds of exposure among controls) OR = ad/bc = 1.5 / 0.1667 = 9

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 81

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A research team conducts a study to investigate the association between smoking and bladder cancer. They select a group of patients with and without bladder cancer and compare their smoking history. Which of the following best describes the significance of the study in this scenario? (Q841397)

A. It allows for the determination of the incidence of bladder cancer among smokers and non-smokers.

B. It helps to establish a temporal relationship between smoking and bladder cancer.

C. It is a cost-effective and efficient way to study the association between smoking and bladder cancer.

D. It can be used to follow patients over time to observe the development of bladder cancer.

Correct Answer: C. It is a cost-effective and efficient way to study the association between smoking and bladder cancer.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Case-control studies are cost-effective and efficient for studying the association between exposure (smoking) and outcome (lung cancer), especially when the outcome is rare. Aspect Case-Control Study Cohort Study Definition Compares individuals with a disease (cases) to those without (controls) Follows a group (cohort) over time to see who develops the disease. Study Design Retrospective or prospective. Prospective (or retrospective in some designs). Data Collection Usually relies on existing records or interviews Collects data over time, often with direct measurements. Population Starts with disease status (cases vs. controls) Starts with exposure status (exposed vs. unexposed). Advantages - Quick and inexpensive. - Useful for rare diseases. - Can

study multiple exposures. - Can establish temporal relationships .(Option B) - Useful for studying multiple outcomes. - Less bias in exposure measurement Disadvantages - Prone to recall bias. - Cannot directly measure incidence. (Option A) - Selection bias may occur. - Time-consuming and expensive. - Requires large sample sizes. - Loss to follow-up can affect results. It can be used to follow patients over time to observe the development of bladder cancer. (Option D) -There is no follow-up period in case-control studies.

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 78-85

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: To investigate the relationship between hormone replacement therapy (HRT) and breast cancer, researchers conducted a study where they selected patients with breast cancer from an ongoing cohort study and compared HRT usage among cancer-free women from the same cohort. What type of study design does this scenario indicate? (Q841396)

A. Cohort study

B. Case-control study

C. Nested case-control study

D. Cross-sectional study

Correct Answer: C. Nested case-control study

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Researchers conducted a nested case-control study using a subset of cancer patients (cases) and cancer-free people (controls) from an ongoing cohort study. Nested case-control study: A type of case-control study that draws its cases and controls from a defined cohort. Data collection is prospective. Combines the efficiency of a case-control study (feasible for rare outcomes, cost-effective) with some of the advantages of a cohort study, such as the ability to establish temporality and reduce recall bias. In a cohort study (Option A) , researchers follow a group of individuals (the cohort) to observe how exposures affect the incidence of outcomes. This study design was not used in the scenario since the cases and controls were selected from an existing cohort rather than being followed from the start. A case-control study (Option B) involves identifying individuals with the outcome of interest (cases) and comparing their past exposures to those without the outcome (controls). Unlike in a nested case-control study, these individuals are not selected from an existing cohort. A cross-sectional study (Option D) examines exposure and outcome status at a single time. This design does not follow participants over time and cannot establish causality or temporality.

References:

https://pubmed.ncbi.nlm.nih.gov/7845919/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: The following are some steps taken to investigate an epidemic. Arrange the steps in the correct sequence. Verification of the diagnosis. Define the population at risk. Data analysis. Confirmation of the existence of an epidemic. Evaluation of ecological factors. Testing of hypothesis. (Q841341)

A. 1, 4, 2, 3, 6, 5

B. 4, 1, 2, 3, 6, 5

C. 1, 2, 3, 4, 5, 6

D. 4, 1, 3, 6, 2, 5

Correct Answer: A. 1, 4, 2, 3, 6, 5

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Steps in the investigation of an epidemic: Steps Salient points 1 Verification of diagnosis Most important step Examination of a sample of cases and verify the diagnosis To avoid a spurious diagnosis based on signs and symptoms. 2 Confirmation of the existence of an epidemic Compare data collected with the previous year's data. Epidemic: Occurrence > 2 S.D. The cases occur at over 80% of the expected frequency. 3 Defining the population at risk Obtain a map of the area affected. A house-to-house survey is done to find the entire population at risk. 4 Rapid search for all cases and their characteristics Medical survey. Epidemiological case sheet. 5 Data analysis Done in terms of Time, Place and person Try to identify the type of epidemic by drawing the epidemic curve. 6 Formulation of hypothesis It contains information about the agent, host, environment, modes of transmission, etc. Formulation of a hypothesis is the work of descriptive epidemiology. 7 Testing of hypothesis First step: Case-control study. Second step: Plan a cohort study to compare the attack rates in exposed vs non-exposed groups. 8 Evaluation of ecological factors Effect of humidity. Effect of sanitary conditions. Effect of water supply. 9 Further investigation of the population at risk Keep looking for any other population that is at risk. 10 Writing the report To provide a strategy at the end. Prevent future occurrences. The investigation of an epidemic can be stopped when no more cases occur for twice the incubation period of the disease from the occurrence of the last case.

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page 147, 148

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Study designs are used for which of the following purposes? (Q841300)

A. Formulating a hypothesis

B. Testing a hypothesis

C. Confirming a hypothesis

D. All of the above

Correct Answer: D. All of the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A hypothesis is an assumption yet to be verified by study designs. Purpose of study designs: Formulation of a hypothesis A hypothesis is formulated when no knowledge about a new disease exists. Descriptive epidemiology, which focuses on time, place, and person, helps in these cases. For instance, early in the COVID-19 outbreak, it was hypothesised as a type of pneumonia. Testing a hypothesis Testing addresses how and why a disease occurs and is a key aspect of Analytical epidemiology. Eg; comparing individuals with COVID-19 to those without it to understand the disease better. Confirmation of a hypothesis The disease is confirmed through Experimental or Interventional epidemiology. Eg; once COVID-19 was confirmed, vaccines and treatments were developed

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page 78

Study Designs in Clinical Research- NIH

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Diseases that follow seasonal trend are? (Q841339)

A. Varicella

B. Cerebro-spinal meningitis

C. Poliomyelitis

D. All of the above

Correct Answer: D. All of the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Cyclical trends Seasonal trends They occur in cycles spread over short periods of time. Cycles are associated with seasons. Examples: Measles: every 2-3 years. Rubella: every 6-9 years. Influenza: every 7-10 years. Examples: Measles. Varicella. Cerebro-spinal meningitis. Upper respiratory tract infections. Malaria. Sunstroke. Hay fever. Snakebite. Rubella Note: Road traffic accidents can be cyclical (more during weekends) and seasonal (more common in winter).

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page 73

↑ *Back to this question in Part A*

@Neet_pg_bot

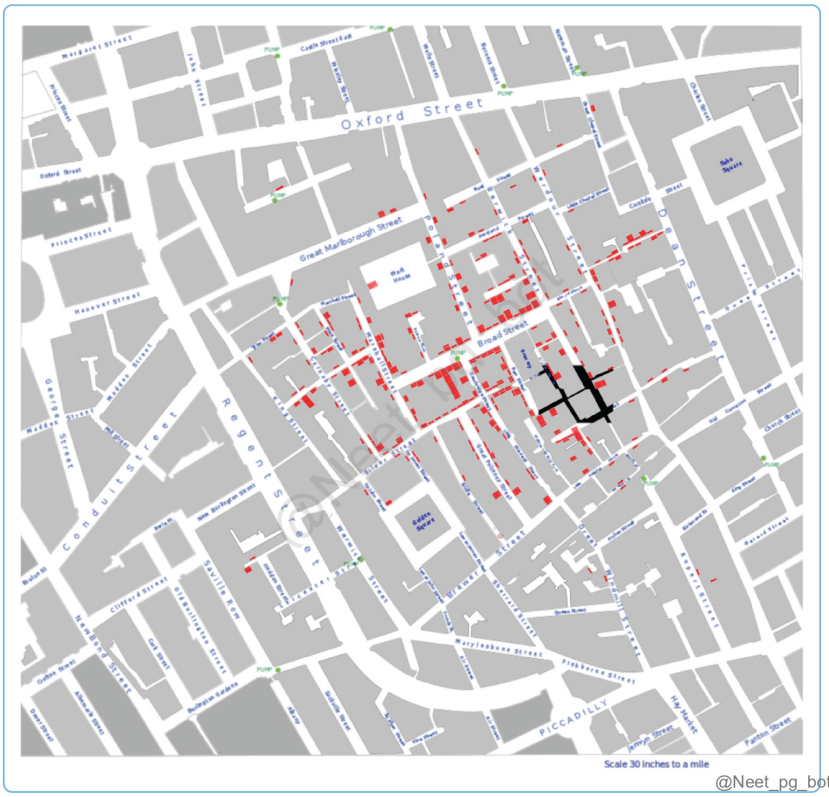
Q19: What is the image given below used for? (Q841338)

A. Local distribution of a disease

B. Rural-urban variation

C. National variation

D. Migration studies



Correct Answer: A. Local distribution of a disease

- *Listen (English)*
- *Listen (Hindi)*

Explanation: The image shows a spot map, which is useful for determining the local distribution of a disease. Spot maps/Shaded maps: It is useful in outbreaks to determine the local distribution of a disease. Inner and outer city variations in disease frequency are well known. These variations are best studied using spot maps. They show areas of high and low frequency at a glance, the boundaries, and distribution. For example, if the map shows a clustering of cases, it may suggest a common source of infection or a common risk factor shared by all the cases. The classic example of the use of spot maps was by John Snow for the cholera epidemic in 1854. Migration studies(Option D): They compare disease and death rates between migrants and their new environment versus their place of origin. Rural-urban variation and National variation are not indicated by the spot maps (Option B & C)

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 74-76.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Which of the following best describes 'person distribution' in descriptive epidemiology? (Q841337)

A. The distribution of people across an area under study.

B. The population's disease analysis is based on the characteristics of the people who develop them.

C. Distribution of human resources to various tasks of the study.

D. Distribution of residents within different neighbourhoods or urban areas.

Correct Answer: B. The population's disease analysis is based on the characteristics of the people who develop them.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Person distribution in descriptive epidemiology involves analysing disease patterns based on demographic characteristics such as age, sex, race, occupation, and other factors of the individuals who develop the disease. The distribution of people across an area under study (Option A) : Describes the geographical distribution of a population. Focuses on where people live in a given area, emphasizing place distribution rather than individual characteristics related to disease. Distribution of human resources to various tasks of the study(Option C): Addresses the logistical aspect of study conduct. Involves allocation of researchers and resources to different tasks, not related to person distribution in epidemiology. Distribution of residents within different neighbourhoods or urban areas(Option D) Concerns the spatial distribution of residents within a city or region. Focuses on place distribution, lacking emphasis on individual characteristics that define person distribution in epidemiology. Understanding these host factors aids in epidemiological studies, identifying high-risk groups, and informing preventive strategies.

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 76

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Which of the following statements best describes a propagated epidemic? (Q841336)

A. It is typically caused by a single brief and simultaneous exposure to a common source.

B. It shows an epidemic curve with one peak that rises and falls rapidly with no secondary waves.

C. Transmission occurs gradually through person-to-person transmission, rising and tailing off in the epidemic curve.

D. A propagated epidemic can only occur if the disease has a short incubation period.

Correct Answer: C. Transmission occurs gradually through person-to-person transmission, rising and tailing off in the epidemic curve.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Propagated epidemic: Most often of infectious origin. Person-to-person transmission. Gradual rise and tailing off. It can occur with diseases that have varying incubation periods. E.g. HIV/AIDS, which has a long incubation period but spreads through person-to-person contact, leading to a propagated epidemic. To stop transmission, the number of susceptibles should be reduced or the susceptibles should be protected from exposure. Herd immunity, contact opportunities, and secondary attack rates determine the speed of spread. Aggregating many susceptibles or a regular supply (birth, immigration etc.) of susceptibles favours the development of propagated epidemics. Examples: Hepatitis A, polio. A propagated epidemic can only occur if the disease has a short incubation period(Option D) is not correct because it also occurs with diseases having a longer incubation period. It shows an epidemic curve with one peak that rises and falls rapidly with no secondary waves(Option B) -eg of common source single exposure e[epidemic (food poisoning) It is typically caused by a single brief and simultaneous exposure to a common source(Option A) : eg of a common source epidemic

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 73

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Which of the following is not a characteristic of a common source epidemic with a single exposure? (Q841335)

A. The epidemic curve shows a rapid increase and decrease in cases.

B. Cases are spread across multiple incubation periods of the disease.

C. The epidemic often appears as an explosive outbreak with cases clustered quickly.

D. Most cases occur within a single incubation period of the disease.

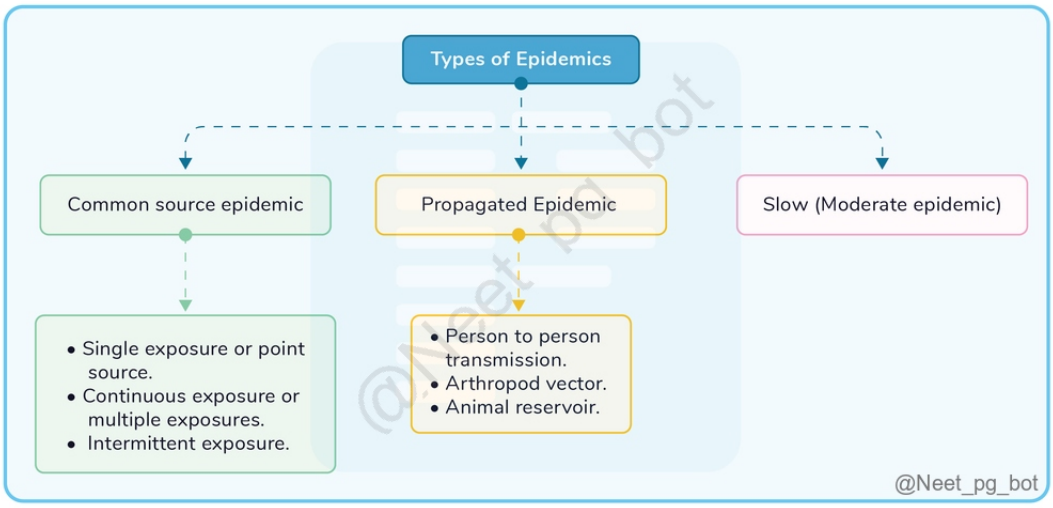
Correct Answer: B. Cases are spread across multiple incubation periods of the disease.

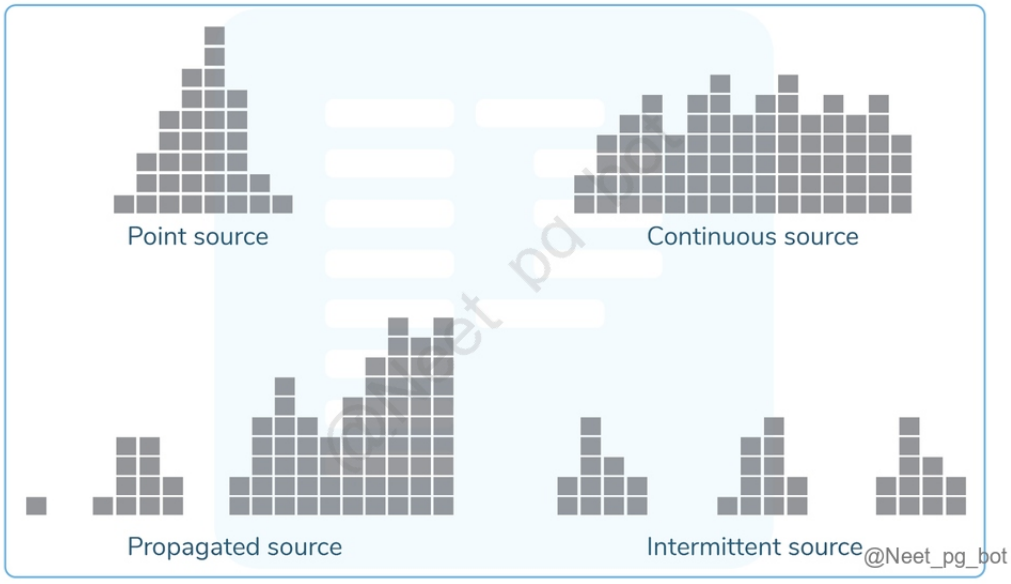
■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Common source Epidemics: Properties Point source or single exposure epidemic Continuous or repeated exposure Intermittent exposure Exposure Timing Brief and simultaneous Prolonged, continuous, repeated, or intermittent Intermittent Incubation Period All cases develop within one incubation period (Option D) Cases develop over multiple incubation periods (Option B) Unrelated to the incubation period Epidemic Curve Single peak; rises and falls rapidly (Option A) Extended or irregular curve Multiple peaks Explosiveness

Explosive with rapid clustering of cases (Option C) No explosive rise in cases - Secondary waves None May continue without clear secondary waves - Disease Agent Source Often due to a single infectious agent or contaminant Prolonged or repeated exposure to an infectious agent or contaminant - Examples Food poisoning. Industrial contamination (e.g., Bhopal gas tragedy, Minamata disease) Contaminated water source. Continuous exposure to pollutants. Prolonged outbreaks (Legionnaires disease) Contaminated food or tinned product which is sold over a period of time.





References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 72

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: Which of the following correctly distinguishes between hyperendemic and holoendemic diseases with appropriate examples? (Q841334)

A. Hyperendemic- Malaria in sub-Saharan Africa Holoendemic- Common cold worldwide

B. Hyperendemic- Influenza during winter in temperate regions Holoendemic- Malaria in sub-Saharan Africa

C. Hyperendemic- Tuberculosis in urban areas Holoendemic- Seasonal influenza

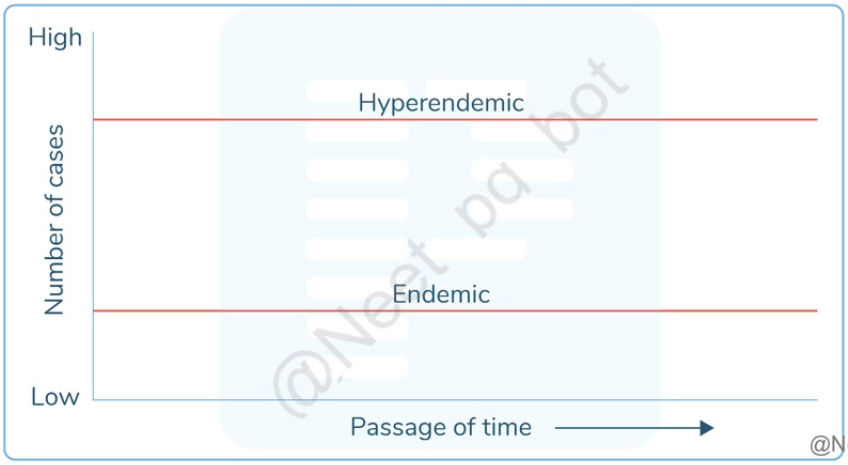
D. Hyperendemic- Malaria in sub-Saharan Africa Holoendemic- Influenza during winter in temperate regions

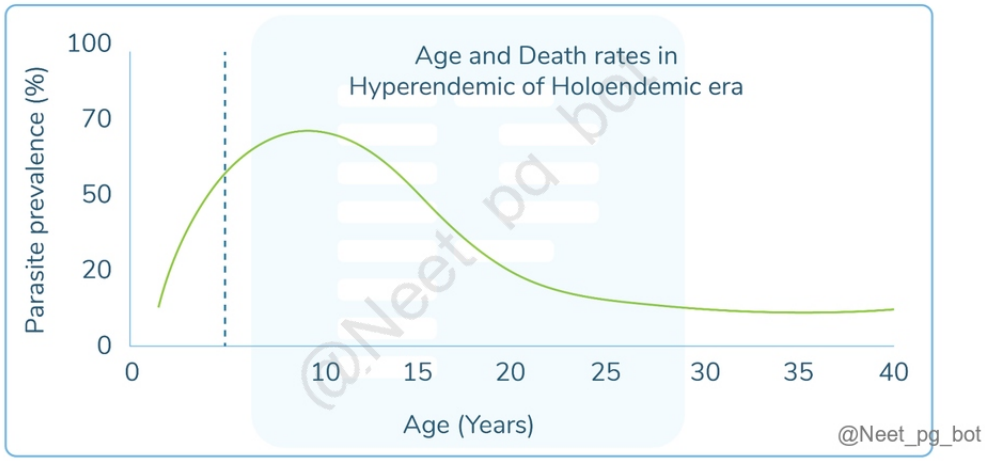
Correct Answer: B. Hyperendemic- Influenza during winter in temperate regions Holoendemic- Malaria in sub-Saharan Africa

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Hyperendemic : Constant presence of a disease at a high incidence and/or prevalence rate within a particular geographic area or population. It affects all age groups equally. Example: Influenza during winter in temperate regions, where the disease is prevalent during certain seasons but affects all age groups similarly. Holoendemic : A high level of infection begins early in life and affects most of the child population, reaching a state of equilibrium such that the adult population is less commonly affected. Example: Malaria in sub-Saharan Africa, where children are heavily infected, and adults show much less evidence of the disease due to early-life exposure and partial immunity.





References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 101.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: Match the following terms related to disease distribution with their appropriate examples: Term Example i) Endemic a) A sudden surge in influenza cases during the winter months. ii) Epidemic b) The persistent occurrence of malaria in certain regions of Africa. iii) Pandemic c) Isolated instances of tetanus infection with no discernible pattern. iv) Sporadic d) The global spread of COVID-19 affecting multiple continents. (Q841333)

A. i-b, ii-a, iii-d, iv-c

B. i-a, ii-b, iii-d, iv-c

C. i-c, ii-d, iii-a, iv-b

D. i-d, ii-c, iii-a, iv-b

Correct Answer: A. i-b, ii-a, iii-d, iv-c

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Term Definition Examples Epidemic Occurrence of disease clearly in excess of normal expectancy (Mean + 2SD or >80% expected frequency). Occurrence of even a single case of a previously eliminated disease. Occurrence of a single case of an exotic disease. Seasonal influenza outbreaks during winter months. Endemic

Constant presence of a disease within a specific population. Epidemiologically linked cases in terms of time, place, or person. Malaria in Africa, TB in India Pandemic Global spread of a disease. Defined as an epidemic in a large population. Requires crossing 2 continents and 2 WHO-specific regions. HIV/AIDS, COVID-19. Sporadic They occur randomly and unpredictably, without any discernible pattern in time, location, or individual. There's no epidemiological link between the cases. Tetanus

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page101, 102.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: A public health researcher is investigating the association between air pollution and asthma in children. The researcher collects data from a population over several years, documenting the levels of air pollution and the incidence of new asthma cases. Which of the following best describes the study design? (Q841313)

A. Interventional study

B. Analytical Study - Cohort

C. Descriptive Study

D. Analytical Study - Case Control

Correct Answer: B. Analytical Study - Cohort

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The researcher compares the levels of air pollution and the incidence of new asthma cases through a cohort study, an analytical epidemiological study. A cohort study is a study design that follows a group of individuals (cohort) to observe how different exposures affect the incidence of specific outcomes. Interventional Study (Option A): An interventional study, also known as an experimental study, involves the researcher actively intervening to modify one or more factors and observing the effects of these changes. Descriptive Study (Option C): A descriptive study primarily describes the characteristics of a population or phenomenon being studied. It does not aim to test hypotheses or investigate causal relationships. Analytical Study - Case Control (Option D): A case-control study is retrospective, starting with individuals who already have the outcome (e.g., asthma) and comparing them to those without the outcome to determine past exposures. In the scenario described, the researcher collects data prospectively which aligns with a cohort study. Classification of study designs: OBSERVATIONAL STUDIES EXPERIMENTAL/INTERVENTIONAL STUDIES Descriptive Analytical Case reports Ecological studies Randomised controlled trials Case series Case-control studies Field trials Cohort studies Community trials Cross-sectional studies

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 70

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: What is the first step in determining a descriptive study design? (Q841312)

A. Defining the disease under study

B. Defining the population of interest

C. Describe the disease in terms of time, place, and person

D. Formulate a hypothesis

Correct Answer: B. Defining the population of interest

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Steps in determining a descriptive study design: Step 1 Defining the population of interest is the first step in descriptive study design, i.e. the socio-demographic profiling of the population. For a population to be a part of a descriptive study design, it has to be: Stable. No migration Community participation: A sample of the population should represent the entire population Step 2 Define the disease under study (Option A) Step 3 Describe the disease in terms of time, place, and person (Option C) Step 4 Measure the disease, i.e. health indicators such as mortality, morbidity and disability rates. Step 5 Compare with known indices. Step 6 Formulate a hypothesis (Option D)

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 71

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: Which of the following statements is FALSE regarding descriptive epidemiology? (Q841311)

A. It is a study of the distribution of disease w.r.t. time, place, and person

B. It tests a hypothesis

C. It is the first phase of epidemiological investigation

D. Descriptive epidemiology does not involve a comparison group

Correct Answer: B. It tests a hypothesis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Analytical study designs to test a hypothesis (Option B) , and involves a comparison group Descriptive studies are used to formulate a hypothesis when nothing is known about a new type of disease. Descriptive epidemiology: Study of disease/health-related events distribution and identification of disease-associated characteristics. Characteristics of descriptive study: It is the 1st phase of the epidemiological investigation (Option C) . It is used to formulate a hypothesis. It studies the distribution of disease w.r.t time, place, and person (Option A). It does not involve a comparison group (Option D) .

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 71

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: A researcher is interested in examining the prevalence of hypertension among adults in a city and wants to identify any associated risk factors such as age, diet, and physical activity at a single time. The researcher collects data from a large sample of adults in the city. Which type of study design is the researcher using in this scenario? (Q841310)

A. Cohort study

B. Cross-sectional study

C. Case-control study

D. Ecological study

Correct Answer: B. Cross-sectional study

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A cross-sectional study is used to determine the prevalence of a disease in a population at a specific time. It is also known as a snapshot of the total population. Here it is cross-sectional study because it calculates prevalence of a disease and relies on primary data, i.e., researcher collects the data himself. To assess the

incidence, a Cohort study (Option A) starts by determining whether risk factors are present. Case-control study (Option C) determines whether an exposure is associated with an outcome. It starts with diseased and non-diseased. An Ecological study (Option D) compares exposure and disease frequency in a series of populations. The unit of study is population. Ecological study uses secondary data.

References:

Park's Textbook of Preventive Medicine, 27th Edition, Pages 78, 79, 83

Cross-Sectional Study

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: Which of the following statements regarding experimental studies is false? (Q841309)

A. Interventional study can confirm/discard a hypothesis

B. Healthy individuals are a unit of study in randomised clinical trials

C. Cost and ethical concerns are seen in experimental studies

D. Experimental studies often include control groups to compare the effects of the intervention.

Correct Answer: B. Healthy individuals are a unit of study in randomised clinical trials

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In randomized controlled trials (experimental study), the study unit is individuals with a particular condition or disease that the intervention aims to treat or prevent. Experimental study Unit of study RCT Diseased individuals Field trials (e.g. Vaccine trials) Healthy Individuals Advantages Disadvantages Provides evidence for the direct effect of an intervention and its outcome. Hence, a disease can be confirmed using Experimental or Interventional epidemiology (Option A) . For example, vaccines and drug manufacturing took place after the confirmation of the COVID-19 virus. Cost: Experimental studies, especially large-scale RCTs, can be expensive to conduct (Option C). Evaluate the efficacy of new drugs, vaccines, and therapies and compare between two interventional groups. Ethical concerns: Ethical considerations often pose limitations on experimental studies (Option C). Experimental studies often include control groups to compare the effects of the intervention (Option D): This is true because having a control group allows us to compare outcomes between those who receive the intervention and those who do not. This comparison helps to isolate the intervention's effect, thereby providing stronger evidence about its efficacy and safety.

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page70, 90

↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: Match column A's types of studies with the appropriate option in column B. COLUMN A COLUMN B a) Cross-sectional i) Testing of hypothesis b) Ecological ii) Prevalence c) Descriptive study iii) First Phase in Epidemiology d) Analytical study iv) Population as the unit of study (Q841308)

A. a-ii, b-iv, c- iii, d-i

B. a-i, b-ii, c- iv, d-iii

C. a-iv, b-iii, c-i, d-ii

D. a-iii, b-iv, c-i, d-ii

Correct Answer: A. a-ii, b-iv, c- iii, d-i

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Cross-sectional study examines a set of populations at a time, helping to determine a disease's presence within the population and calculating prevalence. Ecological Study is the only observational study with a population as the unit of study, while all other studies use individuals as the unit. Descriptive study is the first phase of epidemiology that helps formulate a hypothesis. An analytical study tests the hypothesis.

References:

Park's Textbook of Preventive Medicine, 27th Edition, Page70-75

↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: In community medicine research, which of the following statements is true? (Q841307)

A. Case series are used to establish causality between an exposure and an outcome.

B. Case reports are descriptive studies, while case series are analytical studies

C. Case series is formed by compiling reports of cases with diverse characteristics

D. Case series do not include a comparison group

Correct Answer: D. Case series do not include a comparison group

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Case report Case Series Includes a single individual with unique or unusual findings Aggregation or collection of case reports that have a similar finding (Option C) They are both a type of descriptive study and do not require a comparison group (Option B) Case series provide detailed information about patients with a particular condition's clinical features, treatment, and outcomes. Establishing causality requires analytical study designs like cohort studies or randomized controlled trials (Option A) .

References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC5630458/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: Which of the following is a characteristic of analytical study? (Q841306)

A. The subject of interest is the population

B. The subject of interest is an individual within the population

C. Helps in formulating a hypothesis

D. No comparison group is present

Correct Answer: B. The subject of interest is an individual within the population

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Differences between descriptive and analytical study: Descriptive Study Analytical study The subject of interest is population (Option A) The subject of interest is an individual within the population (Option B) , except in ecological study where the unit is population A comparison group is not present (Option D) A comparison group is present Helps in formulating a hypothesis (Option C) Helps is testing a hypothesis E.g. Case report, case series E.g. Cohort studies and case-control studies.

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page78

↑ *Back to this question in Part A*

@Neet_pg_bot

• [02_Epidemiology] 007 Bias And Confounders

« Back to Folder Directory

[02_Epidemiology] 007 Bias And Confounders — Quick Jump

Q1 (p. 750) *Q2 (p. 751)* *Q3 (p. 751)* *Q4 (p. 752)* *Q5 (p. 753)* *Q6 (p. 754)*
Q7 (p. 755) *Q8 (p. 755)* *Q9 (p. 756)* *Q10 (p. 757)*

Q1: Which of the following best describes a bias? (Q840967)

A. Random variation in data collection between exposure and disease

B. Systematic error in determining an association between exposure and disease

C. Measure of strength of association between exposure and disease

D. Direct estimation of frequency of exposure between disease and non-disease groups

Correct Answer: B. Systematic error in determining an association between exposure and disease

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Bias: Systematic error introduced during study design, conduct, data collection, or analysis Leads to an incorrect estimate of the association between exposure and outcome It does not occur by chance and cannot be eliminated by increasing the sample size. Reflects a type of non-comparability between study and control groups. This can skew the study results → False conclusions, and threaten validity. Types of Bias Subject Bias Investigator Bias Analysis Bias Recall bias Hawthorne bias Reporting bias Non-response bias Selection bias Berksonian Neyman Reporting Publication bias Misclassification bias Interviewer bias Pygmalion bias Golem bias (blunting of response due to demotivated observer) Statistical bias Random variation in data collection between exposure and disease (Option A): Random variation in data collection and measurement refers to the natural fluctuation seen with sampling errors Measure of strength of association between exposure and disease(Option C): The odds ratio measures the strength of the association between risk factors and outcomes Direct estimation of frequency of exposure between disease and non-disease groups (Option D): Exposure rate, defined as a direct estimation of the frequency of exposure between disease and non-disease groups, may be calculated in a case-control study.

References:

Park’s Textbook of Preventive and Social Medicine, 26th Edition, Pages 81-82

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A case-control study is being conducted by researchers to investigate the association between the onset of cardiovascular disease (CVD) and a high-calorie diet. Which of the following scenarios best reflects a form of Neyman bias? (Q840968)

A. Asking participants to recall and report their dietary habits over the past five years.

B. Excluding cases who had CVD in the past but have since died or fully recovered.

C. Including cases as patients admitted with CVD and controls as patients admitted for non-CVD causes

D. Publishing findings with a strong association, while those with inconclusive associations are unpublished.

Correct Answer: B. Excluding cases who had CVD in the past but have since died or fully recovered.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Types of Bias: Neyman bias (Option B) Known as prevalence-incidence bias occurs when a study excludes individuals who have died or recovered from the disease. Missing cases lead to an underestimation of the true association. Berksonian bias (Option C) A selection bias by choosing hospitalised patients with multiple comorbidities as the study population Leads to a distorted association between exposure and outcome. Reporting bias (Option A) Information reporting is influenced by the knowledge of the desired outcome or the interest of the researchers. E.g., CVD patients may attribute their condition to past dietary habits leading to high-fat consumption, while those without CVD may underreport unhealthy eating habits. Publication bias (Option D) Studies with positive or significant results are more likely to be published than studies with negative or non-significant results. This leads to an overrepresentation of studies showing a strong association between high-fat diets and CVD, potentially misleading readers.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 81-82

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A researcher is investigating the association between a new dietary supplement and the development of a rare type of cancer. The study includes 100 patients with the cancer and 100 healthy individuals. All of the following biases can occur in this type of study except? (Q840969)

A. Recall Bias

B. Selection Bias

C. Ascertainment Bias

D. Pygmalion Bias

Correct Answer: D. Pygmalion Bias

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Pygmalion Bias occurs when the researcher's expectations influence participant performance. This bias is irrelevant to case-control studies, which are retrospective and observational and more susceptible to biases like recall, selection, and ascertainment bias. Pygmalion Bias/ Rosenthal Effect: A phenomenon where higher researcher expectations increase participant performance or outcomes. Motivation is proportional to performance and gives an exaggerated response. Seen in experimental or educational settings. For example, increased motivation by teachers increases student performance. Recall Bias (Option A) occurs when participants do not accurately remember past events or experiences. It is common in case-control studies where cases might remember exposure more clearly than controls. Selection Bias (Option B) Happens when there is a systematic difference in characteristics between those selected for study and those not. It is possible that the cases and controls are not representative of the general population. Surveillance Bias or Ascertainment bias (Option C) Occurs when the disease or outcome is more likely to be identified in the exposed group because they are more closely monitored. This could occur if cases are more frequently monitored for dietary habits than controls.

References:

Woods NS, Pygmalion in the cradle https://pubmed.ncbi.nlm.nih.gov/9717138/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A research study monitors smoking cessation among participants using daily self-reporting. Despite being heavy smokers outside the study, participants consistently report reduced cigarette consumption during the study period. What phenomenon is likely influencing these findings? (Q840970)

A. Hawthorne effect

B. Ascertainment bias

C. Interviewer bias

D. Recall bias

Correct Answer: A. Hawthorne effect

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The given scenario shows smokers modifying their behaviour during observation in a study, and it is suggestive of Hawthorne effect. Hawthorne effect: Individuals modify their behaviour due to awareness of being observed. Seen in cohort studies. In this scenario, participants may decrease their reported cigarette consumption due to being monitored rather than reflecting their actual smoking habits outside the study context. Ascertainment bias (Option B) or observer bias occurs when the investigator's knowledge of exposure or outcome influences their assessment of study outcomes, less likely seen in cohort studies where exposure is assessed before the outcome occurs. Interviewer bias (Option C) is mostly seen in case-control studies, where interviewers know the disease status and consciously or unconsciously influence the responses of participants. Recall bias (Option D) occurs when participants with a disease recall past exposures differently when they know their disease status is associated with case-control studies.

References:

pubmed.ncbi.nlm.nih.gov/26341898/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following statements best describes the purpose of double blinding in clinical trials (Q840971)

A. It fails to avoid performance bias

B. It avoids both subject and observer bias

C. Researchers are aware and participants are unaware of the intervention given

D. It avoids selection bias

Correct Answer: B. It avoids both subject and observer bias

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Double blinding in clinical trials prevents observer and subject bias by ensuring participants and researchers are unaware of the treatment or placebo, thereby preventing influenced behaviour or symptoms. Blinding levels in Clinical trials 1. Single-blinded blinding Participants are unaware of the intervention Prevent biases that arise from knowledge of the treatment. 2. Double-blinded blinding Both the researchers and participants are unaware of the intervention given (prevents observer and subject bias) Most common form of blinding Avoids performance bias (associated with knowledge of treatment) (Option A) 3. Triple-blinded blinding Researchers, participants, and analysers are unaware of the intervention. The best form of blinding. Selection bias is avoided by randomisation, which arises when the participants are not representative of the target population. (Option D)

References:

impressions.manipal.edu/mjnhs/vol3/iss1/14/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Researchers found a significant correlation in a study examining the association between coffee drinking and heart disease. However, further analysis revealed that smoking might be influencing this relationship. In this context, smoking is considered as (Q840972)

A. Causal variable

B. Random error

C. Confounding factor

D. Spurious correlation

Correct Answer: C. Confounding factor

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Confounding factor : It is an external variable that influences both the Independent variable (Coffee) and Dependent variable(Heart disease incidence), creating a false association between them. It can distort the true relationship between these variables. Importance: Identifying and addressing confounders is crucial to ensuring a study's internal validity. Internal validity refers to the extent to which a study accurately reflects the true causal relationship between variables without the influence of other extraneous factors. In this case, smoking status can confound the relationship between coffee consumption and heart disease because smokers are more likely to drink coffee and also more likely to have heart disease. Causal variable (Option A) refers to a factor that directly causes a change in the studied outcome. In this case, coffee drinking could be considered a causal variable if it directly affects heart disease risk. Random error (Option B) refers to variability in research outcomes that occurs by chance rather than systematic factors. Spurious correlation (Option D) occurs when two variables appear to be correlated but have no causal relationship.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pages 95, 96

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3755849/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Q. Match the following: 1. Randomisation a. Eliminates only the known confounders. 2. Standardisation b. Eliminate the effect of age and gender. 3. Restriction c. Eliminates both known and unknown confounders. 4. Matching d. Limits the participation in the study to individuals who are similar concerning confounders. (Q840973)

A. 1-a, 2-b, 3-c, 4-d

B. 1-b, 2-a, 3-d, 4-c

C. 1-c, 2-b, 3-d, 4-a

D. 1-d, 2-c, 3-a, 4-b

Correct Answer: C. 1-c, 2-b, 3-d, 4-a

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Techniques To Eliminate Confounders Method Description Matching Cases are matched with the control and should be similar to the control in every possible variable that can affect the study's outcome except the disease in question. Done in a case-control study. Eliminates only the known confounders. Restriction Limits participation in the study to individuals who are similar in terms of confounders. Randomisation The technique where every participant will get an equal and known chance of being allocated to either the treatment group or the control group. Eliminates both known and unknown confounders. Stratification (Segregate) Stratify the participants of the study or segregate them. Standardisation Adjusting the results to a standard population to control for confounding variables often used in rate comparisons Eliminate or control the effect of age and gender. Multivariate regression models Used when there are multiple confounders.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3755849/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A study investigating the relationship between smoking and lung cancer found that the association was stronger in individuals who exercised less and weaker in those who exercised more. In this context, what role does exercise play? (Q840976)

A. Confounding Variable

B. Effect Modifier

C. Spurious Association

D. None of the above

Correct Answer: B. Effect Modifier

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Effect Modifier changes the strength or direction of the association between an exposure and an outcome. Here, exercise modifies the association between smoking and lung cancer, making it stronger in those who exercise less and weaker in those who exercise more. Effect modifier: It is a variable that differentially (positively and negatively) modifies the observed effect of a risk factor on disease status. Features: The magnitude of the effect of an exposure on the outcome will vary according to the presence of a third factor (effect modifier). For effect modification, true relation must be there between the outcome(disease) and independent variable (risk factor).

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5476432/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: In a mountainous region, many residents suffer from endemic goitre. What type of association best describes the relationship between living at high altitudes and the prevalence of goitre in these residents? (Q840977)

A. Spurious Association

B. Indirect Association

C. One-to-One Causal Association

D. Multifactorial Causation

Correct Answer: B. Indirect Association

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Indirect Association: The prevalence of goitre at high altitudes is indirectly associated with Third Variable (iodine deficiency), which is common in mountainous regions due to the lack of iodine in the soil and, consequently, in the food and water. The high altitude does not directly cause goitre; instead, the iodine deficiency

leads to the condition. Association: Occurance of 2 variable more often than expected by chance Measured by OR, correlation coefficient, p value The importance of association is as follows. Identifying Risk Factors. Formulating Hypotheses. Public Health Interventions. Resource Allocation. Epidemiological Surveillance. Types of Association: Type of Association Description 1. Spurious (Option A) An association that appears to be present but is actually due to chance or an error in data. Ice cream sales and drowning incidents : Higher ice cream sales are associated with more drowning incidents, but this is spurious. The real factor is summer, which increases both swimming activity and ice cream sales. 2. Indirect (Option B) An association in which a third variable (known as the confounding variable) causes both the predictor and the outcome. Coffee consumption and heart disease : Initial studies suggested coffee consumption is linked to heart disease. However, smoking (a confounder) was later found to be more prevalent among coffee drinkers and the real cause of the observed association. 3. Direct (Causal) An association where the predictor directly influences the outcome. Smoking and lung cancer : Smoking directly increases the risk of lung cancer through the inhalation of carcinogens. a. One-to-One causal (Option C) A direct causal link between a single predictor and a single outcome. Vitamin C deficiency and scurvy : Lack of vitamin C (predictor) directly causes scurvy (outcome). b. Multifactorial An association involving multiple factors contributing to the outcome.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pages 95-99

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: In a subcenter population, CBR is 20. What is the minimum number of pregnancies registered with ANM? (Q880859)

A. 110

B. 120

C. 55

D. 100

Correct Answer: C. 55

Explanation: Correct Option C - 55: CBR (Crude Birth Rate) = live births per 1000 population per year Population covered by one ANM = 2500 (Even though a subcenter serves ~5000 population, one ANM covers half) Step 1: Calculate live births 20×2500/1000 = 50 live births/year Step 2: Convert live births to pregnancies Pregnancies = live births × 1.1 (to include abortions, stillbirths) 50×1.1=55 Incorrect Options: Option A - 110: Assumes population = 5000 (entire subcenter) Calculation: 20×5000/1000 = =100 births 100×1.1=110 This is total pregnancies in the subcenter , not per ANM Option B - 120: No standard formula supports this number Overestimation Option D - 100: Counts only live births Does not include fetal loss / abortions

References:

.

↑ *Back to this question in Part A*

@Neet_pg_bot

• [02_Epidemiology] 008 Systematic Review Meta-Analysis And Evidence-Based Studies

« Back to Folder Directory

[02_Epidemiology] 008 Systematic Review Meta-Analysis And Evidence-Based Studies — Quick Jump

Q1 (p. 759)	*Q2 (p. 759)*	*Q3 (p. 760)*	*Q4 (p. 761)*	*Q5 (p. 762)*	*Q6 (p. 763)*
Q7 (p. 764)	*Q8 (p. 766)*	*Q9 (p. 767)*	*Q10 (p. 767)*	*Q11 (p. 768)*	*Q12 (p. 769)*

Q1: Below are the steps for conducting a systematic review. Select the option that states the correct order of the steps. Data extraction Data synthesis Selecting the studies Defining the review question and eligibility criteria Searching for the studies Result Interpretation (Q840960)

A. 3-5-4-2-1-6

B. 5-3-1-2-4-6

C. 4-5-3-1-2-6

D. 2-1-5-3-4-6

Correct Answer: C. 4-5-3-1-2-6

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A systematic review is a method used in literature where multiple studies, both published and unpublished, are collected and rigorously analysed (except quantitative analysis) The steps followed in a systematic review are: Defining the review question → Searching for the studies → Selecting the studies → Data extraction → Data synthesis → Result interpretation

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3024725/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following best describes meta-analysis? (Q840961)

A. Quantitative analysis of the result derived from a single study

B. Conducting time-specific research and analysing the same

C. Analysis of results derived from multiple studies

D. Conducting population-specific research and analysing the same

Correct Answer: C. Analysis of results derived from multiple studies

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Meta-analysis is simply an analysis of results derived from multiple studies. It quantitatively and qualitatively analyzes the results from various studies to reach a common conclusion. It differs from a systematic review in that the latter can be used to analyse the outcome of only a single study. Meta-analysis takes the upper hand because the final outcome will always be reliable if multiple studies on the same topic are being analysed rather than a single study.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3099299/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3024725/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: All of the following are true about funnel plot except? (Q840963)

A. It is used in both systematic review and meta-analysis

B. Unbiased results of large-scale studies will be near the average

C. A triangular distribution of results indicates the absence of heterogeneity

D. A positive file drawer means many good outcomes of research were unpublished

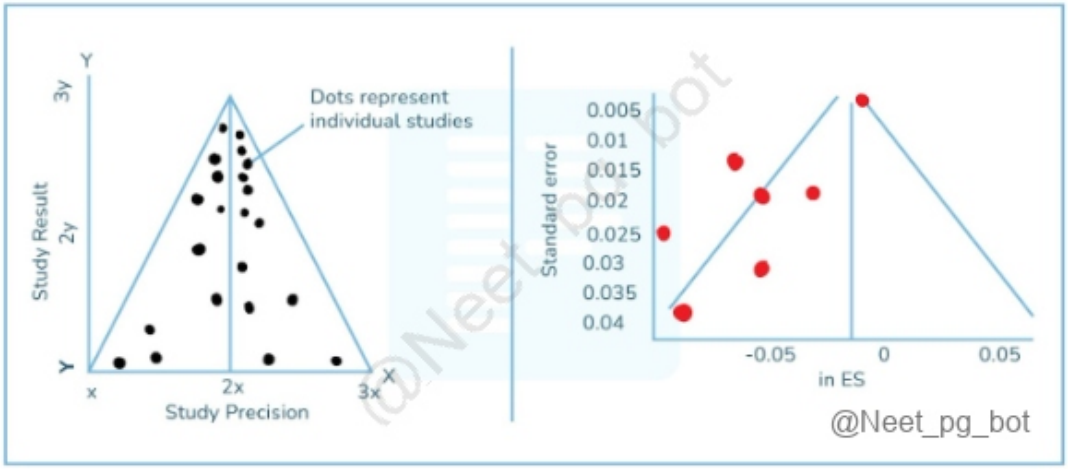
Correct Answer: D. A positive file drawer means many good outcomes of research were unpublished

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A positive file drawer means some of the research's bad outcomes were unpublished. A funnel plot is drawn while conducting both a systematic review and meta-analysis (Option A) to determine whether there is any heterogeneity or publication bias. File drawer effect : This refers to a graph pattern in which all the results are plotted predominantly on either side of the average line, signifying publication bias (meaning some parts of the

results never went beyond the researcher's file drawer). More studies on the left side of the funnel - Bias towards publication of negative result More studies on the right side of funnel - Bias towards publication of positive result Unbiased large-scale studies generally have fewer errors (considering the huge sample population), provided there is no bias; hence, these studies will be plotted at the top close to the average line (Option B) . Unbiased smaller studies are generally more prone to errors and thus plotted at the bottom and distributed on both sides away from the average line. If there is no publication bias or heterogeneity (Option C) , this gives a triangular/inverted funnel-shaped plot.



References:

https://www.bmj.com/content/343/bmj.d4002

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following best describes the use of a blobbogram? (Q840964)

A. Association of multiple risk factors with the same disease

B. Association of one risk factor with selected diseases

C. Association of one risk factor for a disease with another

D. Association of multiple risk factors with selected diseases

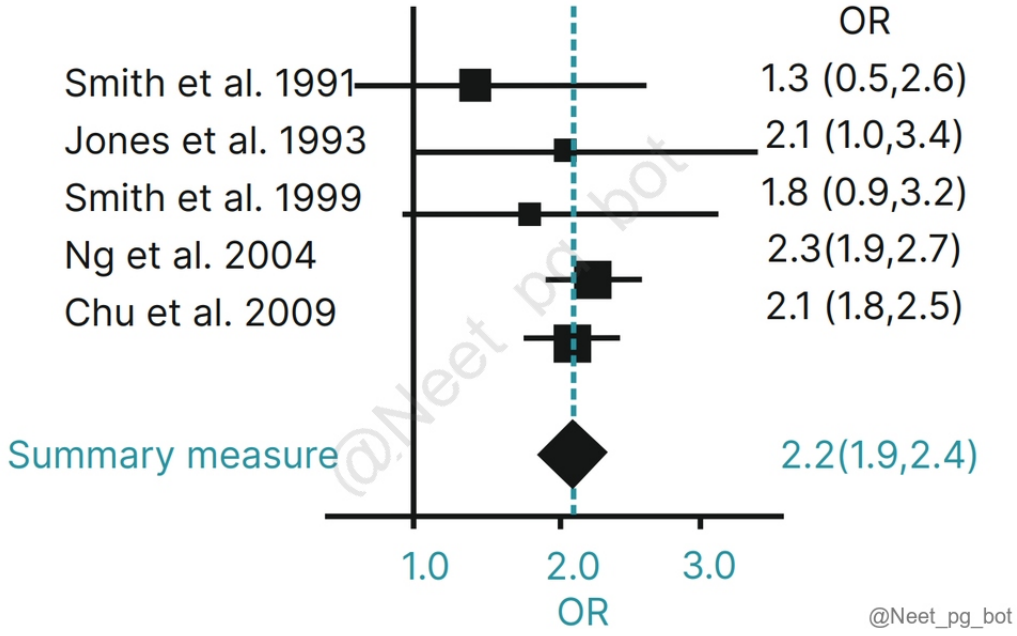
Correct Answer: A. Association of multiple risk factors with the same disease

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A blobbogram/forest plot is used in a meta-analysis to find out the association between multiple risk factors related to the same disease. Components of blobbogram: The Individual Studies: Each row represents one

study. The "Blob" (The Square): This is the point estimate (the result) of that specific study. The Whisker (The Horizontal Line): This represents the 95% Confidence Interval . It shows the range of where the true effect likely lies. A very long line means the study was less precise. The Vertical Line (Line of Null Effect): This is the "neutral" line. If the result is a Risk Ratio , the line is at 1.0 . If a study's "whisker" crosses this line, the result is considered statistically non-significant . The Diamond: This is the most important part! It sits at the bottom and represents the pooled result of all the studies combined. The center of the diamond is the average effect. The width of the diamond is the overall confidence interval. Interpretation: Association of risk factors with outcome (e.g., breast cancer) Smith et al- alcohol Jones et al- effect of smoking Smith et al- effect of diet NG et al- effect of religion Chu et al- effect of area of residence Look for CI (confidence interval) Includes 1: non significant Does not include 1: Significant >1 → Risk factor <1 → Protective factor Diamond in the plot → overall effect size or pooled estimate



References:

https://www.statisticshowto.com/forest-plot-blobbogram/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which is not a reporting format used in systematic review and meta-analysis? (Q840965)

A. PRISMA

B. COCHRANE

C. QUOROM

D. CONSORT

Correct Answer: D. CONSORT

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: CONSORT (Consolidated Standard of Reporting Trials) is a format specifically designed to report the results of individual randomised controlled trials (and not that of a meta-analysis). Reporting the result of a systematic review or a meta-analysis involves the following steps:

References:

https://en.wikipedia.org/wiki/Randomized_controlled_trial

https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-021-01626-4

https://www.cochranelibrary.com/about/about-cochrane-reviews

https://pubmed.ncbi.nlm.nih.gov/10584742/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following incorporates the advantage of researched science into a doctor's clinical expertise and patient values? (Q840966)

A. Correlational research

B. Controlled trials

C. Evidence-based medicine

D. Meta-analysis

Correct Answer: C. Evidence-based medicine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Evidence-based medicine incorporates well-researched and reliable scientific evidence into a doctor's clinical expertise and patient values. Steps for applying evidence-based medicine in practice: The father of evidence-based medicine is David Sackett. The founder of evidence-based medicine is Gordon Guyatt.



References:

https://www.ncbi.nlm.nih.gov/books/NBK470182/#:~:text=Evidence%2Dbased%20medicine%20(EBM),medical%20decision%20for%20the%20patient .

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following is an example of experimental epidemiology? (Q844340)

A. Case-reference study

B. Follow-up study

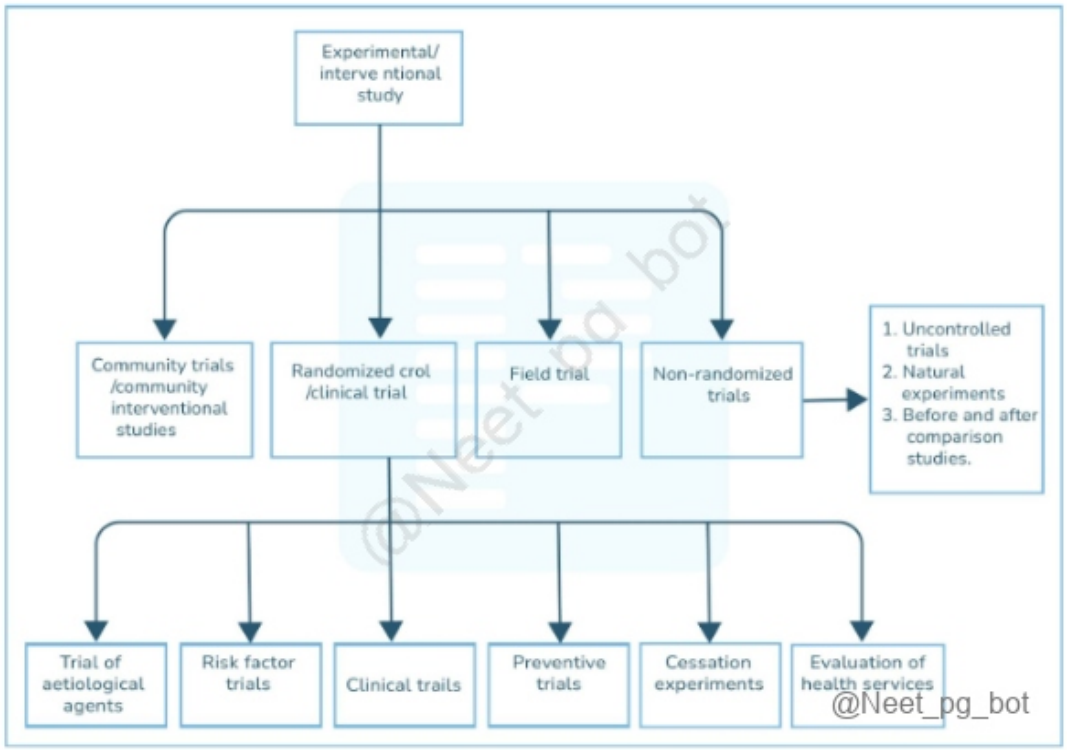
C. Prevalence study

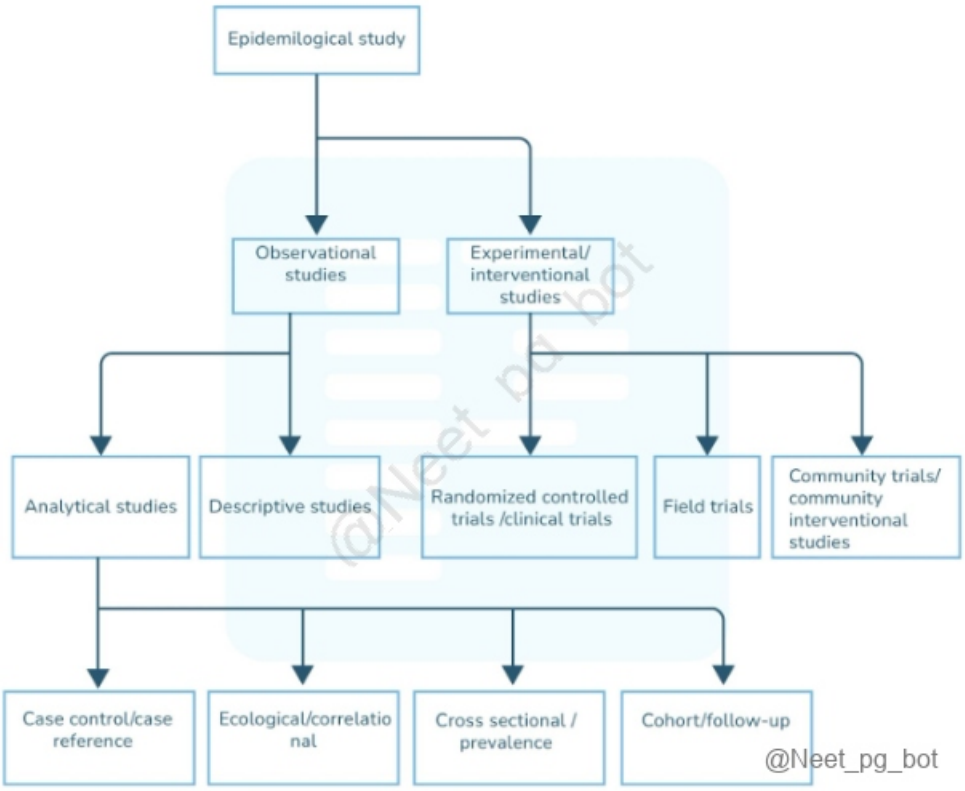
D. Evaluation of health services

Correct Answer: D. Evaluation of health services

Explanation: The evaluation of health services is an example of randomised controlled trials, a type of experimental epidemiological study. Definition of epidemiology by John M Last: The study of distribution and determinants of health-related states or events in specified populations and the application of this study to control

health problems. Observational studies Analytical studies Case-control/case reference. Ecological/correlational. Cross-sectional/prevalence. Cohort/follow-up. Descriptive studies Experimental/observational studies Community trials/community intervention trials. Field trials. Non-randomised trials Uncontrolled trials. Natural experiments. Before and after comparison studies. Randomised controlled trials Trial of aetiological agents. Risk factor trials. Clinical trials. Preventive trials. Cessation experiments. Evaluation of health services.





References:

Park's Textbook of Preventive and Social Medicine, 26th edition, page 93.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: All of the following have individuals as the unit of study except? (Q844341)

A. Descriptive studies

B. Case-control study

C. Cross-sectional study

D. Cohort study

Correct Answer: A. Descriptive studies

Explanation: A descriptive study is a study on populations, not individuals. Epidemiological study Unit of study Descriptive Population Ecological Cross-sectional (Option C) Individuals Case-control (Option B) Cohort (Option D) Randomised controlled trials Patients Field trials Healthy people Community trials Communities

References:

Park’s Textbook of Preventive and Social Medicine, 26th Edition, Page 71

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A study observed 23,000 individuals aged 15-49 who were using oral contraceptives, along with a comparable number of controls using alternative contraception methods or none. The study involved 1400 general practitioners who recorded diagnoses of illnesses, pregnancies, and deaths during the follow-up period. What kind of study is this? (Q844342)

A. Cohort

B. Cross-sectional

C. Community trial

D. Case-control

Correct Answer: A. Cohort

Explanation: The study described is a cohort study. It follows a group of individuals (those using oral contraceptives) and a comparable group of controls over time to observe the outcomes (diagnoses of illnesses, pregnancies, and deaths). The follow-up period indicates prospective , tracking the participants forward from the point of enrollment. Cross-sectional study (Option B) assesses exposure and outcome simultaneously, which is not the case here since a follow-up period is involved. Community trial (Option C) involves assigning interventions to entire communities rather than individuals, which does not fit the study's description. Case-control study (Option D) compares individuals with a specific condition (cases) to those without it (controls) to examine past exposures. In this case, participants are followed over time and not selected based on disease status.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 83, 84

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: All are false about experimental trials except? (Q844343)

A. Animal trials can’t be unblinded

B. All animal trials are unethical

C. Interim analysis can’t be done

D. None of the above

Correct Answer: B. All animal trials are unethical

Explanation: Experimental trials, by definition, involve planning and conducting an intervention and observing its outcomes over time. Double-blinding can be used in animal trials where neither the handlers nor the assessors know which animals are in the treatment or control groups (Option A) . While animal trials have ethical considerations, they are not inherently unethical if conducted according to ethical guidelines and regulations (Option B) . Interim analyses can and often are performed in experimental trials to evaluate the data at pre-specified points (Option C) .

References:

Park’s Textbook of Preventive and Social Medicine, 26th Edition, pages 89-93.

Essentials of Pharmacology, KD Tripathi, 8th Edition, Page 90, 91.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Match the following criteria for judging causality with their descriptions: Criteria: Descriptions: A. Temporal association 1. Requires that exposure precedes the onset of a disease. B. Strength of association 2. Based on relative risk and dose-response relationship. C. Specificity of the association 3. Implies a "one-to-one" relationship between cause and effect. D. Consistency of the association 4. Replication of results in different settings strengthens evidence. E. Biological plausibility 5. Agreement with current understanding of biological response. F. Coherence of the association 6. Consistency with known relevant facts. (Q844344)

A. a-1, b-2, c-3, d-4, e-5, f-6

B. a-2, b-1, c-3, d-4, e-5, f-6

C. a-6, b-5, c-4, d-3, e-2, f-1

D. a-1, b-3, c-2, d-4, e-5, f-6

Correct Answer: A. a-1, b-2, c-3, d-4, e-5, f-6

Explanation: Austin Bradford Hill gives a few criteria on which the relationship between disease and cause increases. Hill’s criteria: Temporality The cause must precede the effect , as seen in the link between long-term smoking and lung cancer. Strength Relative risk and dose-response relationship are assessed. A larger relative risk supports causality, while a dose-response relationship strengthens it, e.g., reduced mortality after quitting smoking. Specificity Implies a "one-to-one" relationship between cause and effect. Lack of specificity doesn't disprove causality. A single cause may lead to multiple effects; smoking's link to lung cancer remains the strongest. Consistency Repeated findings across diverse studies confirm associations , e.g., smoking and lung cancer. Plausibility The absence of a fully understood biological mechanism does not rule out causality . Eg; Inhaling smoke, which deposits carcinogens in the lungs, is biologically plausible. Coherence Aligns with historical and epidemiological evidence , like smoking trends correlating with lung cancer rates. Analogy If a similar association has been observed with another exposure and outcome , it supports the possibility of a causal relationship. Gradient There should be a direct relationship between exposure dose and disease risk , with higher exposure levels leading to higher disease incidence. Experiment Manipulating exposure in studies (e.g., quitting smoking) provide strong support for causation.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 97-99

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: “A factory worker was exposed to asbestos for 20 years starting in the 1980s. 30 years later, he developed mesothelioma.” This scenario is an example of? (Q844345)

A. Temporal association

B. Strength of association

C. Consistency of association

D. Biological plausibility

Correct Answer: A. Temporal association

Explanation: The given scenario is an example of Temporal association. Temporal association: The cause must precede the observed effect. In chronic diseases, establishing temporal sequence can be challenging due to insidious onset and ignorance of precise induction periods. Example: Lung cancer occurring in long-term smokers satisfies the temporal requirement. Hill's criteria for causation are a group of 9 principles that can be useful in establishing epidemiologic evidence of a causal relationship between a presumed cause and an observed effect and have been widely used in public health research. Different principles are as follows: Temporality Strength Specificity Consistency Plausibility Coherence Analogy Gradient Experiment Strength of association (Option B) refers to how strong the link is between exposure and disease (e.g., measured statistically with risk ratios). Consistency of association(Option C) refers to whether the same association is observed across different studies and populations Biological plausibility(Option D) refers to whether the association makes sense based on known

biological mechanisms (asbestos causing mesothelioma is biologically plausible, but that's not what's being illustrated here).

References:

Park’s Textbook of Preventive and Social Medicine, 26th Edition, Page 97

↑ *Back to this question in Part A*

@Neet_pg_bot

• [02_Epidemiology] 009 Previous Year Questions

« Back to Folder Directory

[02_Epidemiology] 009 Previous Year Questions — Quick Jump

Q1 (p. 771)	*Q2 (p. 772)*	*Q3 (p. 772)*	*Q4 (p. 773)*	*Q5 (p. 774)*	*Q6 (p. 775)*
Q7 (p. 776)	*Q8 (p. 776)*	*Q9 (p. 777)*	*Q10 (p. 777)*	*Q11 (p. 778)*	*Q12 (p. 779)*
Q13 (p. 780)	*Q14 (p. 781)*	*Q15 (p. 782)*	*Q16 (p. 783)*	*Q17 (p. 783)*	*Q18 (p. 784)*
Q19 (p. 785)	*Q20 (p. 785)*	*Q21 (p. 786)*	*Q22 (p. 787)*	*Q23 (p. 788)*	*Q24 (p. 788)*
Q25 (p. 789)	*Q26 (p. 790)*	*Q27 (p. 791)*	*Q28 (p. 791)*	*Q29 (p. 792)*	*Q30 (p. 793)*
Q31 (p. 795)	*Q32 (p. 796)*	*Q33 (p. 797)*	*Q34 (p. 798)*	*Q35 (p. 798)*	*Q36 (p. 799)*
Q37 (p. 800)	*Q38 (p. 800)*	*Q39 (p. 801)*	*Q40 (p. 802)*	*Q41 (p. 803)*	*Q42 (p. 803)*
Q43 (p. 804)	*Q44 (p. 805)*	*Q45 (p. 805)*	*Q46 (p. 806)*	*Q47 (p. 807)*	*Q48 (p. 807)*
Q49 (p. 808)	*Q50 (p. 809)*	*Q51 (p. 810)*	*Q52 (p. 811)*	*Q53 (p. 811)*	*Q54 (p. 812)*
Q55 (p. 814)	*Q56 (p. 814)*	*Q57 (p. 815)*	*Q58 (p. 817)*	*Q59 (p. 817)*	*Q60 (p. 818)*

Q1: What is the most effective quantitative method for examining previous research studies? (Q856888)

A. Cohort study

B. Systematic review

C. Meta-analysis

D. RCT

Correct Answer: C. Meta-analysis

Explanation: : This is an observational study design used to follow groups of people over time but is not a method for examining previous research studies. Systematic Review (Option B) : A systematic review is a comprehensive summary of existing research, but it does not necessarily include statistical analysis. It organizes and assesses the quality of existing studies. RCT (Randomized Controlled Trial) (Option D) : An RCT is a primary research design for evaluating interventions but does not deal with summarizing previous research studies.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 83, 89-91

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 89-94

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which statement accurately describes the single exposure point source epidemic? (Q858125)

A. Has more than one incubation period

B. Has multiple peaks

C. Explosive in nature

D. Slow rise and fall

Correct Answer: C. Explosive in nature

Explanation: A single exposure point source epidemic is characterized by a sudden and simultaneous exposure to an infectious agent, leading to an explosive increase in cases within a short time frame, typically seen in foodborne or waterborne outbreaks. Has more than one incubation period (Option A): is incorrect because a single exposure point source epidemic typically results from a single exposure event, leading to cases clustering around a single incubation period. Has multiple peaks (Option B): is incorrect because a single exposure outbreak usually shows a single sharp peak, not multiple peaks. Slow rise and fall (Option D): is incorrect because a single exposure point source epidemic exhibits a rapid onset and decline in cases rather than a gradual change.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 72, 896

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Match the following scientists with their discoveries: 1. Walter reed a. Prevention of scurvy by citrus fruits 2. Edward Jenner b. Yellow fever 3. James Lind c. Smallpox vaccination (Q855298)

A. 1-a, 2-b, 3-a

B. 1-b, 2-a, 3-c

C. 1-c, 2-b, 3-a

D. 1-b, 2-c, 3-a

Correct Answer: D. 1-b, 2-c, 3-a

Explanation: Walter Reed : He is famously known for his discovery regarding the cause of yellow fever , linking it to mosquitoes. This was a groundbreaking discovery in the understanding of the transmission of infectious diseases. Edward Jenner : He is known for the development of the smallpox vaccination , using cowpox as a safer substitute to immunize people against smallpox. This is considered the first successful vaccine ever developed. James Lind : He is known for his work on scurvy prevention. He demonstrated that scurvy could be prevented by consuming citrus fruits, which contain vitamin C, during long sea voyages.

References:

Park's Textbook of Preventive and Social Medicine, 25th Edition, Page 5

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: An intern has to study the relationship between ordering food online and development of obesity using a case-control study. What are the best study groups to be selected? (Q857134)

A. Only obese persons

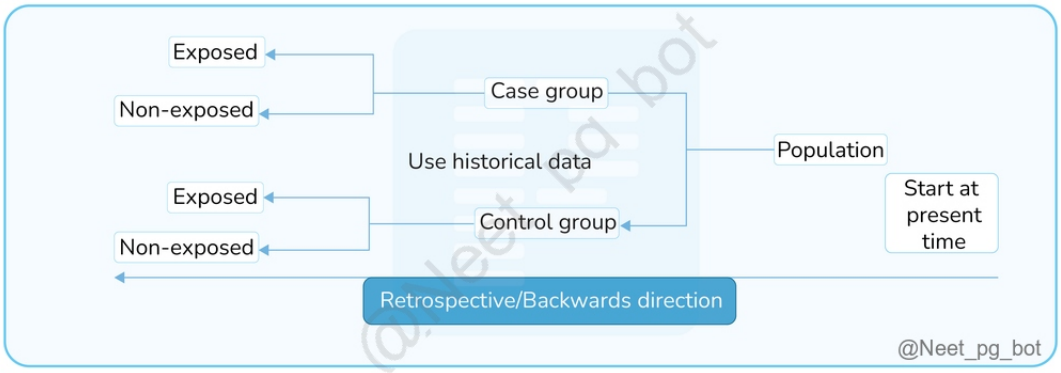
B. Only online food eaters

C. Obese and non-obese persons

D. Online food eaters and non-online food eaters

Correct Answer: C. Obese and non-obese persons

Explanation: - Obese and non-obese persons: In a case-control study, the cases are those with the condition of interest (in this case, obesity), and the controls are those without the condition (non-obese persons). After selecting these groups, the researcher would look retrospectively to assess the exposure to the risk factor (in this case, ordering food online). This design is ideal for studying the association between a specific exposure and an outcome. Salient Features of Case-control study Case-control study is an observational, analytical study. Both exposure and outcome have occurred before the start of the study. Control group who do not have the disease and Case group who have contracted the disease. Study precedes backwards from effect to cause, i.e. Outcome is used to determine the cause. Only obese persons, Only online food eaters (Options A and B): do not include a comparison group Online food eaters and non-online food eaters (Option D): focuses on exposure groups rather than outcome groups, which is not the correct approach for a case-control study.



References:

https://www.ncbi.nlm.nih.gov/books/NBK448143/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: A study to determine the association between maternal smoking histories from pregnant women during their antenatal visits and then subsequently assessing the birth weight of their babies soon after delivery. What type of study is this? (Q857716)

A. Prospective cohort

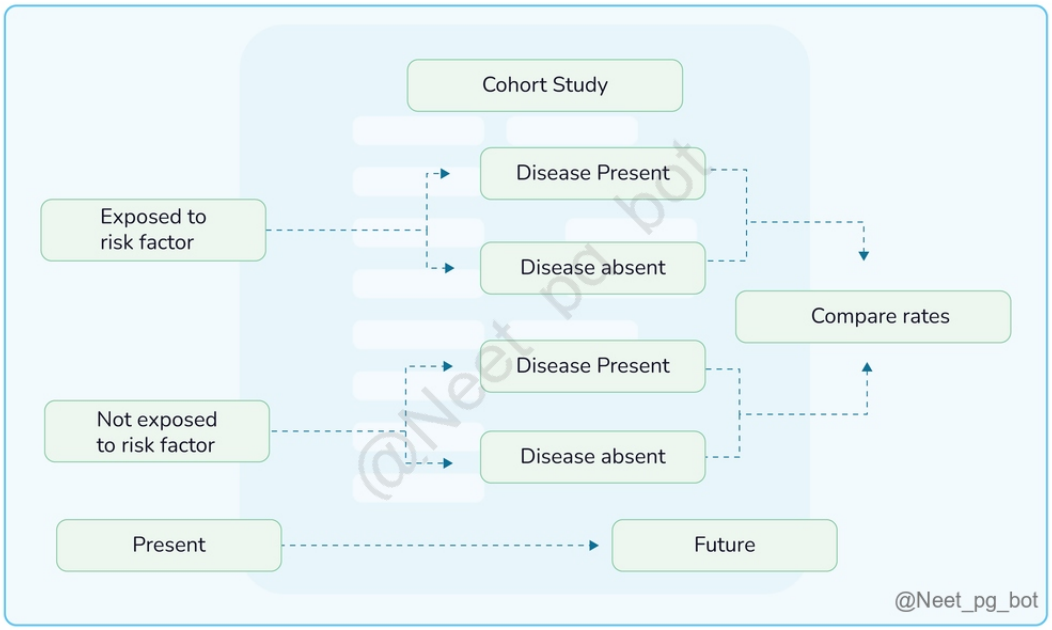
B. Retrospective cohort

C. Case-control

D. Cross-sectional

Correct Answer: A. Prospective cohort

Explanation: xposure Assessment Incidence Calculation Time Relationship Rare Exposures Multiple Outcomes Long Latency Period Natural Course {{caption_text}} Retrospective cohort (Option B): This would involve looking back at existing records to determine past exposure (e.g., smoking history from medical records) and linking it to outcomes (birth weight). Case-control study (Option C): This would start with cases (e.g., low birth weight babies) and controls (normal birth weight babies) and then look back to determine maternal smoking history. Cross-sectional study (Option D): This would assess both exposure (smoking history) and outcome (birth weight) at the same point in time, which is not the case here since birth weight is assessed after delivery.



References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 83

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following is used to reduce the selection bias in a clinical trial? (Q857739)

A. Selecting the population

B. Intervention

C. Randomization

D. Written informed consent

Correct Answer: C. Randomization

Explanation: : do not directly address selection bias.

References:

Park's Textbook of Preventive and Social Medicine 26th Edition Pg: 81-82

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following components are included in the Human Development Index (HDI), as per the World Health Organization (WHO)? (Q855331)

A. Life expectancy at birth, literacy and standard of living

B. Life expectancy at 1 year, literacy and standard of living

C. Infant mortality rate, literacy and standard of living

D. Life expectancy at 1 year, literacy and infant mortality rate

Correct Answer: A. Life expectancy at birth, literacy and standard of living

Explanation: Option A is correct, including life expectancy at birth, literacy, and standard of living. Components of the Human Development Index (HDI) are defined by the UNDP. Life expectancy at birth reflects overall health and mortality rates. Literacy measures ability to read and write, crucial for personal and economic development. Standard of living encompasses material well-being and quality of life. HDI combines these factors to measure human development and well-being globally. Incorrect Options: Life expectancy at 1 year, literacy and standard of living (Option B): Incorrectly includes life expectancy at 1 year. Infant mortality rate, literacy and standard of living (Option C): Incorrectly includes infant mortality rate. Life expectancy at 1 year, literacy and infant mortality rate (Option D): Incorrectly includes life expectancy at 1 year and infant mortality rate.

References:

Park’s textbook of preventive medicine, 25th Edition, Page 17

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the options below does not constitute a component of case-control studies? (Q855334)

A. Follow up

B. Matching

C. Strength of association

D. Selection of study subjects

Correct Answer: A. Follow up

Explanation: Follow-up is not part of case-control studies; they are retrospective and do not involve observing participants over time. Case-control studies involve: Selection of cases and controls. Matching to ensure comparability. Measurement of exposure. Analysis and interpretation of the data. Incorrect Options: Matching (Option B): Matching is commonly used in case-control studies to ensure comparability. Strength of association (Option C): Strength of association is assessed in case-control studies. Selection of study subjects (Option D): Selection of study subjects is indeed a step in case-control studies, involving cases and controls.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following statements is true regarding prevalence and incidence in relation to a newly introduced drug that reduces mortality but does not cure the disease? (Q855340)

A. Decrease in incidence

B. Decrease in prevalence

C. Increase in incidence

D. Increase in prevalence

Correct Answer: D. Increase in prevalence

Explanation: Introduction of a drug that decreases mortality but doesn't cure the disease prolongs the duration of the disease for each individual. Prevalence (P) = Incidence (I) × Duration (D). Since the duration of the disease is prolonged, despite decreased mortality, there will be an increase in prevalence. Incorrect Options: Decrease in incidence (Option A): The drug doesn't affect the occurrence of new cases, so incidence isn't necessarily impacted. Decrease in prevalence (Option B): The prolonged duration of the disease may increase prevalence despite decreased mortality. Increase in incidence (Option C): The drug doesn't influence new case occurrence, so incidence isn't necessarily impacted.

References:

Park’s textbook of preventive medicine, 25th Edition, Page 69-70

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following statements accurately describes the relationship between prevalence, incidence, and the introduction of a new drug that reduces mortality but does not provide a cure? (Q855345)

A. Decrease in incidence

B. Decrease in prevalence

C. Increase in incidence

D. Increase in prevalence

Correct Answer: D. Increase in prevalence

Explanation: Prevalence refers to the proportion of individuals in a population who have a particular disease or condition at a specific point in time. If the new drug decreases mortality but does not cure the disease, it means that individuals with the disease are living longer. As a result, the duration of the disease for each individual is prolonged, which may lead to an accumulation of cases over time. This accumulation of cases could potentially result in an increase in the prevalence of the disease. Although the drug may decrease mortality, it does not prevent new cases from occurring, leading to a higher number of individuals with the disease in the population. Therefore, the correct statement is that there would be an increase in prevalence (Option D) due to the prolonged duration of the disease despite the decrease in mortality. Incorrect Choices: Decrease in incidence (Option a): Incidence refers to the number of new cases of a disease that occur in a population over a specific period of time. The introduction of a new drug that decreases mortality but does not cure the disease does not directly impact the occurrence of new cases. The drug may improve the survival rate of individuals already diagnosed with the disease, but it does not influence the number of new cases being diagnosed. Therefore, the incidence of the disease would not necessarily decrease as a result of this drug. Decrease in prevalence (Option B): Since the drug does not cure the disease but only decreases mortality, it means that individuals with the disease are living longer. However, the prevalence of the disease is influenced by both the number of new cases and the duration of the disease. If the drug does not impact the number of new cases, the overall prevalence of the disease may not decrease. Increase in incidence (Option C): Similar to option A, the introduction of a new drug that decreases mortality but does not cure the disease does not directly impact the occurrence of new cases. The drug may improve the survival rate of individuals already diagnosed with the disease, but it does not affect the likelihood of new cases developing. Therefore, the incidence of the disease would not necessarily increase due to the introduction of this drug.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: What does the standardized age mortality ratio indicate? (Q856601)

A. Death rate of a population adjusted to a standard age distribution

B. Death rate of a population adjusted to a standard sex distribution

C. Removal of bias due to different age group population in different countries

D. To eliminate age structure of different countries

Correct Answer: A. Death rate of a population adjusted to a standard age distribution

Explanation: Standardized age mortality ratio adjusts death rates to a standard age distribution for fair comparisons. Helps remove bias caused by differences in age structure when comparing mortality rates. Calculates expected deaths in a population with the same age-specific death rates as a standard population. Commonly used in epidemiology, public health, and demographic research for comparing mortality rates. Types of Rate Description Examples Crude Rates Actual observed rates are calculated directly from raw data without adjustments. Crude birth rate: Number of births / Total population * 1000 Specific Rates Rates that focus on specific causes Tuberculosis mortality rate: Deaths due to TB / Population at risk * 100,000 Standardised Rates Rates are adjusted to account for differences in the composition of populations when comparing different groups or populations. Age-standardized mortality rate. Incorrect Options: Adjusted to a standard sex distribution (Option B) → This refers to sex standardization, not age. Removal of bias due to different age-group population (Option C) → This is an effect of age standardization, not the definition. To eliminate age structure of different countries (Option D) → Age structure is not eliminated, only adjusted for comparison.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: What is the most effective study design to demonstrate the relationship between cause and effect among the options listed below? (Q856609)

A. Case control study

B. Cohort study

C. Cross-sectional study

D. Clinical trial

Correct Answer: B. Cohort study

Explanation: Cohort study is the best study design to demonstrate cause and effect relationships. Reasons include: Temporal sequence: Follows individuals over time, establishing exposure preceding outcome. Exposure assessment: Collects detailed exposure information for accurate measurement. Control for confounding: Includes

measures to minimize influence of other factors. Large sample size: Enhances statistical power and generalizability. Long-term follow-up: Allows evaluation of short-term and long-term outcomes. Incorrect Options: Case control study (Option A): Case-control studies are retrospective and rely on recall, not ideal for establishing cause and effect. Cross-sectional study (Option C): Cross-sectional studies provide snapshot but lack temporal sequence to establish causality. Clinical trial (Option D): Clinical trials focus on specific treatments, may not address broader cause and effect relationships.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: A researcher wants to know whether there is an association of CRP values with the risk of myocardial infarction/stroke. The study group was divided into quintiles and the following table is formed based on the study results. Which of the following statements is true regarding the relationship between CRP and the risk of myocardial infarction/stroke? Quintile CRP Values (mg/L) Relative Risk (RR) Study Population 1 0.1–1 1 6000 2 1.1–2 1.3 6000 3 2.1–3 1.7 6000 4 3.1–4 2.1 6000 5 4.1–5 2.8 6000 (Q856070)

A. CRP has no association with risk of Ml/stroke

B. Increase in CRP increases the risk of Ml/stroke

C. Increase in CRP decreases the risk of Ml/stroke

D. In quintile 1, there is no risk of Ml/stroke

Correct Answer: B. Increase in CRP increases the risk of Ml/stroke

Explanation: C-reactive protein (CRP) is an inflammatory marker associated with cardiovascular disease risk. In the study, the relative risk (RR) increases progressively as CRP levels increase across quintiles: Quintile CRP (mg/L) Relative Risk (RR) 1 0.1–1.0 1.0 (Baseline) 2 1.1–2.0 1.3 3 2.1–3.0 1.7 4 3.1–4.0 2.1 5 4.1–5.0 2.8 Higher CRP levels are associated with an increasing relative risk of MI/stroke , indicating a positive correlation . Inflammation plays a key role in atherosclerosis , which explains the increased risk. CRP has no association with risk of MI/stroke (Option A) : This is incorrect. The increasing relative risk with rising CRP values shows that CRP is indeed associated with the risk of MI/stroke. Increase in CRP decreases the risk of MI/stroke (Option C) : This is incorrect because the relative risk increases as CRP levels rise, indicating an increased risk, not a decrease. In quintile 1, there is no risk of MI/stroke (Option D) : This is incorrect. Although the relative risk in quintile 1 is 1 (the reference group), it does not imply that there is no risk of MI/stroke. It means that the baseline risk is used for comparison, but individuals in this group still have some risk.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 86

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: The maternal mortality ratio is defined as? (Q856866)

A. Maternal Deaths per 10,000 live births

B. Maternal Deaths per 100,000 live births

C. Maternal Deaths per 10,000 women in reproductive age group

D. Maternal Deaths per 100,000 women in reproductive age group

Correct Answer: B. Maternal Deaths per 100,000 live births

Explanation: eaths per 100,000 live births : The maternal mortality ratio (MMR) is defined as the number of maternal deaths per 100,000 live births. It is an important indicator of the quality of healthcare and maternal health in a population. Key maternal and child health indicators : Indicator Definition Formula Significance Maternal Mortality Ratio (MMR) Number of maternal deaths per 100,000 live births Number of maternal deaths ×100,000 —---------- ■Number of live births Indicator of maternal health and the quality of maternal healthcare services. Infant Mortality Rate (IMR) Number of infant deaths (under 1 year) per 1,000 live births ■Number of infant deaths ×1,000 —---------- Number of live births Reflects the overall health of infants, healthcare quality, and living conditions. Under-5 Mortality Rate (U5MR) Probability of a child dying before age 5 per 1,000 live births Number of under-5 deaths■ ×1,000 —---------- Number of live births Reflects child health and effectiveness of health interventions from birth to age 5. Neonatal Mortality Rate (NMR) Number of deaths of infants aged 0-28 days per 1,000 live births Number of neonatal deaths■ ×1,000 —---------- Number of live births Measures the health of newborns and effectiveness of neonatal care and interventions. Child Mortality Rate (CMR) Number of deaths in children aged 1-4 per 1,000 children in this age group Number of deaths in children aged 1-4■ ×1,000 —---------- Total number of children aged 1-4 Reflects mortality due to preventable causes in children aged 1-4 years, indicating health and nutrition status. Stillbirth Rate (SBR) Number of stillbirths per 1,000 live births and stillbirths Number of stillbirths■ ×1,000 —---------- Number of live births + stillbirths Reflects the quality of prenatal care and the healthcare system’s ability to prevent fetal deaths. Contraceptive Prevalence Rate (CPR) Percentage of women of reproductive age using contraception Number of women using contraception ■×100 —---------- Total number of women of reproductive age Indicates access to and usage of family planning, helping reduce maternal and child mortality. Total Fertility Rate (TFR) Average number of children a woman would have over her lifetime Sum of age-specific fertility rates Reflects population growth and reproductive health patterns. Life Expectancy at Birth Average number of years a newborn is expected to live N/A Reflects the overall health and quality of life in a population. Maternal Deaths per 10,000 live births (Option A) : This is incorrect . The maternal mortality ratio is typically measured per 100,000 live births, not 10,000. Maternal Deaths per 10,000 women in reproductive age group

(Option C) : This is incorrect . The maternal mortality ratio is not calculated based on the number of women in the reproductive age group, but rather on live births. Maternal Deaths per 100,000 women in reproductive age group (Option D) : This is incorrect . While this measure might seem relevant, it is not the standard definition of maternal mortality ratio. The proper denominator for maternal mortality is live births, not the reproductive age group population.

References:

Park's Textbook of Preventive and Social Medicine, Edition 25, Page 610

https://pmc.ncbi.nlm.nih.gov/articles/PMC5463814/

https://pmc.ncbi.nlm.nih.gov/articles/PMC6330388/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A new drug combination of chemotherapy and immunotherapy for metastatic melanoma was prescribed by a radiotherapist. It prolongs survival. Which of the following is true in this situation? (Q856882)

A. Incidence increases and prevalence reduces

B. Incidence reduces and prevalence remains the same

C. Incidence remains the same and prevalence increases

D. Incidence reduces and prevalence increases

Correct Answer: C. Incidence remains the same and prevalence increases

Explanation: - Incidence remains the same and prevalence increases: Incidence : Refers to the number of new cases of a disease occurring in a specific population during a defined time period. Prevalence : Refers to the total number of cases (both new and existing) in a specific population at a given time. Impact of Prolonging Survival on Incidence and Prevalence: Incidence : The number of new cases of metastatic melanoma is not affected by the treatment. Therefore, the incidence remains the same . Prevalence : Prolonging survival means patients live longer with the disease, resulting in an increase in the total number of cases at any given time . Hence, the prevalence increases . Incidence increases and prevalence reduces (Option A) : This is incorrect because prolonging survival does not increase the number of new cases (incidence), and prevalence cannot reduce when survival increases. Incidence reduces and prevalence remains the same (Option B) : The new treatment does not affect the occurrence of new cases (incidence), and prolonging survival would increase, not stabilize, prevalence. Incidence reduces and prevalence increases (Option D) : The treatment affects survival, not the occurrence of new cases, so the incidence remains unchanged.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 68, 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A long-term study found that individuals who had high blood pressure (BP) during childhood continued to have high BP in adulthood, and those with low BP in childhood tended to maintain lower levels later in life. Which of the following epidemiological concepts does this pattern best represent? (Q866890)

A. Rule of halves

B. Regression to the mean

C. Tracking of blood pressure

D. Cohort effect

Correct Answer: C. Tracking of blood pressure

Explanation: Tracking of blood pressure refers to the tendency of an individual’s relative position within a distribution (e.g., BP levels) to remain consistent over time. In other words, those with high BP in childhood often remain at the higher end of BP in adulthood, and those with low BP tend to stay lower - even though absolute values may change with age. This concept is important in predicting adult disease risk from childhood measurements and emphasizes early preventive measures. Rule of halves (Option A): Refers to the observation in hypertension that only half of all hypertensives are diagnosed, half of them are treated, and half of those treated achieve control. It does not describe lifelong consistency in BP levels. Regression to the mean (Option B): This is a statistical phenomenon where extreme values tend to move closer to the average on subsequent measurements. It does not imply consistent rank ordering over time. Cohort effect (Option D): Refers to differences in health outcomes between groups born in different time periods due to shared exposures or experiences. It is unrelated to the persistence of BP levels within the same individuals.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Which data set provides the most comprehensive explanation for the variation between the highest and lowest values? (Q856889)

A. Variance

B. Coefficient of variation

C. Range

D. Interquartile range

Correct Answer: C. Range

Explanation: : Variance measures the average squared deviation from the mean. While it indicates the spread of data, it does not directly focus on the highest and lowest values. Coefficient of Variation (Option B) : The coefficient of variation is the ratio of the standard deviation to the mean and expresses the variability relative to the mean. It's useful for comparing relative variability but doesn't focus on the highest and lowest values. Interquartile Range (IQR) (Option D) : The IQR measures the spread of the middle 50% of the data (between the 25th and 75th percentiles). While it indicates the dispersion of the central portion of the data, it does not address the variation between the highest and lowest values as directly as the range.

References:

Park's Textbook of Preventive and Social Medicine, Edition 25, Page 911

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: The maternal mortality ratio defined as? (Q856439)

A. Maternal Deaths per 10,000 live births

B. Maternal Deaths per 100,000 live births

C. Maternal Deaths per 10,000 women in reproductive age group

D. Maternal Deaths per 100,000 women in reproductive age group

Correct Answer: B. Maternal Deaths per 100,000 live births

Explanation: The Maternal Mortality Ratio (MMR) is defined as the number of maternal deaths per 100,000 live births . This ratio is used to measure the risk of maternal death during pregnancy, childbirth, or within 42 days after delivery. Formula: MMR = (Maternal deaths / Live births) × 100,000 Maternal death : The death of a woman while pregnant or within 42 days of termination of pregnancy due to any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. Live births : The total number of live births in a given year. Maternal deaths per 10,000 live births (Option A) : This is an incorrect scale. The standard measure is per 100,000 live births. Maternal deaths per 10,000 women in reproductive age group (Option C) : This is also incorrect. MMR is based on live births, not on women in the reproductive age group. Maternal deaths per 100,000 women in reproductive age group (Option D) : This is not correct because MMR is specifically calculated based on the number of live births, not women in the reproductive age group.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 610

https://pmc.ncbi.nlm.nih.gov/articles/PMC5463814/

https://pmc.ncbi.nlm.nih.gov/articles/PMC6330388/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: The health authorities are launching a smoking cessation program by designing different activities for smokers. These are very expensive but still useful as a large proportion of lung cancer will be eliminated if smoking is stopped. This proportion of lung cancer can be indicated by? (Q854858)

A. Relative risk

B. Attributable risk

C. Population Attributable risk

D. Prevalence

Correct Answer: C. Population Attributable risk

Explanation: Correct Option: C) Population Attributable risk The question states that a large proportion of lung cancer will be eliminated if smoking is stopped. This refers to the proportion of disease in the entire population that can be prevented if the risk factor (smoking) is removed. This is exactly what Population Attributable Risk (PAR) measures. Incorrect options: Relative Risk (RR): Measures strength of association, not proportion preventable. Prevalence: Describes existing cases, not preventable fraction. Attributable Risk (AR): Measures excess risk among exposed individuals only , not the whole population

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 40

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: What type of study is it when a person collects data on lung cancer patients from government hospitals and the corresponding number of cigarette packets sold during the same time period, in order to examine the relationship between smoking and lung cancer? (Q854860)

A. Cross sectional

B. Ecological

C. Experimental

D. Quasi-experimental

Correct Answer: B. Ecological

Explanation: Correct Option: B) Ecological Ecological study examines relationships between variables at population level, not individual level. Collects data on lung cancer cases and cigarette packet sales over a specific time period. Analyzes associations using aggregate data, providing insights into population-level relationships. Doesn't establish causation or provide individual-level associations. Cross sectional (Option A): A cross-sectional study assesses the prevalence of variables in individuals at a specific point in time, not the relationship between variables over time. Experimental (Option C): Experimental study involves manipulation of variables and random assignment to determine causation, not applicable here. Quasi-experimental (Option D): Quasi-experimental study involves manipulation of variables without random assignment, also not applicable here.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 56

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: The number of polio cases has been steadily declining in comparison to previous years. This pattern is known as: (Q859178)

A. Seasonal

B. Cyclical

C. Periodical

D. Secular

Correct Answer: D. Secular

Explanation: The secular trend implies changes in the occurrence of a disease, i.e., progressive increase or decrease in incidence over a long period of time, such as years or decades. Although it may have short-term fluctuations imposed on it, secular trends imply a constant tendency to change in a particular direction of a definite movement in one direction. Examples include diabetes mellitus, coronary heart disease, and lung cancer (an increase in the number of non-communicable diseases when compared to previous years). Cyclical trends (Option B ruled out) Seasonal trends (Option A ruled out) They occur in cycles spread over short periods of time. Cycles

are associated with seasons. Examples: Measles: every 2-3 years. Rubella: every 6-9 years. Influenza: every 7-10 years. Examples: Measles. Varicella. Cerebro-spinal meningitis. Upper respiratory tract infections. Malaria. Sunstroke. Hay fever. Snakebite. Note : Road traffic accidents can be cyclical (more during weekends) and seasonal (more common in winter). Periodical (Option C): Relates to events or phenomena that occur at fixed intervals or specific time points. These trends may be related to public health campaigns, health screenings, or other planned interventions. Examples include regular immunization campaigns, biennial health surveys, or annual health awareness months (e.g., Breast Cancer Awareness Month).

References:

Park's Textbook of Preventive Medicine, 27th edition, Page 73, 74

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: What is the recommended duration for quarantine for the 30 individuals who had contact with a 28-year-old male who is tested positive for SARS-COV-2, but are currently asymptomatic? (Q859458)

A. Minimum incubation period

B. Maximum incubation period

C. Period of communicability

D. Median incubation period

Correct Answer: B. Maximum incubation period

Explanation: Quarantine should be based on the maximum incubation period, which is the longest time it takes for symptoms to appear after exposure to the virus. This ensures sufficient monitoring for symptom development. Incubation Period: (Option B) The incubation period refers to the time it takes for an individual to develop symptoms after being infected with a pathogen. It begins with exposure to the pathogen and ends with the appearance of recognisable symptoms. Window Period: The window period is the time between infection and when the infection can be reliably detected by diagnostic tests. The individual may be infectious during this period, but tests might not yet show positive results. This concept is important in screening and testing strategies for infectious diseases. Generation Time: Generation time refers to the interval of time between receipt of infection by a host and maximal infectivity of that host. Median incubation period (Option D): It is the time for 50% of cases to show symptoms after exposure. This option is incorrect. Period of communicability (Option C): It is when an infectious agent can be transferred directly or indirectly from an infected person to others, from infected animals to humans, or from infected individuals to animals or arthropods. This option is incorrect.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 107-108

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: What is the term used to describe a disease that is typically not found in a country but is brought in from abroad, as seen in the case of a 25-year-old male who was diagnosed with the condition upon arrival at an Indian airport, leading to quarantine? (Q860011)

A. Endemic

B. Epidemic

C. Zoonotic

D. Exotic

Correct Answer: D. Exotic

Explanation: Exotic: Disease not native or commonly found in a region, brought from abroad. Scenario: Disease brought to India by 25-year-old male. Classification: Disease is considered exotic due to its foreign origin. Term Definition Examples Epidemic (Option B ruled out) Occurrence of disease clearly in excess of normal expectancy (Mean + 2SD or >80% expected frequency). Occurrence of even a single case of a previously eliminated disease. Occurrence of a single case of an exotic disease. (Option D) Seasonal influenza outbreaks during winter months. Endemic (Option A ruled out) Constant presence of a disease within a specific population. Epidemiologically linked cases in terms of time, place, or person. Malaria in Africa, TB in India Pandemic Global spread of a disease. Defined as an epidemic in a large population. Requires crossing 2 continents and 2 WHO-specific regions. HIV/AIDS, COVID-19. Sporadic They occur randomly and unpredictably, without any discernible pattern in time, location, or individual. There's no epidemiological link between the cases. Tetanus Zoonotic (Option C): Disease transmitted under natural conditions from animal to humans. This option is incorrect.

References:

Park's Textbook of Preventive Medicine, 26th Edition, Page 101-102

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: Which of the following statements accurately describes the findings of a cohort study examining the impact of green tea consumption on diabetes mellitus risk? The study revealed a risk ratio of 0.84 between drinkers and non-drinkers of green tea. (Q855629)

A. Green tea reduces the risk of diabetes

B. Green tea increases the risk of diabetes

C. Data insufficient to establish causal association

D. The value (0.85) tends to be close to 1, hence there is no effect

Correct Answer: A. Green tea reduces the risk of diabetes

Explanation: risk ratio (RR) of 0.84 indicates that the group consuming green tea has a 16% lower risk of developing diabetes compared to non-drinkers (1 - 0.84 = 0.16 or 16%). Since the RR is less than 1 , it suggests a protective effect of green tea against diabetes. Green tea increases the risk of diabetes (option B): An RR greater than 1 would indicate an increased risk. Here, the RR is less than 1 , showing a reduced risk, so this option is incorrect. Data insufficient to establish causal association (option C): While cohort studies cannot definitively establish causality (like a randomised controlled trial would), the data from this study clearly shows an association between green tea consumption and reduced diabetes risk. The value (0.85) tends to be close to 1, hence there is no effect (option D): Though 0.84 is close to 1, it still indicates a significant reduction in risk (16%), which is not negligible. Hence, this statement is incorrect.

References:

Park’s Textbook of Preventive and Social Medicine, 25th edition, Page 81, 86

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: In a community, several children have been diagnosed with acute lymphoblastic leukemia (ALL). It is suspected that exposure to a cytotoxic chemical in the local water may be responsible. You plan to conduct a case-control study to investigate whether exposure to the chemical is associated with ALL. Which of the following groups would be the most appropriate controls for this study? (Q855879)

A. Children from the same area who were exposed to the chemical but do not have ALL

B. Children from the same area who were not exposed but have ALL

C. Children visiting the hospital who do not have ALL, regardless of exposure

D. All children with ALL, regardless of exposure status

Correct Answer: A. Children from the same area who were exposed to the chemical but do not have ALL

Explanation: In a case-control study , controls should come from the same population as cases and differ only in disease status . They should have similar background and exposure opportunity but be disease-free . For investigating ALL and chemical exposure in this community, the appropriate controls are children exposed to the chemical who do not have ALL . This allows a fair comparison of exposure between cases and controls while minimizing selection bias. Children from the same area who were not exposed but have ALL (Option B): These are cases, not controls. Children visiting the hospital who do not have ALL, regardless of exposure (Option C): May differ in exposure or other confounding factors, not comparable to cases. All children with ALL, regardless of exposure status (Option D): All are cases; cannot serve as controls.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 79-83

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: Regarding case–control studies, which of the following statements are FALSE? Matching prevents all confounders. Using multiple controls can increase study power. Selection bias is more common in hospital-based studies. Controls should be selected from the same population as cases. Case–control studies provide incidence directly. (Q878920)

A. 1 and 2

B. 1 and 3

C. 1 and 4

D. 1 and 5

Correct Answer: D. 1 and 5

Explanation: Statements 1 and 5 are incorrect in the context of Case-Control Studies . Matching controls for some confounders, but it does not prevent all confounding. (Statement 1) It estimates odds ratios or relative risks indirectly and does not directly provide incidence. (Statement 5) Using multiple controls can increase study power. (Statement 2 ruled out) Selection bias is more common in hospital-based studies. (Statement 3 ruled out) Controls should be selected from the same population as cases. (Statement 4 ruled out)

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 79-82.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: In a population of 500 people, 20 new cases of a disease were reported over 2 years. The total person-time observed was 950 person-years. Calculate the incidence rate of the disease. (Q879024)

A. 2.1 per 1000 person-years

B. 2.1 per 100 person-years

C. 4 per 1000 person-years

D. 2 per 100 person-years

Correct Answer: B. 2.1 per 100 person-years

Explanation: The incidence rate measures the occurrence of new cases per unit of person-time at risk. Formula : Incidence rate = (Number of new cases / Total person-time) × 1000 Substituting values: Incidence rate = (20 / 950) × 1000 = 21 per 1000 This means 2.1 new cases occur for every 100 person-years of observation.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 68

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: A study finds that exercise reduces the incidence of cardiovascular disease. However, it was found that the people who exercise also tend to consume a healthy diet, and a good diet itself lowers the risk of cardiovascular disease. What does a healthy diet act as in this context? (Q879029)

A. A healthy diet is a confounding factor

B. Diet is an effect modifier

C. There is no association; it can be ignored

D. Diet is a mediator for reducing cardiovascular disease

Correct Answer: B. Diet is an effect modifier

Explanation: An effect modifier is a variable that changes the strength or direction of the association between exposure and outcome. In this question: Exposure = Exercise Outcome = Cardiovascular disease Modifier = Diet The study finds: Exercise reduces cardiovascular disease more strongly in people who have a healthy diet. The effect of exercise varies depending on dietary status. Thus, diet modifies the effect of exercise on reducing cardiovascular disease. This is a biological interaction (not a source of bias). A healthy diet is a confounding factor (Option A): A confounder must satisfy three criteria : Be associated with the exposure (diet ↔ exercise) Be associated with the outcome (diet ↔ CVD) Not be on the causal pathway between exercise and CVD Must distort the association if uncontrolled. But in this question, the study does not say the association is distorted; instead, the effect of exercise on heart disease differs depending on diet , which describes effect modification . There is no association; it can be ignored (Option C): This would only be true if diet had no role in modifying the effect of exercise. But the question explicitly says diet influences cardiovascular risk. So diet cannot be ignored. Diet is a mediator for reducing cardiovascular disease (Option D): Exercise does not cause a healthy diet; people who exercise tend to eat healthier, which is a lifestyle correlation, not a causal pathway.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 80. Confounding and effect modification: distribution and measure - PMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: Which of the following is NOT a component of Bradford Hill’s criteria for causation? (Q879031)

A. Temporality

B. Dose–response relationship

C. Biological plausibility

D. Sensitivity

Correct Answer: D. Sensitivity

Explanation: Bradford Hill proposed a set of criteria to assess a causal relationship between an exposure and a disease. The main criteria include: Temporality Strength of association Consistency Specificity Dose–response relationship (biological gradient) Biological plausibility Coherence Experiment Analogy Incorrect Options: Temporality (Option A): Exposure must precede the effect. Dose–response relationship (Option B): Greater exposure leads to greater risk. Biological plausibility (Option C): Relationship must make biological sense.

References:

Gordis Epidemiology, 6th Edition, Pages 276-279.

↑ *Back to this question in Part A*

Q30: Which of the following best helps assess the issues in the quality of healthcare? (Q857354)

A. Bar diagram

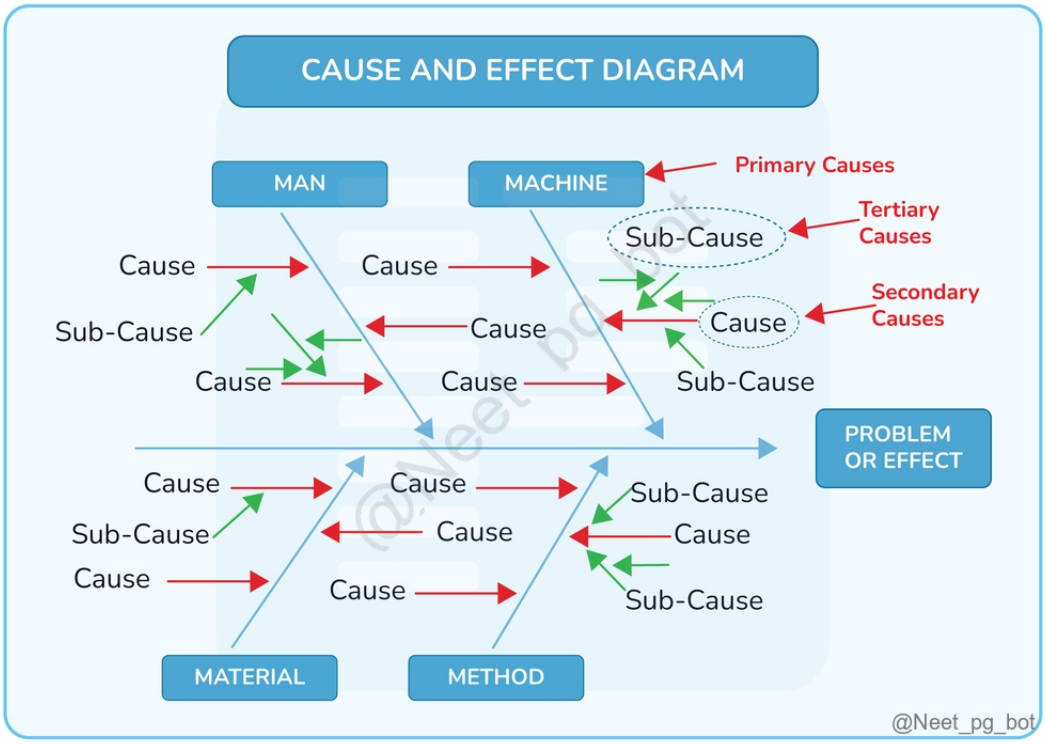
B. Histogram

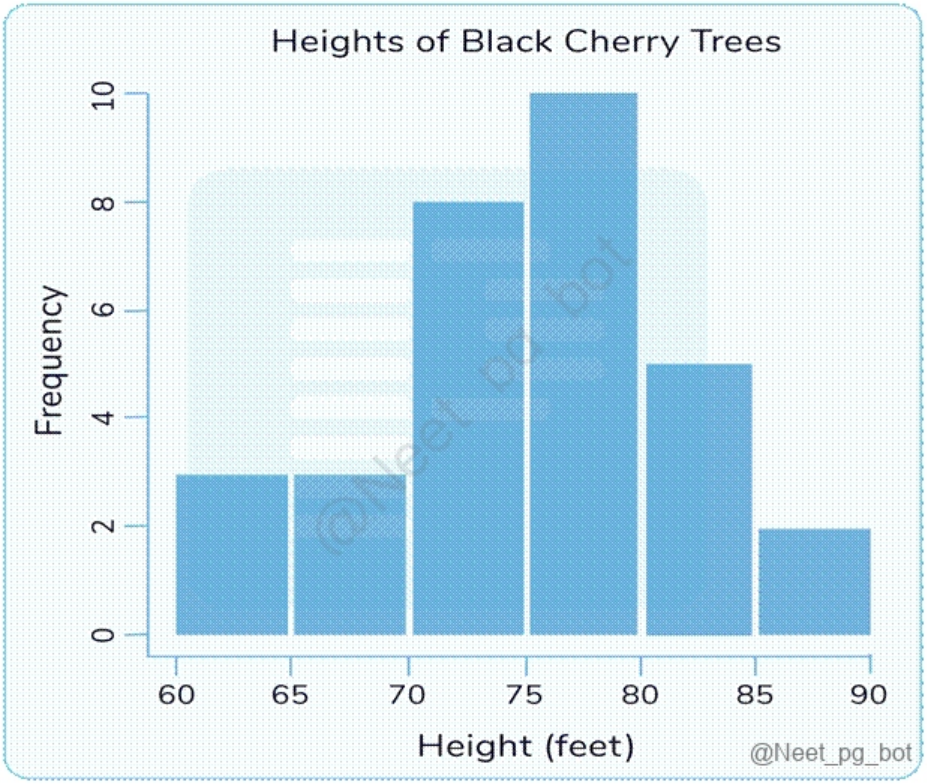
C. Multiple regression model

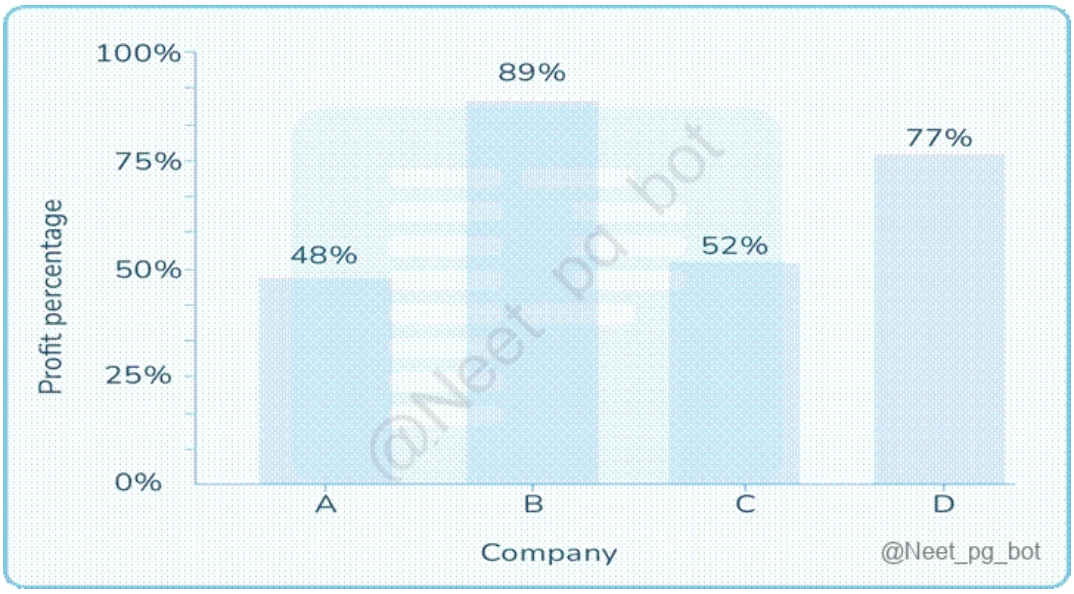
D. Ishikawa diagram/ Fishbone diagram

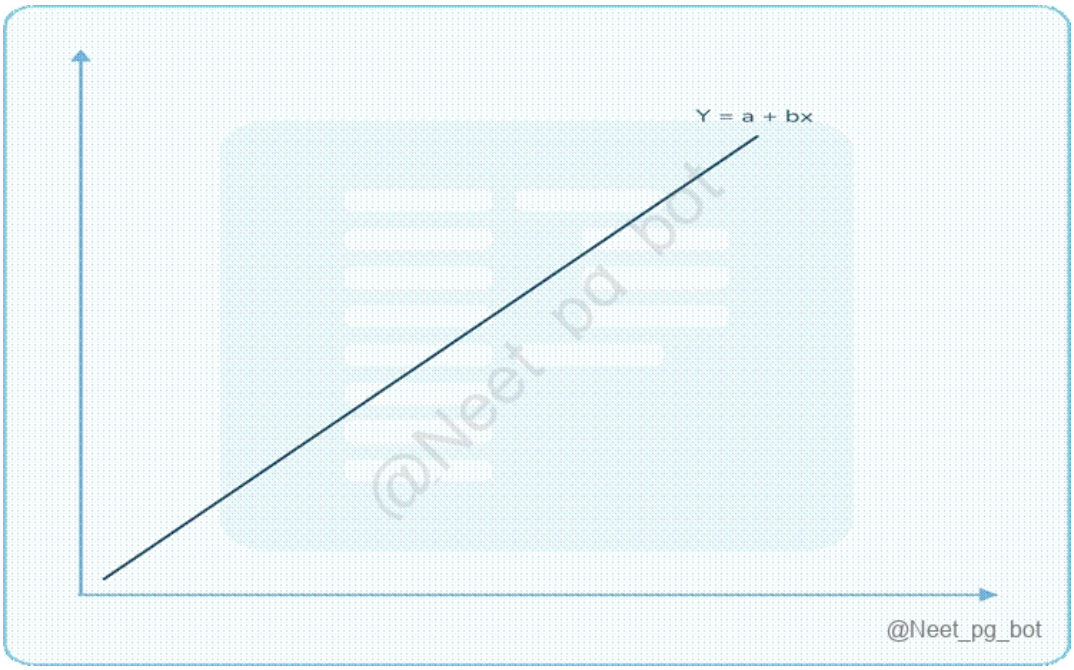
Correct Answer: D. Ishikawa diagram/ Fishbone diagram

Explanation: Ishikawa diagram/Fishbone diagram is specifically designed to identify and organize potential causes of a problem systematically. It is widely used in quality improvement processes to uncover root causes of issues in healthcare. Histogram (Option B): It represents the frequency of continuous variables or quantitative variables. Height is a quantitative or continuous variable (can take many possible values and also in between values) It can be expressed in decimals and there is no gap in between. Bar Diagram (Option A): Simple bar diagrams represent the frequency of discrete variables like gender. Discrete variables:These variables take fewer values and no in between values. Examples: Religion, Blood groups These are not represented in decimals so there are gaps. Regression analysis (Option C): It is a statistical technique used to describe relationships between variables. It represents unitary change. It quantifies how changes in one variable are associated with changes in another variable(s). It provides insights into the direction (positive or negative correlation) and strength (the magnitude of the relationship) between variables. (Option A) The process involves fitting a mathematical model to observed data to describe the effect of ≥1 independent variable on a dependent variable. (Option B) Equation: $y = a + bx$ where, y = Dependent variable; a = Constant ; b = Regression coefficient ; x = Independent variable E.g., Blood pressure is a continuous variable, it can be affected by age, cholesterol.


CAUSE AND EFFECT DIAGRAM
MAN
MACHINE
Primary Causes
Tertiary Causes
Secondary Causes
Sub-Cause
Cause
PROBLEM OR EFFECT
MATERIAL
METHOD
@Neet_pg_bot


Heights of Black Cherry Trees
Frequency
0
2
4
6
8
10
60
65
70
75
80
85
90
Height (feet)
@Neet_pg_bot





References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 973-975, 980-981

https://pmc.ncbi.nlm.nih.gov/articles/PMC11077513/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: A study was conducted using office records over the past 20 years to compare the incidence of disease among factory workers exposed to aniline dye and unexposed clerical staff. What type of epidemiological study is this? (Q866777)

A. Prospective study

B. Retrospective study

C. Ambispective study

D. Ecological study

Correct Answer: B. Retrospective study

Explanation: In this study, past office records were used to compare disease incidence between two groups: exposed and unexposed- over a 20-year period. Since the data were collected from past records and both exposure and outcome had already occurred before the start of the study, it is a retrospective study. Retrospective study looks back in time using existing records or data. Both exposure and outcome have already occurred at the time the study starts. Often uses medical records, employment logs, or registries. Can be retrospective cohort if subjects are grouped by exposure and followed through past records to see outcomes. Advantages: Less time-consuming, less expensive than prospective studies. Limitations: Dependent on the accuracy and completeness of past records. Types of analytical studies: Cross-sectional Case-control Cohort Ecological Snapshot of population (survey) Retrospective (effect → cause) Prospective (cause / risk factor → effect) Correlational (compare populations) Prevalence Study of choice: Rare diseases Incidence Correlation of variables Odds ratio Odds ratio Relative risk, Attributable risk, Population attributable risk – Unit of study: Individual Unit of study: Individual Unit of study: Individual Unit of study: Population – Recall bias Attribution bias Ecological fallacy Prospective study (Option A): Follows subjects forward in time from exposure to outcome; here, data are already in the past. Ambispective study (Option C): I s a hybrid research design that combines retrospective data with prospective data collection. Ecological study (Option D): Compares populations or groups, not individuals; this study uses individual-level data.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: In a village of 100 children, 10 children have a past history of measles (i.e, they are not at risk now), 20 new cases of measles were reported this year. What is the incidence of measles in this population for the year? (Q865279)

A. 20%

B. 22.22%

C. 10%

D. 30%

Correct Answer: B. 22.22%

Explanation: In the above scenario, Total population: 100 (10 children have a past history of measles) Population at risk: 100-10 = 90 Number of new cases: 20 Incidence = (No. of new cases of specific disease during a given time period / Population at risk during that period) × 1000 Incidence: = (20 / 90) × 1000 = 222.222 per 1000 population Percentage will be: 22.22% Uses of incidence rates: Identifying and monitoring disease trends over time Evaluating the effectiveness of public health interventions Helps to determine the efficacy of primary prevention of the disease Used as a health status indicator.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 68-69.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q33: During the Maha Kumbh Mela, mobile health units and medical bases were set up, along with multiple surveillance units for monitoring cases of fever, diarrhea, and respiratory illnesses. What was the primary purpose of setting up these surveillance units? (Q865359)

A. To reduce the need for medical professionals

B. For early diagnosis and detection of potential outbreak warning signs

C. For immediate quarantine of all symptomatic individuals

D. To provide curative treatment only

Correct Answer: B. For early diagnosis and detection of potential outbreak warning signs

Explanation: Surveillance units track illnesses like fever, diarrhea, and respiratory infections to enable early diagnosis and detect potential outbreak warning signs, helping to prevent widespread transmission. It is the systematic collection, analysis, and interpretation of health data to plan, implement, and evaluate public health practice. (Option B) Types: Active surveillance: Involves proactive data collection with efforts to find cases. Passive surveillance: Relies on routine reporting from healthcare providers or institutions. Sentinel surveillance: Monitors specific sentinel sites or groups for early detection of trends. Incorrect Options: To reduce the need for medical professionals (Option A) : Surveillance units support, not replace, medical professionals. They rely on trained staff to monitor and respond to health risks. For immediate quarantine of all symptomatic individuals

(Option C) : Quarantine is based on confirmed risk, not just symptoms. Surveillance identifies potential outbreaks, but not all symptomatic people need isolation. To provide curative treatment only (Option D) : Surveillance focuses on monitoring and early detection. Treatment is provided by medical units, while surveillance aims to prevent outbreaks.

References:

Park's Textbook of Preventive and Social Medicine, 26th Edition, Page 46-47.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q34: What are the steps of a research study, in chronological order? a. Formulating the objective b. Selecting the sample population c. Finalising the study analysis d. Formulating the research question (Q865364)

A. d,a,c,b

B. a,c,b,d

C. a,d,c,b

D. d,a,b,c

Correct Answer: D. d,a,b,c

Explanation: Correct order of steps in a research study: 1. Formulating the Research Question (d) 2. Formulating the Objective (a) 3. Selecting the Sample Population (b) 4. Finalising the Study Analysis (c) Steps of Research: Formulating the Research Problem (Including Extensive Literature Review) Developing the objectives / Conceptualization of a research design Preparing the Research Design / Constructing an instrument for data collection Selecting a sampling design Writing a research proposal Collecting the Data Analysis of Data / Processing and displaying data / Including Generalization and Interpretation Preparation of the Report or Presentation of Results.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 62-71.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q35: A diabetic patient with COVID-19 dies in the hospital. Which type of surveillance does this death report fall under? (Q866428)

A. Passive surveillance

B. Active surveillance

C. Sentinel surveillance

D. Syndromic surveillance

Correct Answer: A. Passive surveillance

Explanation: In passive surveillance , healthcare providers routinely submit reports to public health authorities based on diagnosed cases or events they encounter in daily practice. A hospital death certificate for a diabetic patient with COVID-19 is an example — the hospital records the death and reports it to health authorities without special prompting or additional case-finding efforts. Incorrect Options: Option B - Active surveillance: Involves actively seeking out cases through field visits, record reviews, or outreach by public health officials — more resource-intensive and not part of routine passive reporting. Option C - Sentinel surveillance: Relies on selected health facilities or sites to provide high-quality, detailed data for certain conditions, often for trend monitoring — not a universal reporting system. Option D - Syndromic surveillance: Focuses on early detection by monitoring symptom patterns (e.g., fever, cough) before a definitive diagnosis is made — this case already has a confirmed cause of death.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q36: In designing a rigorous experimental study, the order of steps is critical to minimize bias and ensure valid results. Which of the following sequences correctly reflects this principle? Steps: A) Defining inclusion and exclusion criteria B) Randomization of participants C) Blinding of participants and investigators D) Performing statistical analysis (Q852838)

A. A→B→C→D

B. D→C→B→A

C. B→A→C→D

D. C→B→A→D

Correct Answer: A. A→B→C→D

Explanation: The correct sequence reflecting the principle of minimizing bias and ensuring valid results in an experimental study is: A) Defining inclusion and exclusion criteria (ensures proper selection of study population) B) Randomization of participants (ensures unbiased assignment to groups) C) Blinding of participants and investigators (minimizes assessment bias) D) Performing statistical analysis (valid interpretation of data) DCBA (Option B): Skips proper selection and bias control, compromising study validity BACD (Option C): Randomizes before defining the study population, which is methodologically incorrect CBAD (Option D): Applies blinding before randomization, which can lead to allocation bias

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC9469750/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q37: To study the effect of vitamin C on respiratory disease pre-post study is done. Arrange in the correct sequence. A. Select case and control. B. Matching C. Measure total exposure D. Analysis (Q844051)

A. ABCD

B. BCDA

C. CBAD

D. DABC

Correct Answer: A. ABCD

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option A - ABCD: The correct sequence of a case-control study is: A. Select case and control B. Matching C. Measure total exposure D. Analysis Incorrect Options: Options B, C, and D are incorrect, as given above.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q38: In which phase of clinical trials is drug dosing determined? (Q844107)

A. Phase 1

B. Phase 2

C. Phase 3

D. Phase 4

Correct Answer: A. Phase 1

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option A - Phase 1: This phase focuses on evaluating the safety, tolerability, and pharmacokinetics of a drug in a small group of healthy volunteers or patients. The primary goal is to determine the drug's safety profile and establish an appropriate dose range. Dosing is initially determined based on preclinical data and adjusted as necessary based on observed effects and tolerability in this phase. Incorrect Options: Option B - Phase 2: In this phase, the drug's efficacy and further safety are assessed in a larger group of patients with the condition the drug is intended to treat. Although dosing strategies may be refined based on efficacy and side effects observed in Phase 2, the initial dose determination is generally established in Phase 1. Option C - Phase 3: This phase involves large-scale testing of the drug in diverse populations to confirm its effectiveness, monitor side effects, and compare it with existing treatments. While Phase 3 can provide additional data on the optimal dosing regimen and long-term effects, the primary dosing determination occurs in Phase 1. Option D - Phase 4: This phase, also known as post-marketing surveillance, occurs after the drug has been approved for general use. It focuses on long-term effectiveness, monitoring of adverse effects in the general population, and potential new uses. Dosing is not typically determined in Phase 4 but rather monitored for ongoing safety and effectiveness.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition

↑ *Back to this question in Part A*

@Neet_pg_bot

Q39: Mid-year population is the denominator in? (Q860580)

A. CDR

B. CFR

C. MMR

D. NMR

Correct Answer: A. CDR

Explanation: The crude death rate (CDR) is a demographic indicator that measures the number of deaths in a population per 1,000 individuals per year. It is calculated by dividing the total number of deaths in a given period by the mid-year population and multiplying by 1,000. CDR = (Number of deaths / Mid-year population) x 1000

Therefore, the mid-year population serves as the denominator in calculating the crude death rate. This rate provides a broad overview of mortality within a population, irrespective of age or other factors. Incorrect Options: CFR (Option B): The case fatality rate (CFR) is a measure of the proportion of individuals diagnosed with a particular disease or condition who die from that disease or condition within a specified time period. It is calculated by dividing the number of deaths from the disease by the number of diagnosed cases and multiplying by 100 to get a percentage. CFR is commonly used in epidemiology and public health to assess the severity of a disease outbreak or epidemic. MMR (Option C): The maternal mortality rate (MMR) is a measure of the number of maternal deaths per 100,000 live births. It reflects the risk associated with childbirth and pregnancy-related complications. MMR is an important indicator of maternal health and healthcare system performance, especially in developing countries where maternal mortality rates tend to be higher. NMR (Option D): The neonatal mortality rate (NMR) is a measure of the number of deaths among newborns (within the first 28 days of life) per 1,000 live births. It specifically focuses on mortality during the neonatal period, which is critical for assessing the quality of maternal and newborn healthcare services. NMR is an essential indicator for monitoring progress in reducing infant mortality and improving newborn health outcomes.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q40: Blood cholesterol shown as mg/ml value is in which scale? (Q860585)

A. Ordinal

B. Nominal

C. Discrete

D. Continuous

Correct Answer: D. Continuous

Explanation: Continuous data refers to data that can take any value within a given range and can be measured with a high degree of precision. Continuous data can include decimal values and can theoretically take on an infinite number of possible values within the specified range. Examples of continuous data include height, weight, temperature, and blood cholesterol levels (measured in mg/dL or mmol/L). In the context of blood cholesterol levels, they are measured on a continuous scale because they can take on any value within a range (e.g., from 100 mg/dL to 300 mg/dL) and can be measured with a high degree of precision using laboratory methods. Incorrect Options: Ordinal (Option A): Ordinal data refers to data that have a defined order or ranking but the differences between the values are not meaningful or consistent. For example, ranking students based on their exam scores (1st, 2nd, 3rd, etc.) represents ordinal data because while there is a ranking order, the difference in scores between students may not be uniform or meaningful. Nominal (Option B): Nominal data refers to categorical data where the categories are unordered and have no inherent numerical value. For example, colors (red, blue, green) or types

of fruits (apple, banana, orange) represent nominal data because there is no inherent order or ranking among the categories. Discrete (Option C): Discrete data refers to data that can only take specific, distinct values and cannot take on values between these points. Discrete data are usually counts of items or events and are typically represented by whole numbers. For example, the number of students in a classroom or the number of cars in a parking lot are examples of discrete data.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q41: A gym owner observes that individuals who drink iced tea during their workouts tend to lose more weight. What is the nature of this relationship? (Q859981)

A. Spurious

B. Relative

C. Direct

D. One-to-One causal

Correct Answer: A. Spurious

Explanation: Types of Association: Type of Association Description Spurious An association that appears to be present but is actually due to chance or an error in data. Indirect An association in which a third variable (known as the confounding variable) causes both the predictor and the outcome. Direct (Causal) An association where the predictor directly influences the outcome. If the relationship between iced tea consumption and weight loss were direct, it would mean that drinking iced tea itself leads to weight loss. However, it is unlikely that drinking iced tea alone would have a direct effect on weight loss. a. One-to-One causal A direct causal link between a single predictor and a single outcome. b. Multifactorial An association involving multiple factors contributing to the outcome. Relative: This would imply a comparison between two things, but doesn't directly address the relationship type.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q42: A study was conducted in 3 states to measure the mean blood pressure in each community. Health workers were assigned to visit each house in the 3 communities. The mean blood pressure of each community was then compared. What is the study design called? (Q859982)

A. Case-control

B. Cross-sectional

C. Cohort

D. Ecological study

Correct Answer: D. Ecological study

Explanation: Correct Option: D) Ecological study An Ecological study (also called a correlational study) is one where the units of analysis are populations or groups (like communities, states, or countries) rather than individuals. In this scenario: The data collected is the mean blood pressure for each community . The unit of analysis being compared is the community (group), not the individual people within the houses. Incorrect Options: Case-control (Option A): A case-control study compares individuals who have a specific condition (cases) with individuals who do not have the condition (controls). Cross-sectional (Option B): This measures both exposure and outcome simultaneously in individuals at a single point in time (a snapshot). Cohort (Option C): A cohort study follows a group of people over time to see how their exposures affect their outcomes.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q43: In the context of a new onset of a morbid disease, how does the change in incidence affect the prevalence of the disease? (Q859984)

A. Prevalence is not related to incidence

B. Incidence will increase, and prevalence will decrease

C. Incidence and prevalence will increase

D. Prevalence will increase with a decrease in the incidence

Correct Answer: C. Incidence and prevalence will increase

Explanation: Correct Option C- Incidence and prevalence will increase: When a new morbid disease appears, the number of new cases (incidence) will increase. As a result, more individuals will have the disease at any given time, contributing to an increase in prevalence. Incorrect Options: Options A, B, and D are incorrect, as explained above.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q44: Calculate relative risk for the given situation: Exposed to malaria Not exposed to malaria Vaccinated 6 94 Non-vaccinated 12 88 (Q860001)

A. 0.5

B. 2

C. 1.5

D. 1.7

Correct Answer: A. 0.5

Explanation: Relative risk = Incidence in Vaccinated / Incidence in Non-Vaccinated Relative risk (RR): Incidence in Vaccinated (Exposed to Malaria): Number of vaccinated individuals exposed: 6 Total vaccinated individuals: 6 (exposed) + 94 (not exposed) = 100 Incidence in vaccinated = 6/100 = 0.06 (or 60/1000) Incidence in Non-Vaccinated (Exposed to Malaria): Number of non-vaccinated individuals exposed: 12 Total non-vaccinated individuals: 12 (exposed) + 88 (not exposed) = 100 Incidence in non-vaccinated = 12/100 = 0.12 (or 120/1000) Relative Risk (RR): RR = Incidence in Vaccinated / Incidence in Non-Vaccinated RR = 0.06 / 0.12 = 0.5 Vaccinated individuals have half the risk of getting malaria compared to non-vaccinated individuals.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q45: Which among the following cannot be studied using case-control study? (Q860041)

A. Effect to cause

B. Rare Disease

C. Odds ratio

D. Cause to effect

Correct Answer: D. Cause to effect

Explanation: Cause to effect cannot be studied using case-control studies and it is studied using a cohort study. In case-control studies, researchers start with individuals who already have the outcome of interest (cases) and compare them to individuals without the outcome (controls). This retrospective design makes it challenging to establish causality because the exposure may have occurred before or after the disease developed, leaving the relationship unclear. Additionally, since participants are not followed over time, the study cannot confirm whether the exposure directly caused the outcome. Thus, case-control studies are more suited for identifying associations rather than proving causal relationships. Case-Control study: Advantages Disadvantages Less time taken. Inexpensive. Minimal ethical problems. Multiple exposure was studied. Rare diseases can be studied. Attrition bias not present Forms the rationale for prevention and control programmes based on risk factors. Selection bias. Recall bias. Interviewer bias. Cannot measure incidence: Only provides estimation of relative risk. Cannot differentiate between causes and associated factors Incorrect Options: Effect to cause (Option A): Case-control study precedes backward from effect to cause, hence it is also called effect to cause study. Rare Disease (Option B): Rare Diseases can be studied using case-control. Odds ratio (Option C): Odds ratio is used to analyze and interpret the case-control study.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q46: What is the serial interval? (Q858023)

A. Time taken to develop a Primary case A

B. Time gap between entry of organism till maximum infectivity

C. Interval between Primary and secondary case

D. Time gap between onset till first detection

Correct Answer: C. Interval between Primary and secondary case

Explanation: The serial interval is the time between the onset of symptoms in the primary case (the first infected person) and the onset of symptoms in a secondary case (the person infected by the primary case). It is useful for

understanding the transmission dynamics of an infectious disease. Time taken to develop a Primary case (Option A): is incorrect because this refers to the incubation period or the time it takes for symptoms to develop after exposure to the pathogen, not the serial interval. Time gap between entry of organism till maximum infectivity (Option B): is incorrect. This describes the infectious period or incubation period , not the serial interval. Time gap between onset till first detection (Option D): is incorrect because this refers to the time to diagnosis or detection time , not the serial interval.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 107, 108

↑ *Back to this question in Part A*

@Neet_pg_bot

Q47: According to SDG proposed goals towards 2030, Which of the following is the target for maternal mortality rate reduction? (Q820561)

A. <60/100000

B. <70/100000

C. <50/100000

D. <80/100000

Correct Answer: B. <70/100000

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option B - <70/100000: The SDGs aim to reduce the maternal mortality ratio to less than 70 deaths per 100,000 live births by 2030. This target reflects the global efforts to improve maternal health and reduce the risks associated with childbirth. Incorrect Options: Option A - <60/100000: This option is not the correct answer. While reducing the maternal mortality ratio to less than 60 deaths per 100,000 live births is a noble goal, it is not the specific target for maternal mortality reduction set by the SDGs. Option C - <50/100000: This option is not the correct answer. While further reducing the maternal mortality ratio to less than 50 deaths per 100,000 live births would be an even more ambitious goal, the specific target set by the SDGs is slightly higher. Option D - <80/100000: This option is not the correct answer. While aiming for a maternal mortality ratio of less than 80 deaths per 100,000 live births would still represent progress, it is not the exact target established by the SDGs for maternal mortality reduction.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q48: Which of the following statement is correct about triage? (Q820563)

A. Red- ambulatory

B. Yellow- stable need observation

C. Black- minor injuries

D. Green- life threatening

Correct Answer: B. Yellow- stable need observation

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option B - Yellow - stable, need observation: This category is used for patients who are stable but need observation and these patients have injuries or conditions that are not immediately life-threatening but could worsen without proper medical attention. They may require medical care within a reasonable timeframe. Incorrect Options: Option A - Red-ambulatory: This category is used for patients with severe injuries or conditions requiring immediate attention. These patients are often in critical condition and require immediate medical intervention. It is not indicative of being "ambulatory." Option C - Black- minor injuries: This category is used for patients who are deceased or have injuries so severe that they are unlikely to survive even with medical intervention. It is not used for "minor injuries." Option D - Green-life threatening: This category is often used for patients with minor injuries or conditions that are not life-threatening. These patients can wait longer for medical care compared to patients in the other categories. It is not indicative of being "life-threatening."

↑ *Back to this question in Part A*

@Neet_pg_bot

Q49: Denominator in incidence rate is? (Q820624)

A. Total observed population

B. Total population at risk in a year

C. Total live births

D. Total new cases in a year

Correct Answer: B. Total population at risk in a year

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option B - Total population at risk in a year: In epidemiology, the incidence rate is a measure of the probability or risk of occurrence of a given medical condition in a population within a specified period. The

denominator for incidence rate is the total population at risk during a specific time period (e.g., a year). Incorrect Options: Option A - Total observed population: This could be misleading as it might include those not at risk of the condition (e.g., already had the condition or immune to it), which is not an appropriate denominator for calculating incidence rate. Option C - Total live births : This could be used as the denominator when calculating rates for conditions that occur at or around the time of birth, but not for incidence rate of a condition in the general population. Option D - Total new cases in a year: This is a part of the numerator, not the denominator, when calculating incidence rate. The incidence rate is calculated as the number of new cases (numerator) divided by the total population at risk (denominator), over a specified time.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q50: In an experiment 39 was the highest number but was mistaken for 93. It will affect which of the following? (Q820654)

A. Mean will remain same, median will increase

B. Mean and median both will increase

C. Mean will increase, median will remain same

D. Both mean and median will decrease

Correct Answer: C. Mean will increase, median will remain same

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option C- Mean will increase, median will remain the same: The inclusion of the higher value (93) instead of the original highest value (39) will increase the mean, but the median will remain the same. The median is only affected by the middle value(s) of the dataset, so changing the highest value will not impact the median as long as the middle values remain unchanged. Incorrect Options: Option A - Mean will remain the same, median will increase: Adding a value (rather than replacing it, like in the scenario) equal to or higher than the highest value to the dataset will cause the mean to remain the same and the median to increase. Option B - Mean and median both will increase: For this to happen, a new value higher than the highest value should be added to the existing dataset. Option D - Both mean and median will decrease: This could happen if the highest value(s) in the dataset are removed or replaced by lower values.

References:

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↑ *Back to this question in Part A*

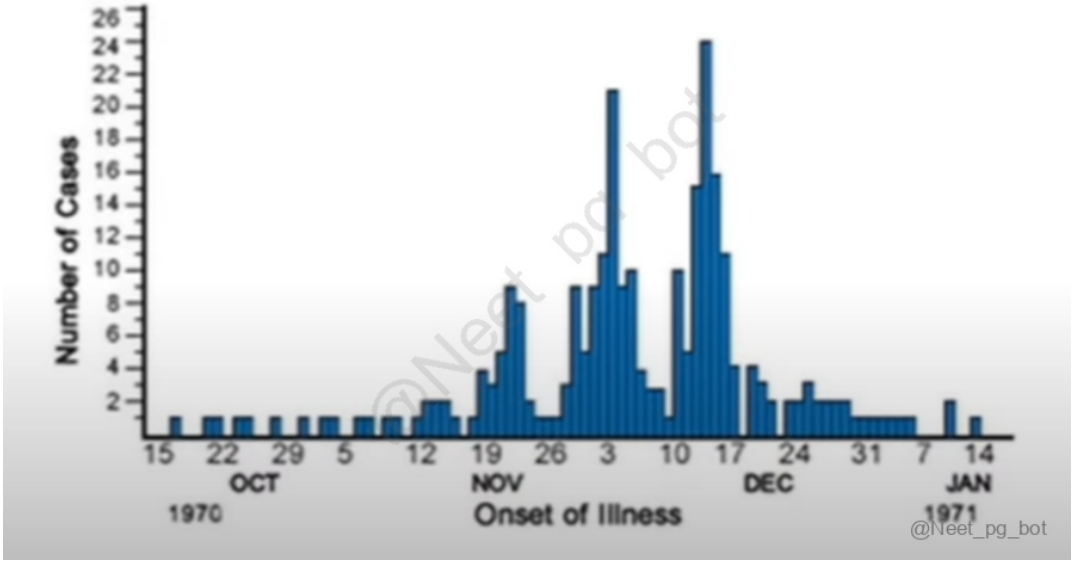
Q51: Identify the graph below: (Q820656)

A. Point source single exposure epidemic

B. Common source, Continuous exposure epidemic

C. Intermittent Exposure

D. Propagated epidemic



Correct Answer: D. Propagated epidemic

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option D - Propagated epidemic: A propagated epidemic is characterized by an increasing number of cases over time due to person-to-person transmission. This graph displays a gradual increase in cases, followed by a peak, and then a decline. This pattern is consistent with a propagated epidemic where the infection spreads from one individual to another. Incorrect Options: Option A - Point source single exposure epidemic: In a point source epidemic, cases occur rapidly after exposure to a common source. The graph doesn't show a sudden spike followed by a rapid decline, which is characteristic of a point source epidemic. Option B - Common source, Continuous exposure epidemic: A common source epidemic usually shows a rapid increase in cases followed by a decline once the exposure source is identified and controlled. The graph doesn't show this pattern. Option C - Intermittent Exposure: This option doesn't fully describe the graph. Intermittent exposure might lead to sporadic cases, but it doesn't explain the overall trend of increasing and decreasing cases seen in the graph.

References:

Ref: Park’s textbook of preventive medicine, edition: 25

↑ *Back to this question in Part A*

@Neet_pg_bot

Q52: No. of live births/1000 women in reproductive age group? (Q820682)

A. Total fertility rate

B. General Fertility rate

C. Net Reproduction Rate

D. Crude birth Rate

Correct Answer: B. General Fertility rate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option B - General Fertility Rate: The general fertility rate (GFR) is the number of live births per 1,000 women in the reproductive age group (usually defined as 15-49 years) in a given year. It directly measures the number of live births occurring in a population of women in their reproductive years. Incorrect Options: Option A - Total Fertility Rate: The total fertility rate (TFR) is a measure of the average number of children that would be born to a woman over her lifetime, assuming she experiences the current age-specific fertility rates throughout her reproductive years. It is not directly related to the number of live births per 1000 women in the reproductive age group. Option C - Net Reproduction Rate: The net reproduction rate (NRR) is a measure of the average number of daughters that would be born to a woman over her lifetime, considering both age-specific fertility rates and mortality rates. It is more focused on population replacement and growth. Option D - Crude Birth Rate: The crude birth rate is the total number of live births in a given year divided by the total population, usually expressed per 1,000 people. It provides an overall measure of the birth rate in a population but doesn't specifically focus on the reproductive age group.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q53: In a hospital pharmacy setting, a budget of 50,000 Rs is allocated for the purchase of three types of drugs: 35,000 Rs for A drugs, 10,000 Rs for B drugs, and the remaining amount for C drugs. Which type of analysis is being used in this

scenario? (Q820698)

A. Network Analysis

B. ABC Analysis

C. VED Analysis

D. System Analysis

Correct Answer: B. ABC Analysis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option B - ABC Analysis: ABC Analysis is a technique used to classify items based on their value or importance within an inventory or resource allocation context. It categorizes items into three groups: A Items: These are items that are of high value or importance but typically represent a smaller portion of the total items. In the context of the question, A drugs receive the largest allocation of the budget (35,000 Rs), and they would be classified as "A Items" in an ABC analysis due to their high value. B Items: These are items of moderate value or importance and constitute a moderate portion of the total items. B drugs receive a budget of 10,000 Rs, which is less than A drugs but still represents a considerable portion of the total budget. They would be classified as "B Items" in an ABC analysis. C Items: These are items of lower value or importance and typically make up a larger portion of the total items. In the question, the remaining amount after allocating for A and B drugs is meant for C drugs. Since the remaining amount is smaller, C drugs would be classified as "C Items" in an ABC analysis. Incorrect Options: Option A - Network Analysis: Network analysis involves the study of interconnected activities and their relationships in a project or process. It's used to optimize scheduling and resource allocation in complex projects. This option is not applicable to the scenario described in the question. Option C - VED Analysis: VED Analysis is used in inventory management to categorize items into three groups based on their criticality: V (Vital) Items: These are items that are essential for the operation and should be available at all times to avoid disruptions. This analysis doesn't directly apply to the allocation of a budget among different types of drugs. E (Essential) Items: These are important items but may have alternatives or substitutes available. They are not as critical as Vital items. D (Desirable) Items: These are items with relatively lower criticality, and their absence might not significantly impact operations. Option D - System Analysis: System Analysis involves studying complex systems to identify their components, relationships, and functions, usually to optimize the system's performance or design. This option is not relevant to the scenario described in the question.

↑ *Back to this question in Part A*

@Neet_pg_bot

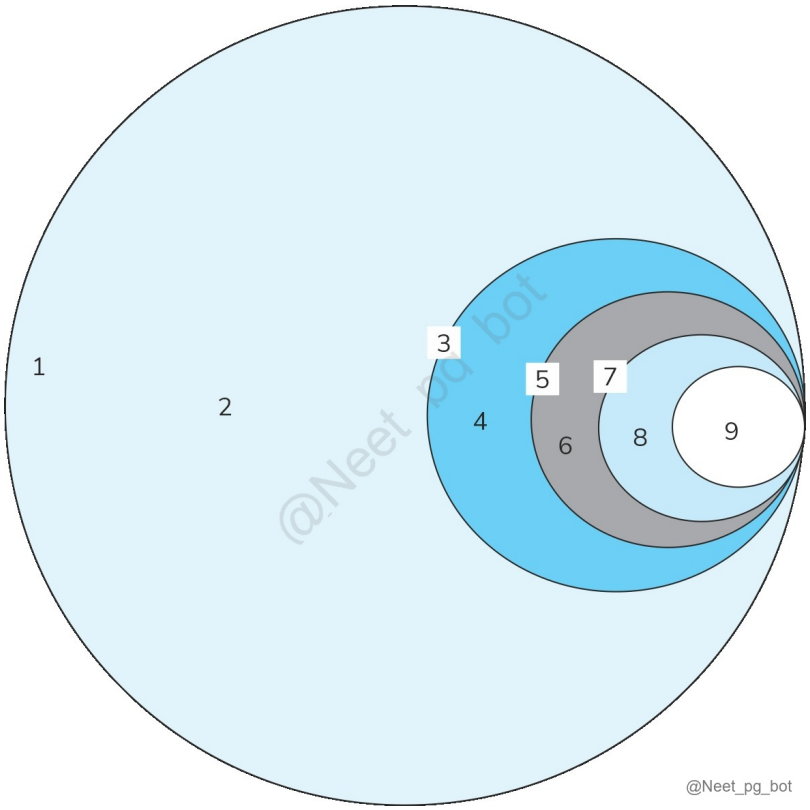
Q54: What does the number 9 in the provided diagram on hypertension represent? (Q830733)

A. Diagnosed and untreated

B. Diagnosed and treated

C. Inadequately treated

D. Adequately treated



Correct Answer: D. Adequately treated

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In the context of hypertension management, the number 9 in the diagram likely represents individuals whose hypertension is adequately treated . This means that their blood pressure is under control, typically following treatment guidelines and with effective management through lifestyle changes and/or medication. Diagnosed and untreated (Option A): is incorrect because if individuals were diagnosed but untreated, they would be at risk of uncontrolled hypertension, and it would not represent "adequately treated." Diagnosed and treated (Option B): is incorrect because this category doesn't necessarily imply that treatment has been effective or adequate, just that they have been treated. Inadequately treated (Option C): is incorrect because the number 9 represents adequately treated individuals, not those whose treatment is insufficient.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 404

↑ *Back to this question in Part A*

@Neet_pg_bot

Q55: A longitudinal, observational, and analytical study is also known as? (Q854738)

A. Cross-sectional Study

B. Cohort Study

C. Ecological Study

D. Randomized Control Trial

Correct Answer: B. Cohort Study

Explanation: The combination of a longitudinal, observational, and analytical study is known as a Cohort Study. Design: Prospective study following a group of individuals with a common characteristic or exposure over time. Longitudinal study is a type of study where outcomes are determined at fixed time intervals, can be retrospective (case control) or prospective (cohort srudy) A cohort study is an observational analytical study that provides evidence supporting the existence of an association between exposure and outcome. Classification of study designs: Observation Studies Experimental/intervential Studies Descriptive Analytical Case reports Ecological studies Randomised controlled trials Case series Case-control studies Field trials Cohort studies Community trials Cross-sectional studies Cross-Sectional Study (Option A): Design: Observational studies that analyze data from a population at a single point in time. Observational: Yes, it is observational, but it is not longitudinal. Ecological Study (Option C): Design: Examines the correlation between variables at the group level rather than the individual level. Observational: Yes, it is observational, but it is not longitudinal. Randomized Control Trial (RCT) (Option D): Design: Experimental study where participants are randomly assigned to different groups (treatment and control). Longitudinal: Yes, it is longitudinal as it involves follow-up over time. Observational: No, it is an experimental design involving interventions. Analytical: Yes, it is analytical, but it involves experimental manipulation.

References:

Park Textbook of Preventive Medicine 26th edition. Pg 70

↑ *Back to this question in Part A*

@Neet_pg_bot

Q56: Match the following columns on Epidemiology Guidelines: A. Care 1. RCT B. Consort 2. Case report C. Prisma 3. Observational study D. Strobe/Moose 4. Systematic Review (Q854751)

A. A2-B4-C1-D3

B. A4-B1-C2-D3

C. A2-B1-C4-D3

D. A4-B1-C3-D2

Correct Answer: C. A2-B1-C4-D3

Explanation: Care: Stands for Case Report. It is a guideline that provides a framework for reporting case reports in medical and health-related fields. Case reports describe and analyze individual cases or small groups of cases, providing valuable insights into rare diseases, unusual presentations of common diseases, and unexpected treatment outcomes. Consort: Stands for Consolidated Standards of Reporting Trials. It is a guideline designed to improve the transparency and reporting of randomized controlled trials (RCTs). It provides a checklist and flow diagram to ensure that essential information about the design, conduct, analysis, and interpretation of RCTs is reported in a standardised and comprehensive manner. Prisma: Stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses. It is a guideline that aims to improve the transparency and reporting of systematic reviews and meta-analyses. PRISMA provides a checklist and flow diagram to ensure that researchers accurately report their systematic reviews and meta-analyses' methods, results, and interpretations. Strobe/Moose: STROBE stands for Strengthening the Reporting of Observational Studies in Epidemiology, while MOOSE stands for Meta-analysis of Observational Studies in Epidemiology. These guidelines provide recommendations for reporting observational studies, including cohort, case-control, and cross-sectional studies. STROBE and MOOSE guidelines help researchers ensure that they report relevant information about the design, conduct, analysis, and interpretation of observational studies, thus enhancing the transparency and reproducibility of their findings.

References:

https://en.wikipedia.org/wiki/Randomized_controlled_trial

https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-021-01626-4

https://jamanetwork.com/journals/jamasurgery/article-abstract/2778476

https://pubmed.ncbi.nlm.nih.gov/28529185/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q57: Research is being conducted to find the association between aniline dye exposure and bladder cancer in workers who have worked in the industry for >20 years. Two groups were formed: one directly involved with dye handling and the other group consisting of office clerks not directly exposed to the dye. Years of occupation were noted from records. What type of study is being performed? (Q855435)

A. Retrospective cohort study

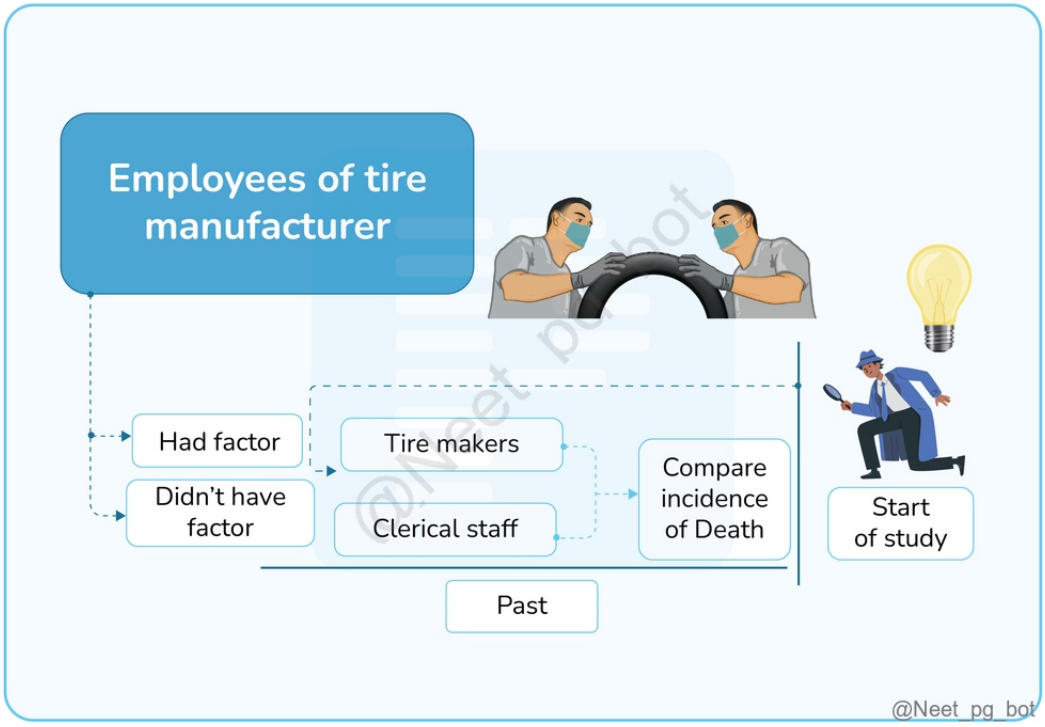
B. Prospective cohort study

C. Case-control study

D. Intervention and response

Correct Answer: A. Retrospective cohort study

Explanation: A retrospective cohort study is a combination of a prospective cohort study and a case-control study. The researcher goes back in time and selects study groups from existing past medical records and traces it forward. In this case, past records of the aniline dye handlers were noted to study the close association with bladder cancer. Retrospective Cohort Study Start study at present time Move backwards (retrospectively) and use historical data Based on historical data, divide study participants into exposed and non exposed groups. Ex: Based on Medical college register of 2010 divide students into exposed and non exposed groups Determine outcomes (diseased and non diseased rates) at the time study begins. They produce faster results than prospective cohort studies. It has been used for the study of lung carcinoma in uranium miners, arsenic in carcinogenesis, angiosarcoma of the liver, and radiation exposure in physicians. {{caption_text}} Prospective cohort study (Option B): In this study, the disease has not yet occurred when the investigation has started. The investigation starts from the present and proceeds to the future. A few examples are study on smoking and lung cancer, study of oral contraceptives and health. Case-control study (Option C): It starts with the disease and, hence it proceeds from effect to cause. Quicker results are noticed. It is suitable for the study of rare diseases and is relatively cheap. Intervention and response (Option D): It is also called an experimental study. Intervention and response involves direct control over study, unlike cohort studies which are observational.



References:

Park's Textbook of Preventive Medicine, 27th Edition, Page 83

↑ *Back to this question in Part A*

@Neet_pg_bot

Q58: What is the primary factor responsible for the demographic burden? (Q793759)

A. Decreased old age dependency ratio

B. Increased young age dependency ratio

C. Decreased young age dependency ratio

D. Increased old age dependency ratio

Correct Answer: D. Increased old age dependency ratio

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Options D - Increased old age dependency ratio Increased dependency ratio of the elderly: Proportion of elderly (65 and above) compared to working-age population (15-64). Primary contributor to demographic burden: Places pressure on working-age population to support elderly's needs (healthcare, social security). Economic and social ramifications: Can lead to strain on resources, affecting economic growth and social welfare. Incorrect Options: Option A - Decreased old-age dependency ratio: It is associated with economic growth, as working-age population is relatively high compared to elderly. Option B - Increased young-age dependency ratio: High proportion of young dependents (under 15) compared to working-age population (15-64). Option C - Decreased young-age dependency ratio: Fewer young dependents compared to working-age population, reducing dependency burden and contributing positively to economy.

References:

Park’s textbook of preventive medicine, edition: 25

↑ *Back to this question in Part A*

@Neet_pg_bot

Q59: What is the term used to describe the number of maternal deaths per 100,000 live births ? (Q793741)

A. Maternal mortality rate

B. Maternal mortality ratio

C. Infant mortality rate

D. Perinatal mortality rate

Correct Answer: B. Maternal mortality ratio

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option B - Maternal Mortality Ratio (MMR): Measures maternal deaths during antenatal, delivery, or within six weeks postnatal, excluding accidental causes. Formula: MMR = (Total maternal deaths / Live Births) × 100,000. Incorrect Options: Option A - Maternal mortality rate: Calculated per women in reproductive age group (15-49 years), not per live births. Option C - Infant Mortality Rate: Measures infant deaths under one year per 1,000 live births, indicating overall child health and healthcare system effectiveness. Option D - Perinatal Mortality Rate: Combines stillbirths and early neonatal deaths per 1,000 total births, indicating infant health during perinatal period.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q60: What is the method used to assess the relative risk (RR)? (Q793609)

A. Case control study

B. Cohort study

C. Randomized controlled trial

D. Cross-sectional study

Correct Answer: B. Cohort study

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option B - Cohort Study: Measure of association strength between incidence in exposed and non-exposed called relative risk (RR). Track group with shared exposure or risk factor over time, comparing outcome incidence. Typically used in cohort studies to estimate relative risk. Incorrect Options: Option A - Case-Control Study: Compares cases and controls to identify potential risk factors, using odds ratio. Option C - Randomized Controlled Trial (RCT): Assigns participants randomly to intervention groups to assess treatment effectiveness. Option D - Cross-Sectional Study: Gathers data on exposure and outcome at a single point in time.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

• [03_Vaccines and Cold Chain] 010 National Immunization Schedule Delayed Immunization Cold Chain

« Back to Folder Directory

[03_Vaccines and Cold Chain] 010 National Immunization Schedule Delayed Immunization Cold Chain — Quick Jump

Q1 (p. 820)	*Q2 (p. 821)*	*Q3 (p. 821)*	*Q4 (p. 822)*	*Q5 (p. 822)*	*Q6 (p. 824)*
Q7 (p. 826)	*Q8 (p. 827)*	*Q9 (p. 828)*	*Q10 (p. 830)*	*Q11 (p. 831)*	*Q12 (p. 832)*
Q13 (p. 833)	*Q14 (p. 834)*	*Q15 (p. 835)*	*Q16 (p. 836)*	*Q17 (p. 837)*	*Q18 (p. 837)*
Q19 (p. 838)	*Q20 (p. 840)*	*Q21 (p. 840)*			

Q1: A vaccination campaign in a remote village with limited electricity access. Which of the following vaccines is most susceptible to damage if not properly maintained during transport? (Q840679)

A. Hepatitis B vaccine

B. Pentavalent vaccine

C. Oral Polio Vaccine (OPV)

D. Tetanus-Diphtheria vaccine

Correct Answer: C. Oral Polio Vaccine (OPV)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The scenario mentions a remote village, which indicates challenges in maintaining the cold chain during transport due to its limited electricity access. OPV, being highly heat-sensitive, is most susceptible to damage. Characteristics Heat-Sensitive Vaccines Freeze-Sensitive Vaccines Definition Vaccines that lose potency (effectiveness) when exposed to temperatures higher than their recommended storage temperature of +2°C to +8°C. Vaccines that lose potency if frozen or stored below their recommended temperature of +2°C to +8°C. Storage in ILR Stored in the bottom of an Ice Lined Refrigerator (ILR), where the temperature is coldest. Stored in the top of an Ice Lined Refrigerator (ILR), where the temperature is warmer. Examples Most heat sensitive: reconstituted BCG, OPV (Option C), Measles, Rotavirus, JE Least heat sensitive: Pentavalent, PCV Most freeze sensitive: Hepatitis B, Pentavalent, IPV, DPT (Option A, B, and D) Least freeze sensitive: TT, Td

References:

Park’s Textbook of Preventive and Social Medicine 27th ed. Page no. 118

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which vaccinations can be given to a 13 month child who has never been immunized? (Q880867)

A. BCG, OPV, Hep B

B. DPT 1 and OPV 1

C. DPT 1, OPV 1 and Measles 1

D. DPT 1 and Measles 1

Correct Answer: C. DPT 1, OPV 1 and Measles 1

Explanation: A 13-month-old child who has never been immunized should be started on a catch-up immunization schedule as per UIP (India). What can be given at ≥12 months: DPT → can be started up to 5 years of age OPV → can be given up to 5 years Measles (or MR) → given at 9–12 months , so it must be given immediately Incorrect Options: BCG → Not given after 1 year (no benefit, risk of lymphadenitis) Hepatitis B → Can be given, but it is not routinely started alone in catch-up without pentavalent

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A health worker in a rural village is preparing to transport a stool sample from a suspected case of acute flaccid paralysis (AFP). Which of the following is/are the most important considerations for transporting this sample? (Q846615)

A. Transport in a vaccine carrier lined with four ice packs

B. Maintain sample temperature between +2°C to +8°C during transport

C. Deliver to National Institute of Virology within 24 hours

D. All of the above.

Correct Answer: B. Maintain sample temperature between +2°C to +8°C during transport

Explanation: Stool samples must be transported using a reverse cold chain , which ensures that the sample is kept at optimal temperature of +2°C to +8°C to preserve the viability of the virus for accurate testing. Chain Type Description Temperature Products Equipment Cold Chain System of storing and transporting vaccines at recommended temperatures. (Option A) Areas where vaccines are used: +2°C to +8°C Storage of vaccines: -15 to

-25°C Vaccines, including OPV, Measles, Hepatitis B, BCG, Pentavalent, DPT, Td, and JE. Ice-Lined Refrigerators (ILRs) Deep Freezers Vaccine Carriers Day Carriers Cold Boxes Ice Packs Dial Thermometers Reverse Cold Chain System of transporting stool samples from suspected AFP cases. +2°C to +8°C (Option B) Stool samples for AFP testing Red Carriers Warm Chain Series of ten coordinated steps performed during and after birth to reduce the risk of hypothermia in newborns. The stool sample must be transported to the National Institute of Virology in Pune within 72 hours, not 24 hours. (Option C)

References:

Reference: Park's Textbook of Preventive and Social Medicine 27th ed. Page no. 119-120 Using Acute Flaccid Paralysis Surveillance as a Platform for Vaccine-Preventable Disease Surveillance - PMC (nih.gov)

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Match the following vaccines with their strains: VACCINES STRAINS A) Measles i) RA 27/3 B) Mumps ii) 17 D C) Rubella iii) Edmonston Zagreb D) Yellow fever iv) Jeryl Lynn strain (Q844352)

A. A-iii; B-iv; C-i; D-ii

B. A-i ; B-ii ; C-iii ; D-iv

C. A-iv ; B-iii ; C-ii ; D-i

D. A-ii ; B-i ; C-iv ; D-iii

Correct Answer: A. A-iii; B-iv; C-i; D-ii

Explanation: Strains of vaccine: VACCINES STRAINS Measles Edmonston Zagreb Mumps Jeryl Lynn strain Rubella RA 27/3 Yellow fever 17 D Japanese Encephalitis live SA-14-14-2 Typhoral vaccine Ty21a In■uenza (killed) A7/California/2009 Chicken pox vaccine/ Varicella vaccine Oka HIV Modi■ed vaccinia ANKARA Anthrax Sterne BCG- Protects from extrapulmonary TB Danish 1331 Leprosy Mycobacterium indicus pranii

References:

https://www.sciencedirect.com/topics/medicine-and-dentistry/vaccine-strain#:~:text=Only%20one%20vaccine%20strain%20

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following is true regarding vaccine disposal? (Q840873)

A. Empty plastic syringes should be categorized as white

B. Empty vaccine vials should be categorized as blue

C. Expired vaccines should be categorized as red

D. A hub cutter is used to dispose of vaccine vials

Correct Answer: B. Empty vaccine vials should be categorized as blue

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Vaccine Disposal: Type Category Disinfection done by Plastic part of syringes Red (Option A) Autoclaving followed by shredding Expired Vaccine Yellow (Option C) Returned to manufacturer for incineration at >1200°C Empty/damaged vials Blue (Option B) Detergent or sodium hypochlorite Hub cutter (Option D): This device safely disposes of needles by cutting them off from syringes. This prevents reuse and reduces the risk of needle-stick injuries and infections.



References:

Park’s Textbook of Preventive and Social Medicine 27th edition, pg no: 919

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following can maintain vaccine temperatures for the longest duration? (Q840867)

A. Cold box

B. Vaccine carrier

C. Day carrier

D. Conditioned ice pack

Correct Answer: A. Cold box

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Different types of carriers: Cold box Vaccine carrier Day carrier Purpose Supply vaccines to all peripheral centres -Supply vaccines to outreach programs. - Used in subcenters. -Supply vaccines to nearby sessions. - Used in subcenters. Capacity 50-75 vaccine vials 16-20 vaccine vials 6-8 vaccine vials No. of ice packs placed 4-36 4 2 Maintains temperature of vaccine for 48-96 hours 24-48 hours 24-48 hours Images Vaccine carries and day carriers are used in Subcenters Conditioned ice packs (Option D) are water packs frozen to -5°C to -20°C, then allowed to thaw to +2°C to +8°C to prevent vaccine freezing. They are used inside vaccine carriers or cold boxes to maintain the required temperature, but they do not provide long-term temperature maintenance on their own.



@Neet_pg_bot


@Neet_pg_bot



References:

Park's Textbook of Preventive and Social Medicine 27th edition, pg no 120
https://www.unicef.org/supply/media/6391/file/VaccineCarrierColdBox-guideline-2021.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following is not true regarding ice packs? (Q840865)

A. Plain water is used to prepare ice packs.

B. The entire volume of the ice pack can be filled with water.

C. Vials of DPT/TT should not be placed directly with the ice pack.

D. OPV vials should be placed with ice packs.

Correct Answer: B. The entire volume of the ice pack can be filled with water.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Ice packs: Ice packs are frozen water packs that help carry out vaccinations at subcenters, village levels and outreach programs. Ice packs are made up of only plain water with no salt (Option A) The Ice pack

should be filled up to a level marked on the side of it (Option B) . Filling the entire ice pack with water may damage the ice pack, as water expands on freezing. Damaged ice packs/ice packs with any leakage should be discarded. Freeze-sensitive vaccines such as Hep B, penta, and DPT/TT should not be placed in direct contact with the ice packs (Option C). They should be placed in a carton/polythene bag and then placed with the ice packs. OPV vials should be placed with ice packs since they are heat sensitive (Option D)



References:

Park's Textbook of Preventive and Social Medicine 27th edition, pg no: 118 & 120
https://hotshopvips.top/ProductDetail.aspx?iid=604623101&pr=77.88

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Match the following types of thermometers with their correct example: Term Example i) Dial Thermometer a) Monitors the temperature of the Deep freezer ii) Hygro Thermometer b) Monitors the temperature of the ILR iii) Steam Alcohol Thermometer c) Used to determine air humidity (Q840861)

A. i) - b, ii) - c, iii) - a.

B. i) - c, ii) - a, iii) - b.

C. i) - a, ii) - b, iii) - c.

D. i) - c, ii) - b, iii) - a.

Correct Answer: A. i) - b, ii) - c, iii) - a.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Dial Thermometer Tool to monitor the temperature inside Ice-Lined Refrigerators (ILRs). They are important for ensuring vaccines are stored within the safe temperature range of +2°C to +8°C. Hygro Thermometer Measures both temperature and humidity. Used in environments where both parameters are important, such as climate control and storage conditions. Steam Alcohol Thermomete These are used to monitor the temperature of Deep Freezers (DFs)

References:

Park’s Textbook of Preventive and Social Medicine 27th edition. Page no. 120

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: The hospital management is deciding between procuring a large ILR (Ice-Lined Refrigerator) or a large deep freezer for vaccine storage due to frequent power outages in that area. Which of the following would be the most important factor to consider when making this decision? (Q840856)

A. The difference in temperature ranges between the ILR and the deep freezer.

B. The equipment’s ability to maintain temperature during power outages.

C. The physical space available for installation of either piece of equipment.

D. The need to store ice packs for vaccine transportation.

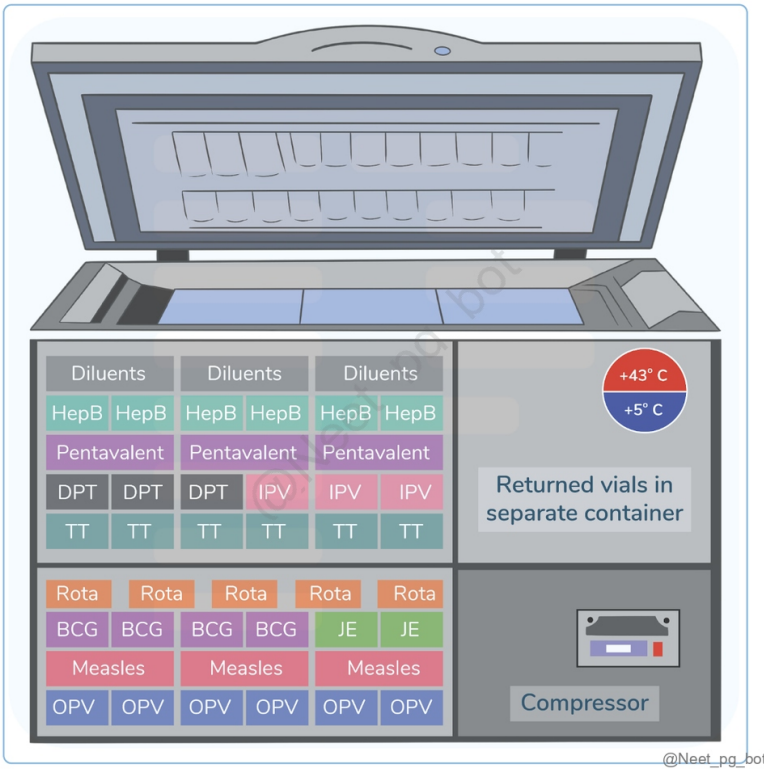
Correct Answer: B. The equipment’s ability to maintain temperature during power outages.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The scenario highlights a critical factor: Frequent power outages. ILRs are designed for locations with unreliable electricity as the ice lining helps maintain safe temperatures longer than a deep freezer with no power. Feature Ice-Lined Refrigerator (ILR) Deep Freezer (DF) Purpose Safe storage of vaccines at +2°C to +8°C, especially in areas with unreliable electricity. Freezing ice packs and short-term storage of OPV at district level and above Temperature Range +2°C to +8°C -15°C to -25°C Power Failure Maintains safe temperatures for at

least 8 hours during outage Limited hold-over time, dependent on the number of ice packs and frequency of opening Vaccine Placement The upper part stores freeze-sensitive vaccines (e.g., Hepatitis B, DPT), while the lower part stores heat-sensitive vaccines (e.g., OPV, BCG, Measles). Never used to store vaccines. However, if used, using the same DF for vaccine storage and ice pack preparation is not recommended. Monitoring A dial thermometer is used to monitor the temperature twice daily. A stem alcohol thermometer is used to monitor the temperature. The image below shows ice-lined refrigerator. The image below shows a deep freezer. These considerations are secondary to ensuring vaccine viability in this scenario, with power failure being the major determiner.(Options A, C, and D)





References:

Park's Textbook of Preventive and Social Medicine 27th ed. Page no. 119-120

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A nurse is preparing to administer a 0.1 ml dose of the BCG vaccine to a 6-month-old infant. Which type of syringe should the nurse use? (Q840851)

A. Tuberculin syringe

B. Insulin syringe

C. Either A or B

D. Neither A or B

Correct Answer: A. Tuberculin syringe

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: To administer small volume liquids, tuberculin syringes are best suited as they are marked in ml. Feature Tuberculin syringe (Option A) Insulin syringe (Option B) Markings Marked in millilitres (ml), typically from 0.1 ml to 1 ml. Calibrated in units, typically from 10 to 100 units. Used in Used to measure and administer small volumes of liquid, such as IM injections, test for TB and allergies Used specifically to administer insulin, which is dosed in units. Image To prevent medication errors, ensuring the correct syringe is crucial for accurate dosing, especially in infants. Always verify the syringe type and calibration before preparing or administering any medication. Tuberculin and insulin syringes cannot be used interchangeably.



References:

https://www.cdc.gov/tb/hcp/testing-diagnosis/tuberculin-skin-test.html#

https://pmc.ncbi.nlm.nih.gov/articles/PMC3481914/#

https://www.cdc.gov/tb/publications/factsheets/testing/Tuberculin_Skin_Testing_Information_for_Health_Care_Providers.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: If a healthcare provider temporarily uses a domestic refrigerator to store vaccines, where should he place the BCG and Measles vaccines inside the refrigerator? (Q840685)

A. Middle shelf

B. Door shelves

C. Top shelf

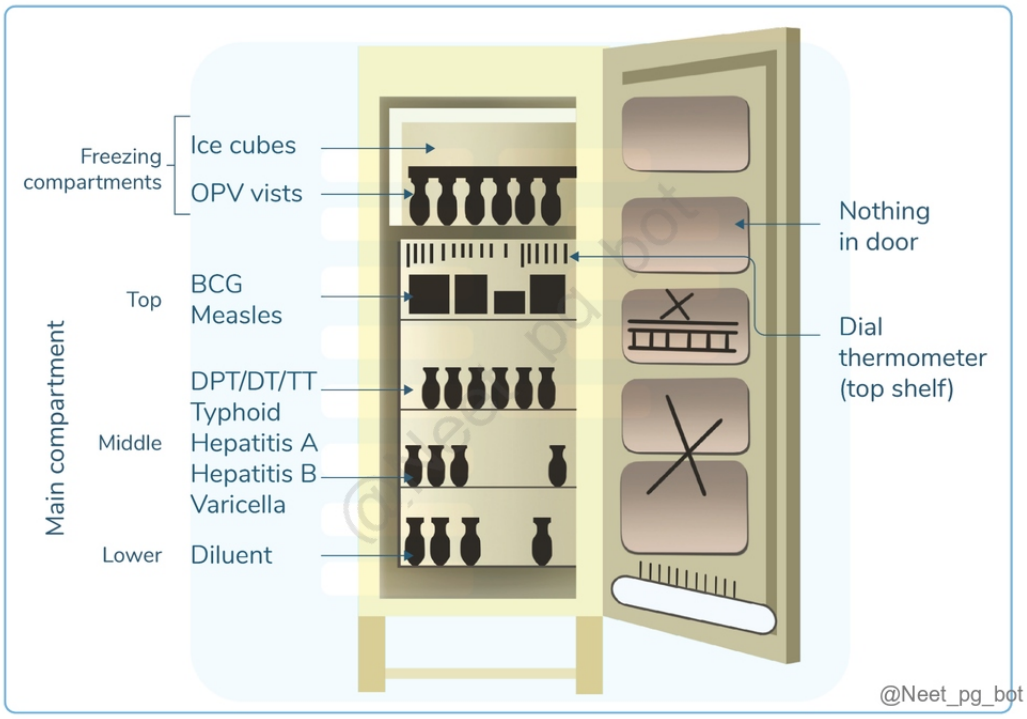
D. Bottom shelf

Correct Answer: C. Top shelf

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Appropriate placement is essential to maintain the cold chain. Heat-sensitive vaccines, such as OPV, BCG and Measles vaccines, are best stored on the top shelf , as they provide a more stable temperature and reduce the risk of freezing, which can occur in colder areas like the bottom shelf or door shelves. Domestic Refrigerator Usage Details Vaccine Storage Can be used for storing vaccines at private clinics and nursing homes, but hold-over time and capacity are limited. Requires a guaranteed continuous power supply. Temperature Range Maintains a cabinet temperature between +2°C to +8°C. Placement of Vaccines (Options A, B, C, D) Top Shelf : Measles, BCG, Rotavirus vaccine, OPV Middle Shelf : DPT, Pentavalent vaccine, TT, IPV, Hepatitis B, and diluents placed next to their corresponding vaccines. Bottom Shelf : Water-filled ice packs to help maintain temperature stability. Door : Avoid storing vaccines in the door as they experience the most temperature fluctuation Ice Pack Usage Place ice packs filled with water on the bottom shelf and in the refrigerator door to help maintain the temperature in case of a power outage. Temperature Monitoring A dial thermometer is placed inside the refrigerator to monitor the temperature twice daily.



References:

Park’s Textbook of Preventive and Social Medicine 27th ed. Page no. 120

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: A 10-month-old infant came to the clinic for a regular follow-up visit. He missed his most recent vaccine, which was scheduled for 9 months. According to the National Immunization Schedule, which of the following vaccines is not administered to a 10-month-old infant? (Q840559)

A. Measles

B. DPT

C. PCV

D. None of the above

Correct Answer: B. DPT

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: DPT Vaccine: The primary DPT series is given at 6, 10, and 14 weeks , and the first booster dose is scheduled at 16-24 months . Therefore, DPT is not given at 9 or 10 months . National Immunization Schedule: The National Immunization Schedule (NIS) in India provides a structured guideline for vaccination to protect children against various infectious diseases. The schedule includes primary series, booster doses, and catch-up immunization strategies. Age Vaccine At Birth BCG, Hepatitis B (Birth dose), OPV (0 dose) 6 Weeks DPT-1, IPV-1, Hepatitis B-1, Hib-1, Rotavirus-1, PCV-1 10 Weeks DPT-2, IPV-2, Hepatitis B-2, Hib-2, Rotavirus-2, PCV-2 14 Weeks DPT-3, IPV-3, Hepatitis B-3, Hib-3, Rotavirus-3, PCV-3 9 Months Measles-1, PCV Booster, JE-1 (in endemic areas) 16-24 Months DPT Booster-1, IPV Booster, Measles-2 5-6 Years DPT Booster-2, OPV Booster 10 Years Tetanus and Diphtheria (Td) 16 Years Tetanus and Diphtheria (Td) Measles Vaccine(Option A) : Scheduled at 9 months as per the National Immunization Schedule (NIS) in India., If missed, it should be administered as soon as possible. Pneumococcal Conjugate Vaccine (PCV) (Option C): Incorrect; primary doses completed earlier; no routine dose scheduled exactly at 10 months. Booster: Given at 9 months , and if missed, can still be administered at 10 months .

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 136

https://main.mohfw.gov.in/sites/default/files/24545352106148966387 3.pdf

https://nhm.gov.in/New_Updates_2018/NHM_Components/Immunization/report/National_%20Immunization_Schedule.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following storage practices is appropriately matched with the corresponding cold chain level? Level Storage practice A. Subcenter Use walk-in cold rooms to store large quantities of vaccines. B. Primary Health Center Use small ice-lined refrigerators to store vaccines for up to one month. C. Community Health Center Store vaccines in vaccine carriers for daily use. D. State Level Use domestic refrigerators due to their large storage capacity. (Q840676)

A. A

B. B

C. C

D. D

Correct Answer: B. B

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Cold Chain Level Storage Equipment Capacity Storage Duration Temperature Range Subcenter/Village Level (Option A) Vaccine Carriers, Day Carriers 16-20 vials (vaccine carrier) 24-48 hours +2°C to +8°C Ice Packs - 1-4 hours +2°C to +8°C Primary Health Center (PHC) (Option B) Small Ice-Lined Refrigerator (ILR) Up to 140 liters Up to 1 month +2°C to +8°C Small Deep Freezer (DF) - - -15°C to -25°C Community Health Center (CHC)/ Sub District Hospital/ District Hospital (Option C) Large Ice-Lined Refrigerator (ILR) Up to 300 liters Up to 1 month +2°C to +8°C Large Deep Freezer (DF) - - -15°C to -25°C State/National Level (Option D) Walk-In Cold Rooms Large quantities Up to 3 months +2°C to +8°C Walk-In Freezers Large quantities Long-term storage -15°C to -25°C

References:

https://www.who.int/docs/default-source/searo/india/publications/immunization-handbook-107-198-part2.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A nurse is preparing to administer a 0.1 ml dose of the BCG vaccine to a 6-month-old infant. Which type of syringe should the nurse use? (Q840667)

A. Tuberculin syringe

B. Insulin syringe

C. Either A or B

D. Neither A or B

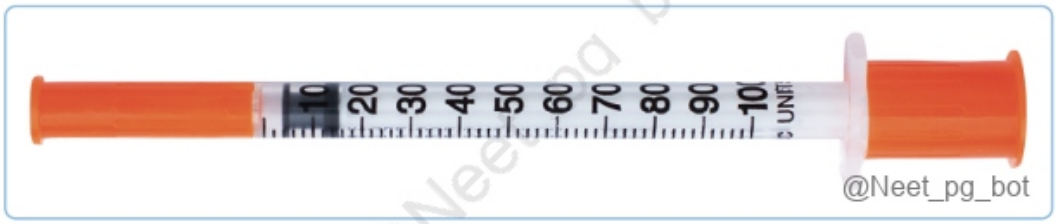
Correct Answer: A. Tuberculin syringe

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Feature Tuberculin syringe (Option A) Insulin syringe (Option B) Markings Marked in millilitres (ml), typically from 0.1 ml to 1 ml. Calibrated in units, typically from 10 to 100 units. Used in Used to measure and administer small volumes of liquid, such as IM injections, test for TB and allergies Used specifically to administer insulin, which is dosed in units. Image To prevent medication errors, ensuring the correct syringe is crucial for accurate dosing, especially in infants. Always verify the syringe type and calibration before preparing or administering any medication. Tuberculin and insulin syringes cannot be used interchangeably.





References:

https://www.cdc.gov/tb/hcp/testing-diagnosis/tuberculin-skin-test.html#

https://pmc.ncbi.nlm.nih.gov/articles/PMC3481914/#

https://www.cdc.gov/tb/publications/factsheets/testing/Tuberculin_Skin_Testing_Information_for_Health_Care_Providers.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following vaccines is appropriate to administer to an 18-month-old child who has not received any prior vaccination according to national immunisation schedule? (Q840663)

A. OPV + MMR

B. Pentavalent

C. BCG + OPV

D. BCG + OPV + MMR

Correct Answer: A. OPV + MMR

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: OPV (Oral Polio Vaccine) and MMR (Measles, Mumps, Rubella) are administered up to 5 years of age in the catch-up vaccination schedule. BCG is given only up to 1 year of age, so it is not recommended at 18 months. (Option C, D) Pentavalent (DPT, Hep B, Hib) is given up to 1 year of age and is not recommended after that. (Option B) Delayed Immunization Schedule Time Vaccine Till 15 days OPV birth dose Till 24 hours Hepatitis B birth dose Up to 1 year BCG, Rotavirus, Pentavalent, fIPV, PCV, Hepatitis B (alone) Up to 5 years OPV, Measles, MR vaccine, Vitamin A drops Up to 7 years DPT Up to 15 years JE Lifelong Td

References:

https://www.cdc.gov/vaccines/schedules/hcp/schedule-changes.html#guidance

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A 68 y/o man with a history of chronic obstructive pulmonary disease (COPD) and hypertension hasn't received any vaccines in recent years and is concerned about his increased risk of infections. Which of the following vaccines should be given to him? (Q840656)

A. Influenza vaccine

B. Pneumococcal vaccine (PCV13 followed by PPSV23)

C. Tdap vaccine

D. All of the above

Correct Answer: D. All of the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Recommended Vaccines for Elderly Individuals Vaccine Indication Schedule Influenza Annual vaccination for all individuals ≥ 60 years 1 dose every year Pneumococcal (PCV13, PPSV23) Prevents pneumococcal pneumonia, especially in chronic conditions PCV13 followed by PPSV23 after 1 year Tdap/Td Tetanus, diphtheria, pertussis protection Tdap once, then Td booster every 10 years Herpes Zoster (Zoster vaccine) Prevents shingles in adults ≥ 50 years 2 doses, 2–6 months apart

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8955469/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: A 30 y/o woman at 16 weeks gestation has a history of three prior pregnancies and her last delivery was 18 months ago. Which of the following is the most appropriate Td vaccination schedule for this patient? (Q840653)

A. 2 doses of Td vaccine, one month apart, starting immediately.

B. 1 dose of Td vaccine now.

C. 1 dose of Td vaccine around the 7th month of pregnancy.

D. No Td vaccine is needed for this pregnancy.

Correct Answer: C. 1 dose of Td vaccine around the 7th month of pregnancy.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This patient is considered a multigravida because she has a history of three prior pregnancies. Her last delivery was less than 3 years ago (18 months). The use of Td is recommended during pregnancy to protect against maternal and neonatal tetanus & diphtheria during prenatal care. Primi-gravida or multigravida with last delivery >3 years ago 2 doses of Td vaccine: Td1 - Early in pregnancy, 0.5ml IM Td2 - 4 weeks after Td1, 0.5ml IM Multigravida with last delivery <3 years (If received 2 Td doses in a pregnancy within the last 3 yrs) Td-Booster around the 7th month of pregnancy

References:

Park’s Textbook of Preventive and Social Medicine 27th ed. Page no. 136.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which of the following is true regarding BCG vaccination? (Q840651)

A. It is an inactivated vaccine

B. Can be administered only on the left upper arm

C. Provides protection only against extrapulmonary TB

D. None of the above

Correct Answer: C. Provides protection only against extrapulmonary TB

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The BCG (Bacillus Calmette–Guérin) vaccine is primarily administered to prevent childhood tuberculosis, especially its severe forms. Its most consistent and reliable protective effect is against extrapulmonary TB , particularly: TB meningitis Miliary TB BCG Vaccine: Aspect Details Full Form Bacillus Calmette-Guérin (BCG) Type of Vaccine Live attenuated vaccine derived from Mycobacterium bovis (Option A) Mechanism of Action Stimulates cellular immunity (T-cell mediated) against Mycobacterium tuberculosis Indications Routine childhood immunization (to prevent severe TB forms like miliary TB & TB meningitis) High-risk individuals in endemic regions Considered for health workers and individuals with high TB exposure Administration Route : Intradermal (ID) Site : Left upper arm (deltoid region) to standardize scar assessment Schedule Given at birth (or as early as possible until 1 year of age if not previously vaccinated) Dosage 0.1 mL for infants >1 month 0.05 mL for newborns (≤1 month) Contraindications Symptomatic HIV/AIDS (due to risk of disseminated BCG infection) Primary immunodeficiencies Severe illness Adverse Reactions Local ulceration and scar formation (normal immune response) Suppurative lymphadenitis (rare) Disseminated BCG infection (only in immunocompromised patients) Scar Formation A characteristic BCG scar develops at the injection site within 6-8 weeks, confirming successful vaccination Special Considerations Not part of adult vaccination schedules unless in specific high-risk settings No booster doses required, as its protective effect does not increase with revaccination Can be administered only on the left upper arm (Option B) : Incorrect because the left upper arm is preferred for documentation and standardization, but not mandatory .

References:

Park’s Textbook of Preventive and Social Medicine 27th edition, pg no: 231-232

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Match the following vaccines with their route of administration VACCINE ROUTE A) Rotavirus i) Subcutaneous B) BCG ii) Oral C) JE iii) Intramuscular D) Pentavalent iv) Intradermal (Q840645)

A. A-ii; B-iv; C-i; D-iii

B. A-i; B-iii; C-ii; D-iv

C. A-iv; B-i; C-iii; D-ii

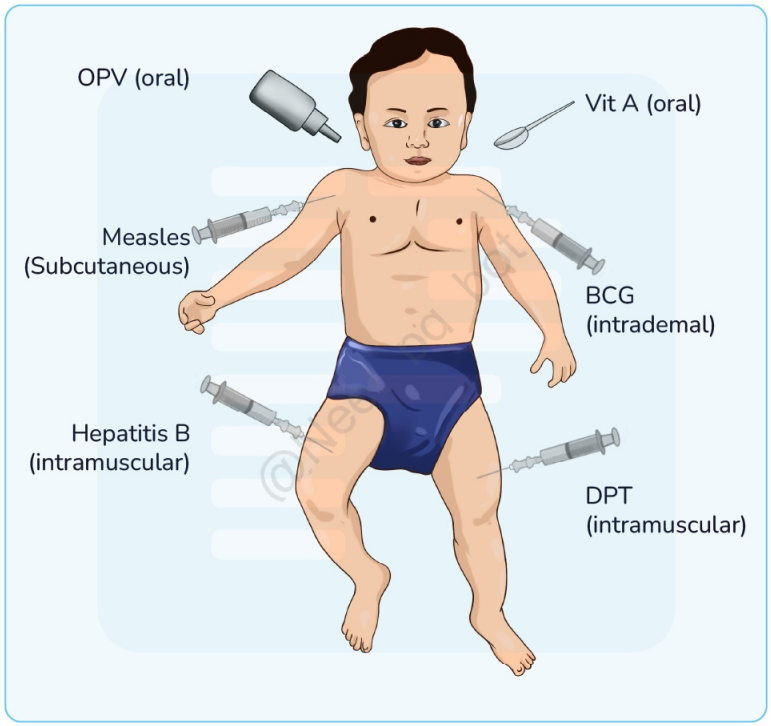
D. A-iii; B-ii; C-iv; D-i

Correct Answer: A. A-ii; B-iv; C-i; D-iii

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Matching vaccines with their correct route of administration : Vaccine Route of Administration Rotavirus (A) Oral (ii) → Given as oral drops. BCG (B) Intradermal (iv) → Given in the left upper arm. Japanese Encephalitis (JE) (C) Subcutaneous (i) → Given in the upper arm. Pentavalent (D) Intramuscular (iii) → Given in the anterolateral thigh. Vaccine Administration Routes and Their Importance Vaccines are administered through different routes based on their formulation and intended immune response. The choice of route ensures optimal immune activation while minimizing adverse effects. Below is a detailed breakdown of vaccines, their administration routes, doses, and sites: Route Vaccine Dose Site Oral OPV (Oral Polio Vaccine) 2 drops Oral Rotavirus 5 drops Oral Intradermal BCG (Bacillus Calmette-Guérin) 0.1 ml (0.05 ml until 1 month) Left upper arm fIPV (Fractional IPV) 0.1 ml Right upper arm Intramuscular Pentavalent (DPT, Hep B, Hib) 0.5 ml Antero-lateral side of mid-thigh PCV (Pneumococcal Conjugate Vaccine) 0.5 ml Antero-lateral side of mid-thigh Td (Tetanus and Diphtheria) 0.5 ml Upper arm Subcutaneous MR (Measles-Rubella) 0.5 ml Right upper arm JE (Japanese Encephalitis) 0.5 ml Left upper arm (Live vaccine via S.C) Killed vaccine via I.M- Anterolateral thigh (<3 years, IM); Deltoid (≥3 years, IM) Intranasal Influenza 0.2 ml (0.1 ml each nostril) Nasopharynx



References:

Park’s Textbook of Preventive and Social Medicine 27th edition, pg no: 115

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Under the Vitamin A distribution scheme, which of the following is the appropriate dose of Vitamin A to prevent blindness in a 3-year-old? (Q840641)

A. 100,000 IU

B. 150,000 IU

C. 200,000 IU

D. 50,000 IU

Correct Answer: C. 200,000 IU

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Vitamin A supplementation is essential to prevent blindness and reduce childhood mortality . Under the National Vitamin A Prophylaxis Program , children aged 1 to 5 years receive 200,000 IU every 6 months as a preventive measure. This dose is crucial for preventing xerophthalmia, night blindness, and severe infections associated with Vitamin A deficiency. Vitamin A Supplementation Schedule in Children Age Dosage (Oral Route) < 6 months 50,000 IU 6 - 12 months 100,000 IU 9 months (with measles vaccine) 100,000 IU 1 - 5 years (every 6 months) 200,000 IU Treatment of Vitamin A Deficiency: Oral 200,000 IU on 2 successive days All children with corneal ulcers should receive Vitamin A , regardless of suspected deficiency.

References:

Park’s Textbook of Preventive and Social Medicine 27th edition, page no: 459

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Consider the following statements: i) f IPV is a live attenuated vaccine. ii) fIPV is not effective in control of epidemics iii) OPV has a shorter shelf life than IPV iv) fIPV provides humoral immunity only v) 5 ml of fIPV is administered via IM route Which of the following are correct? (Q840625)

A. i, ii and iii

B. ii, iii and iv

C. ii, iii and v

D. i, iii and v

Correct Answer: B. ii, iii and iv

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: i) IPV is a live attenuated vaccine: Incorrect IPV (Inactivated Poliovirus Vaccine) is a killed (inactivated) vaccine. ii) fIPV is not effective in control of epidemics: Correct Fractional IPV (fIPV) is not ideal for rapid outbreak control because it does not induce sufficient mucosal immunity , which is required for halting poliovirus transmission. OPV is preferred in epidemic situations due to its ability to induce gut immunity and stop transmission. iii) OPV has a shorter shelf life than IPV: Correct OPV is a live virus vaccine , requiring strict cold chain maintenance and has a shorter shelf life than IPV, which is inactivated and more stable. iv) fIPV provides humoral immunity only: Correct fIPV induces humoral (systemic) immunity but does not provide strong mucosal immunity in the intestines, which is necessary to prevent virus shedding. OPV provides both humoral and mucosal immunity. v) 5 ml of fIPV is administered via IM route: Incorrect fIPV is given as 0.1 ml intradermally , not 5 ml intramuscularly . The standard full-dose IPV (not fractional) is given intramuscularly (IM) . Differences Between IPV and OPV Feature IPV (Inactivated Poliovirus Vaccine) OPV (Oral Poliovirus Vaccine) Type of Vaccine Inactivated (killed) virus Live attenuated virus Route of Administration Intramuscular (IM) or Intradermal (ID) Oral (drops) Immunity Provided Systemic (humoral) immunity Systemic + mucosal immunity (gut immunity) Effectiveness in Epidemics Not effective in stopping transmission Highly effective in epidemic control Prevention of Virus Shedding Limited effect on intestinal virus shedding Strong gut immunity prevents shedding Shelf Life & Storage More stable, longer shelf life Less stable, requires strict cold chain Risk of Vaccine-Derived Poliovirus (VDPV) No risk of VDPV Small risk of VDPV due to live virus reversion Use in Eradication Programs Primarily used in polio-free areas Used in endemic and outbreak settings

References:

Park’s Textbook of Preventive and Social Medicine 27th edition, pg no 240

↑ *Back to this question in Part A*

@Neet_pg_bot

• [03_Vaccines and Cold Chain] 011 Vaccines And Open Vial Policy

« Back to Folder Directory

[03_Vaccines and Cold Chain] 011 Vaccines And Open Vial Policy — Quick Jump

Q1 (p. 842)	*Q2 (p. 843)*	*Q3 (p. 844)*	*Q4 (p. 845)*	*Q5 (p. 847)*	*Q6 (p. 848)*
Q7 (p. 850)	*Q8 (p. 852)*	*Q9 (p. 852)*	*Q10 (p. 853)*	*Q11 (p. 854)*	*Q12 (p. 856)*
Q13 (p. 857)	*Q14 (p. 858)*	*Q15 (p. 859)*	*Q16 (p. 860)*	*Q17 (p. 860)*	

Q1: Which of the following is the diluent used for the Measles Rubella vaccine? (Q840640)

A. Normal Saline

B. Phosphate Buffer Solution

C. Distilled water/ Sterile Water

D. Cold Physiological saline

Correct Answer: C. Distilled water/ Sterile Water

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The diluent used for the Measles Rubella vaccine is Distilled water/ sterile water. The diluent provided along with the vaccine by the manufacturer ONLY should be used. Normal Saline (Option A)- is the diluent for the BCG Vaccine. Phosphate Buffer Solution (Option B)- is the diluent used for Japanese encephalitis vaccine Cold Physiological saline (Option D)- is the diluent used for Yellow fever Vaccine Powdered vaccines & their diluents

Vaccine	Diluent	Time limit
BCG	Normal saline	Up to 4 hours
Measles or Measles rubella	Distilled water/ sterile water	Up to 4 hours
Japanese encephalitis	Phosphate buffer solution	Up to 2 hours
Yellow fever	Cold physiological saline	Up to 30 mins.

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 231,166,327, Reconstituent vaccines & their diluents

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: MMR, Hepatitis-b, BCG, and JE vaccines were being carried for immunisation camp and have been opened. Which of the following opened vials can be reused provided that the cold chain is maintained? (Q844354)

A. Measles, Mumps, and Rubella (MMR) Vaccine

B. BCG Vaccine

C. Hepatitis B Vaccine

D. Japanese encephalitis (JE) vaccine

Correct Answer: C. Hepatitis B Vaccine

Explanation: Open vial policy states that “vaccine vials, once opened, can be reused in subsequent sessions for up to 28 days, provided that they are maintained in appropriate cold chain conditions to reduce the wastage of vaccines. All liquid vaccines follow open vial policies. Eg: Hepatitis B , DPT, Pentavalent, OPV, IPV, PCV, Td. Reconstituted vaccines such as MMR, BCG, JE (Option A,B and D) Yellow fever vaccine along with Rotavirus vaccine does not follow open vial policy

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page120

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following statements is TRUE regarding the "Switch" from tOPV to bOPV in India? (Q840677)

A. The switch included the removal of wpv1 from the vaccine formulation.

B. The reason for the switch was the eradication of wpv3 in September 2015.

C. bOPV contains attenuated forms of wpv1 and wpv3.

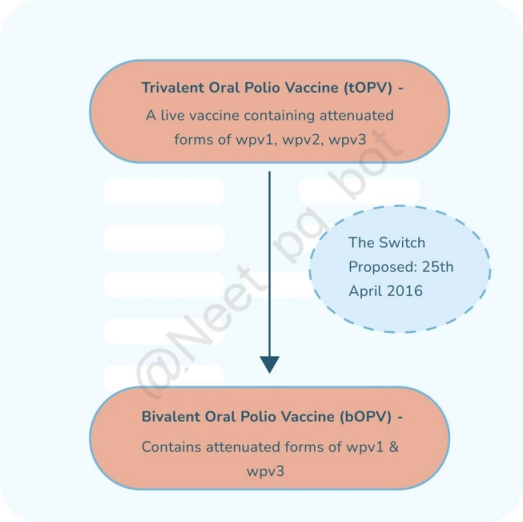
D. IPV was introduced after the switch to compensate for the removal of wpv2 from the vaccine.

Correct Answer: C. bOPV contains attenuated forms of wpv1 and wpv3.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Switch: This was approved because the wpv2 in tOPV was leading to CVDPV (Circulating Vaccine Derived Polio virus) which was dangerous and causing outbreaks. It was eradicated in September 2015. wpv3 is associated with VAPP(vaccine-associated paralytic polio); it does not cause outbreaks. It was eradicated in October 2019. To maintain immunity against type 3 components, it is retained in bOPV. The switch included the removal of wpv1 from the vaccine formulation (Option A): This statement is false because the Switch involved the removal of wpv2, not wpv1, from the vaccine formulation The reason for the switch was the eradication of wpv3 in September 2015 (Option B): This is also a false statement because the Switch was prompted by the eradication of wpv2 in 2015, not wpv3 (which was eradicated later in October 2019) IPV was introduced after the switch to compensate for the removal of wpv2 from the vaccine (Option D): IPV was introduced before the switch (in 2014-2015) to help maintain immunity against polio, particularly against the type 2 component



References:

www.who.int/teams/immunization-vaccines-and-biologicals/diseases/poliomyelitis-(polio)

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following is not included in the IT initiatives under Mission Indradhanush? (Q840672)

A. eVIN (Electronic Vaccine Intelligence Network)

B. ANMOL (Auxiliary Nurse Midwife Online)

C. SAFE-VAC (Surveillance and Actions for Events following Vaccination)

D. AEFI (Adverse Event Following Immunization)

Correct Answer: D. AEFI (Adverse Event Following Immunization)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: - AEFI is not listed as one of the IT initiatives under Mission Indradhanush. It is a separate program under WHO that monitors adverse events following immunization, but it is not categorized as an IT initiative under Mission Indradhanush. eVIN App (Option A) IT initiative under Mission Indradhanush designed to strengthen immunization supply chain systems in India. Helps in effective vaccine logistics management, including route planning, vaccine requirements, stock inventory, and stock reallocation. ANMOL (Option B) IT initiative under Mission Indradhanush that acts as a job aid for Auxiliary Nurse Midwives (ANMs). Provides readily available information such as due lists, dashboards, guidance based on data entered, and educational videos on topics like high-risk pregnancy, immunization, and family planning. SAFE-VAC (Option C) IT initiative under Mission Indradhanush focused on monitoring and managing adverse events following vaccination. It aims to enhance the safety and effectiveness of immunization programs by providing a system for the timely reporting, tracking, and analysis of any adverse events that occur after vaccination





References:

nhm.gov.in/uhc-day/Session%202/eBooklet%20on%20IT%20Initiatives%20of%20NHM.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following diseases is not part of the Pan-India diseases covered under Mission Indradhanush? (Q840669)

A. Extra-pulmonary tuberculosis

B. Polio

C. Rotavirus diarrhea

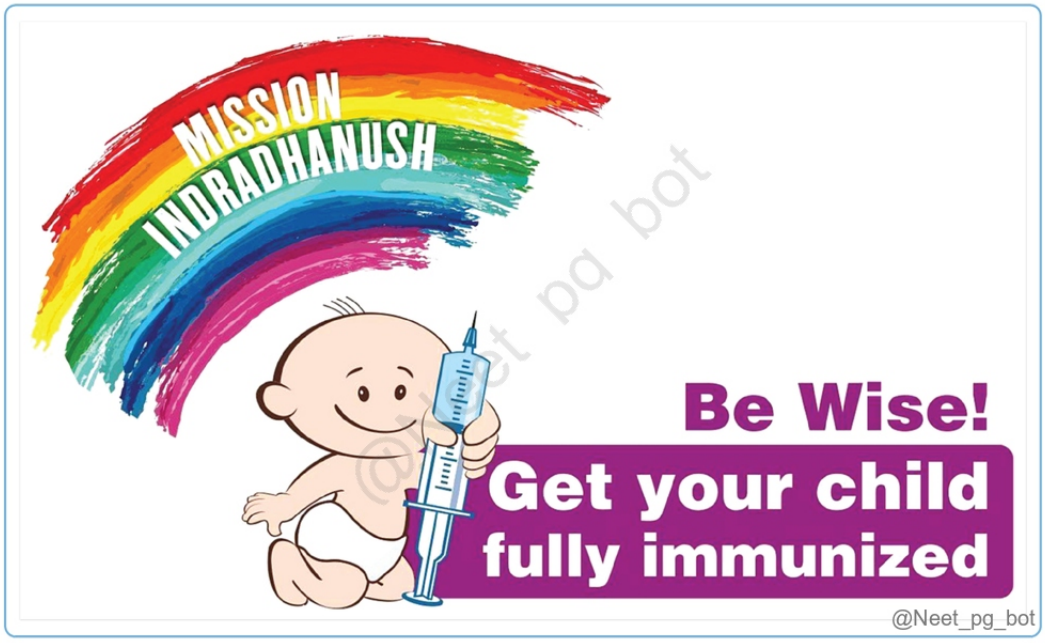
D. Japanese encephalitis

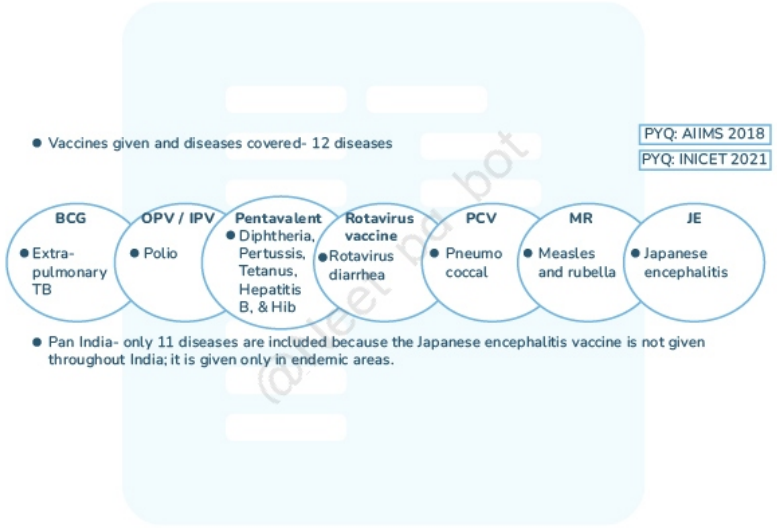
Correct Answer: D. Japanese encephalitis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Japanese Encephalitis (JE) is the twelfth disease, and the vaccine is provided in districts identified as endemic for the disease. Mission Indradhanush 1.0 was launched in 2014 with the objective of 7 diseases, representing 7 colors of Rainbow. Mission Indradhanush 2.0 was launched in 2019, covering 11 diseases and 1 endemic disease of Japanese Encephalitis. Mission Indradhanush 3.0 was launched in 2021, to cover up dropouts during Covid.





@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 511

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10795861

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following steps is incorrect when conducting a shake test to check for vaccine vial damage due to freezing? (Q840665)

A. Take a vaccine vial you suspect may have been frozen and label it as the "Test" vial.

B. Freeze a control vial of the same antigen, manufacturer, and batch number at -20°C overnight, and label it as the "Frozen control vial."

C. Thaw the "Frozen control vial" by heating it gently.

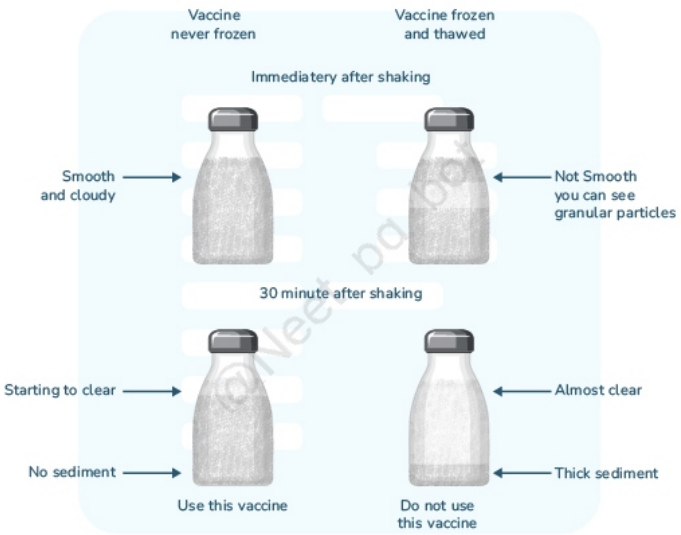
D. Shake both the "Test" vial and the "Frozen control vial" together for 10-15 seconds, then place them side-by-side on a flat surface to observe sedimentation.

Correct Answer: C. Thaw the "Frozen control vial" by heating it gently.

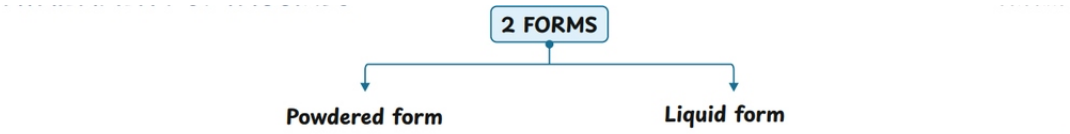
■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The correct procedure is to let the "Frozen control vial" thaw naturally. Heating it can alter the results of the shake test. Shake test: Checks whether freeze-sensitive vaccines have been damaged by exposure to temperatures below 0°C. After it has thawed → the vial of a frozen vaccine has no longer the appearance of cloudy liquid, but instead, thick sediments or flakes settle at the bottom of the vaccine vial Test vial: Vial suspected of being frozen (Option A) Frozen control vial: Take a vaccine vial of the same manufacturer, same batch, and same antigen as the test vial 0 freeze vaccine vial at - 20 C (in a deep freezer) overnight. (Option B) Next day, let it thaw (do not heat) (Option C) After it thaws, take the test vial and frozen control vial and shake it vigorously for 10 - 15 seconds Place both vials on a flat surface and observe for 30 minutes Check for sedimentation rate (Option D) If the rate of sedimentation in the test vial is slower than the frozen control vial → the vial is not damaged If the rate of sedimentation in the test vial is the same/ faster than the frozen control vial → the vial is damaged. Do not use Availability of vaccines: Placement of VVM on vaccines: Body → liquid vaccines → follow open vial policy Cap → freeze-dried vaccines → do not follow open vial policy Neck of ampule → freeze-dried vaccines → do not follow open vial policy



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POWDERED FORM/FREEZE-DRIED/ LYOPHILIZED VACCINES			LIQUID FORM
• Diluent is added to make it liquid → k/as reconstituted vaccines • Examples : BCG, measles/MR, JE live: SA-14-14-2, YF, rabies vaccine, covid vaccine			Examples • All t series vaccines : DPT, Tt, Td, Hepatitis B • PCV • IPV • OPV
VACCINE	**DILUENT**	**DURATION THAT VACCINE CAN BE USED AFTER RECONSTITUTION**	
BCG	Normal saline	Up to 4 hours	
Measles	Distilled water or sterile water	Up to 4 hours	
JE (live)	Phosphate buffer	Up to 2 hours	
Yellow fever	Cold physiological saline	Up to ½ hour	

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References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 122

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following statements about the Vaccine Vial Monitor (VVM) is incorrect? (Q840658)

A. The VVM is a heat-sensitive chemical indicator placed on the body of the vial, neck of the ampule, or cap of the vial.

B. The VVM records cumulative heat exposure of the vaccines through a gradual change in color.

C. If the inner square of the VVM is darker than the outer circle, the vaccine can still be used.

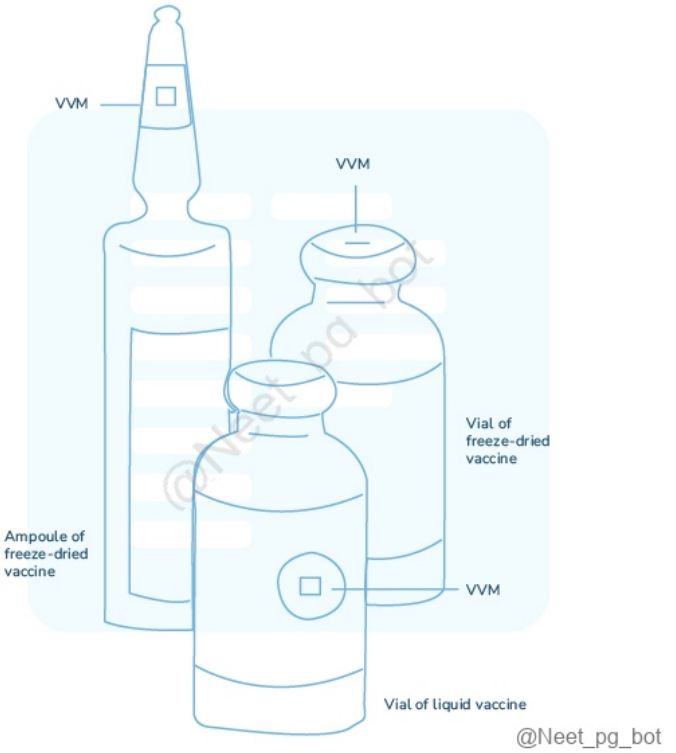
D. The VVM number is the time in days for the inner square to reach the colour indicating a discard point, if the vial is exposed to a constant temperature of 37°C.

Correct Answer: C. If the inner square of the VVM is darker than the outer circle, the vaccine can still be used.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: If the inner square of the VVM is darker than the outer circle, it indicates that the vaccine has been exposed to excessive heat and should not be used . Therefore, the statement that the vaccine can still be used is wrong. VVM is only used to detect the potency of vaccine and it has nothing to do with expiry. If the vaccine is expired, it has to be discarded irrespective of the colour changes on VVM. The VVM is indeed a heat-sensitive chemical indicator that is placed on the vial, ampule, or cap to monitor the vaccine's exposure to heat.(Option A) The VVM changes color gradually to indicate the cumulative exposure of the vaccine to heat over time. (Option B) The VVM numbers such as VVM2, VVM7, etc. is the time in days for the inner square to reach the colour indicating a discard point, if the vial is exposed to a constant temperature of 37°C. (Option D)



VACCINES THAT DO NOT FOLLOW OPEN VIAL POLICY	VACCINES THAT FOLLOW OPEN VIAL POLICY
• Reconstituted vaccines/freeze-dried vaccines/ lyophilised vaccines • **E.g.,** ○ BCG ○ Measles/MR ○ JE (live) ○ YF	• Used upto 4 weeks • **E.g.,** ○ All t series vaccines: Hepatitis B, DPT, Tt, Td, Pentavalent, Rotavac ○ PCV ○ IPV ○ OPV ○ JE (killed) → JEEV, JENVAC (Kolar strain)

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page121 & 122.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following statements is true based on thermolability of vaccines? (Q840652)

A. The most heat-sensitive vaccine is Hepatitis B.

B. The most freeze-sensitive vaccine is Pentavalent.

C. The loss of potency of vaccines due to exposure to heat or cold is permanent and cannot be regained.

D. The physical appearance of a damaged vaccine always changes.

Correct Answer: C. The loss of potency of vaccines due to exposure to heat or cold is permanent and cannot be regained.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: - Loss of potency due to either exposure to heat or cold is permanent and cannot be regained. The most heat-sensitive vaccine is Reconstituted BCG>OPV>Measles (Option A) The most freeze-sensitive vaccine is Hepatitis B>Pentavalent>DPT/Td (Option B) The physical appearance of the vaccine may remain unchanged even after it is damaged. (Option C) Vaccines Sensitive to Heat Vaccines Sensitive to Freezing OPV Hepatitis B IPV Pentavalent Measles, MR IPV Rota DPT JE DT DPT BCG TT

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page118,121 WHO Guidelines for Heat/Freeze Sensitive

↑ *Back to this question in Part A*

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Q9: You have been posted in a rural PHC where you just received a new batch of vaccines for the upcoming vaccination drive. You need to educate your team on the conditions that have to be fulfilled in order to reuse opened vaccine vials during the drive. Which of the following would you not suggest regarding the same? (Q840648)

A. The Vaccine Vial monitor has not reached the discard point.

B. An aseptic technique must be used to withdraw all doses.

C. Vaccines are stored strictly under an appropriate temperature (+6° C to +10° C) range during transportation and storage at cold chain point.

D. The expiry date should not have passed.

Correct Answer: C. Vaccines are stored strictly under an appropriate temperature (+6° C to +10° C) range during transportation and storage at cold chain point.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Here, we need to explain the conditions for fulfilling the Open Vial Policy; this statement is not true. Under Open Vial Policy, Vaccines are stored at an appropriate temperature range of (+2°C to +8°C) during transportation & storage at cold chain points. Other conditions to be fulfilled under open vial policy include: The Vaccine Vial monitor has not reached the discard point (Option A): Monitoring the Vaccine vial Monitor (VVM) is an essential aspect of vaccine management followed under the Open Vial Policy An aseptic technique must be used to withdraw all doses (Option B): Maintaining sterility during the withdrawal of the vaccine is important to prevent contamination, a requirement under the Open vial policy. The expiry date has not passed (Option D): Expired vaccines can lose their efficacy and can even become harmful.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 121

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following is an example of a vaccine used as a secondary level of prevention? (Q840594)

A. Hepatitis B vaccine

B. MMR (Measles, Mumps, Rubella) vaccine

C. BCG (Bacillus Calmette-Guérin) vaccine

D. Influenza vaccine

Correct Answer: C. BCG (Bacillus Calmette-Guérin) vaccine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Vaccination is a primary level of prevention - provides specific protection against diseases, before they occur. Exception is the BCG (Bacillus Calmette-Guérin) vaccine It is used against TB as a primary preventive

measure. But, it is also used to treat bladder cancer. It is instilled intravesically Targets existing cancer cells and prevents the progression and recurrence of bladder cancer. Since the BCG vaccine is used for intervention, it is regarded as a secondary level of preventive measure. Hepatitis B vaccine (Option A) , MMR vaccine(Option B) , and Influenza vaccine (Option D) are all used to prevent infections in individuals before they occur, fitting the primary prevention model.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 111 The use of intravesical BCG in urothelial carcinoma of the bladder - PMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Match the following vaccines with their well-known side effects: Vaccine Side effect a. Rotavirus 1. Inconsolable cry & convulsions b. BCG 2. Toxic Shock Syndrome c. Measles 3. Scar d. Pertussis 4. Intussusception (Q840634)

A. a-2, b-3,c-4, d-1

B. a-2, b-1, c-3, d-4

C. a-3, b-4, c-1,d-2

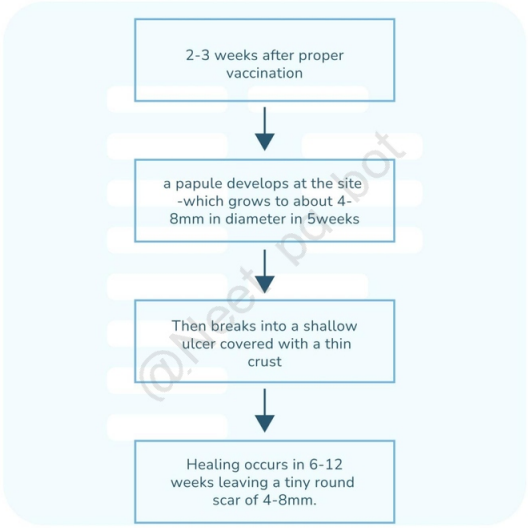
D. a-4, b-3, c-2, d-1

Correct Answer: D. a-4, b-3, c-2, d-1

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Rotavirus vaccine usually causes intussusception 1 year after vaccination: The rotavirus vaccine induces an immune response that can lead to lymphoid hyperplasia, which is the enlargement of lymphoid tissue in the intestinal wall. This can create a lead point for intussusception.■ BCG Vaccine- scar. Mechanism: Measles is commonly associated with Toxic shock syndrome (TSS) - TSS occurs when the measles vaccine is contaminated or the same vial is used for more than 1 session on the same day or the next day. Pertussis- Inconsolable cry & convulsions is a known side-effect, but it is not an absolute contraindication for giving the vaccine. Vaccines & their side effects:



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Vaccine	Side-effects
OPV	Precipitates paralysis; CVDPV, VAPP
Measles	Toxic shock syndrome (TSS), febrile seizures, anaphylaxis, encephalopathy
Rotavirus (After 1 year)	Intussusception
Pertussis	Inconsolable crying, convulsion, HHE (Hypotensive hyporesponsive encephalopathy)
BCG	Scar, fever, osteomyelitis, lymphadenitis
MMR	Thrombocytopenia
Rubella, MMR	Arthralgia

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References:

Rotavirus & Intussusception Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pageg 165,183, 231

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: A 7 y/o girl is brought to a makeshift medical camp that was set up following a massive earthquake 3 days ago. She has no prior history of vaccinations. The child was exposed to a confirmed case of measles two days ago. Which of the following would be your next step in helping the child? (Q840630)

A. Administer the measles vaccine immediately.

B. Administer typhoid and cholera vaccines first.

C. Administer OPV.

D. No vaccines are necessary at this time.

Correct Answer: A. Administer the measles vaccine immediately.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In a disaster scenario, all vaccines are contraindicated for victims except the measles vaccine, which can be administered within 3 days of exposure to a confirmed case. This is because measles has a natural incubation period of 10-14 days, and antibodies can be produced after vaccination within 7 to 10 days, which can help in preventing the disease and its outbreak. Typhoid and cholera vaccines (Option B) are not given to all because the time needed to produce antibodies is longer than the natural incubation period of these diseases. In a disaster situation, immediate protection is crucial, and these vaccines do not offer quick enough protection to be beneficial in the acute phase. OPV (Option C) is not indicated in this scenario unless there is an outbreak of polio- in which case OPV is given to at least 500 children in the vicinity. Vaccine protocol during a disaster & Epidemic:

To the victims	• All vaccines are contraindicated except the measles vaccine (within 3 days of exposure). • Post-disaster gastrointestinal infections are the most common. • Typhoid and cholera vaccines are not given to all, as the time needed to produce antibodies is much larger than the natural incubation period. • While measles have a natural incubation period of 10-14 days, and antibodies are produced after vaccination in 7 to 10 days.
For all health professionals	• All vaccines are given, like typhoid, cholera, hepatitis, and tetanus, except measles who are working in endemic areas.
Epidemic	• Outbreak of polio-OPV is given at least to 500 children in the vicinity • In case of an outbreak, IPV is not given as it precipitates paralysis

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References:

terrance.who.int/mediacentre/data/sage/SAGE_Docs_Ppt_Apr2012/6_vaccination_humanitarian_emergencies/Apr2012_session6_humanitarian_emergencies.pdf

www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following statements is FALSE regarding the contraindications of vaccines? (Q840624)

A. Yellow fever vaccine can be given to pregnant women

B. DPT Vaccine is unsafe in children with Spina bifida

C. All live vaccines are contraindicated in patients on corticosteroids

D. All vaccines except MMR, measles, rubella & varicella are contraindicated in adults with symptomatic HIV

Correct Answer: B. DPT Vaccine is unsafe in children with Spina bifida

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: DPT is safe for children with Spina bifida. DPT is contraindicated in progressive neurological diseases due to its pertussis component, anaphylaxis to the previous dose, and encephalopathy within 7 days of vaccination attributed to no other cause. Post-vaccine fever, inconsolable cry within 48 hours, and seizures within 72 hours of vaccine are relative contraindications of DPT. Spina Bifida is a birth defect where there is incomplete closing of the backbone and membranes around the spinal cord. It is a non-progressive neurological condition. Hence DPT is safe in such patients. All live vaccines are contraindicated in pregnancy except the yellow fever vaccine (Option A) as the infection's risk outweighs the live vaccine's risk. All Live vaccines are contraindicated in patients on corticosteroids (Option C) since their immune response is suppressed. All vaccines except MMR, measles, rubella & varicella are contraindicated in adults with symptomatic HIV (Option D) whereas none are contraindicated in asymptomatic HIV patients. CONDITIONS CONTRAINDICATIONS Pregnancy All live vaccines C/I Exception: Yellow fever vaccines India - yellow fever vaccine not used Due to the required storage temperature not available Yellow fever does not occur in India. Fever Typhoid oral vaccine (Ty21a) Mild to moderate fever - No C/I Asymptomatic HIV No C/I Symptomatic HIV Adult: All live vaccines C/I Exception: Measles, MMR, & varicella vaccines Newborn: All live vaccines C/I Exception: Measles & OPV vaccines Progressive neurologic disease Pentavalent/DPT C/I Cause: pertussis component (associated with seizures) Immuno suppression & corticosteroids All live vaccines C/I Egg Allergy Yellow fever vaccine & Influenza vaccines C/I Acute onset of fever / Fever of Unknown Origin All vaccines C/I Recurrent yeast infection (suspect immunosuppressed condition) Recurrent yeast infection (suspect immunosuppressed condition) Protein-Energy Malnutrition, Mild to moderate fever, diarrhoea No C/I

References:

DTP in progressive neurological disorder Egg allergy- Yellow fever vaccine Vaccines in HIV patients - adults, children . Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 111, 178

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which of the following statements is true about polysaccharide vaccines? (Q840614)

A. They are often combined with a toxoid component to enhance the immune response against toxins produced by bacteria.

B. Multiple immunizing agents are included in the vaccine.

C. More effective in children < 2 years

D. Polysaccharide based vaccines are available against S.pneumoniae, H.influenza b

Correct Answer: D. Polysaccharide based vaccines are available against S.pneumoniae, H.influenza b

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Polysaccharide vaccines Stimulate an antibody response against the capsular polysaccharides of pathogenic bacteria. Disadvantage - serotype specific immune response since the capsular polysaccharides vary between different strains. Polysaccharide-based vaccines are available against 23 serotypes of S.pneumoniae, Hib, Neisseria meningitidis, and Salmonella typhimurium. Pneumococcal Polysaccharide Vaccine (PPV) is not used in NIS. Other Subunit vaccines: Vaccine and Mechanism Examples Advantage / Disadvantage Toxoid (Option A) Exotoxins produced by live organisms are used Diphtheria, Tetanus, Anthrax Highly efficacious Highly safe Protein vaccine Specific proteins or peptides from the pathogen Influenza vaccine (hemagglutinin and Neuraminidase), Acellular pertussis vaccine. Less immunogenic Conjugate vaccine Polysaccharide antigen chemically linked to a protein recognized by Tcells. Pneumococcal conjugate vaccine - PCV (used in NIS), Meningococcal. Adv: More effective in children < 2 years (Option C) D/A: Serotype specific Recombinant Vaccine Prepared by DNA technology. Antigens are expressed on E. coli, yeast, and mammalian cells. Hepatitis B, HPV, Cholera toxin B, Lyme disease Adv: Safe D/A: Less immunogenic and need an adjuvant to enhance efficiency Combination Vaccine (Option B) More than one immunizing agent MMR, DPT, Pentavalent Overall reduction in adverse effects due to combination

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page. 113

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following statements is wrong with regard to administration of two live vaccines? (Q840611)

A. Do not administer both vaccines at the same site simultaneously.

B. Administer both vaccines at different sites simultaneously.

C. Administer both vaccines with an interval of 4 weeks.

D. Administer both vaccines with a minimum interval of 2 weeks.

Correct Answer: D. Administer both vaccines with a minimum interval of 2 weeks.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The minimum time interval needed to administer two live vaccines is not 2 weeks. Two live vaccines can be administered: Simultaneously at different sites, or With a minimum interval of 4 weeks between the vaccines, if required. An example of simultaneous administration at different sites is as follows: According to the National Immunization Schedule (NIS) at 9 completed months, Measles-rubella: Right arm Japanese Encephalitis: Left arm Both administered as 0.5 ml via the subcutaneous route.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page111

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Which of the following vaccines cannot be given to a pregnant woman? (Q840605)

A. Rabies vaccine

B. IPV

C. Rotavirus vaccine

D. Kyasanur Forest Disease Vaccine

Correct Answer: C. Rotavirus vaccine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Live attenuated vaccines contain weakened forms of pathogens that can replicate within the host and are contraindicated in pregnancy. A live organism is injected into the body in attenuated form. Attenuated form means that we have reduced the organism's virulence (killing power), but immunogenicity (antibody-producing capacity) is maintained. The rotavirus vaccine is an example of a live attenuated vaccine designed to provide immunity against rotavirus infections. Comparison of Live and Killed Vaccines: Live Vaccines Killed Vaccines Injected in live, attenuated (weakened) form Injected in killed form A single dose is sufficient (except OPV) Multiple doses are needed Longer duration of immunity Shorter duration of immunity Contraindicated in pregnancy, radiation therapy, and severe symptomatic immunodeficiency. It can be given during pregnancy Examples: Mnemonic - I love Chick EMBRYO Live Influenza, Chickenpox (Varicella), Live JE vaccine, MR, BCG, Rotavirus, Yellow fever virus, OPV. Others: Live plague vaccine Examples: Mnemonic: KILLED KFD, IPV, Killed Influenza, Japanese Encephalitis (Killed), Dog bite-Rabies Others · Killed Plague vaccine · Killed cholera vaccine Reversion to virulence is possible. Reversion to virulence is not possible.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page111-112

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: A 2-year-old child is brought by his mother. During the consultation, it is revealed that the child has not received any vaccinations since birth due to the family's geographical isolation and lack of access to healthcare services. The healthcare worker is concerned about the child's susceptibility to vaccine-preventable diseases and advises immediate initiation of the vaccination schedule. Based on this scenario, how would you classify this child's immunization status? (Q840599)

A. Fully immunized

B. Completely immunized

C. Dropout

D. Left out

Correct Answer: D. Left out

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Here, the child has not been immunized since birth, so vaccination never reached this child. Hence, he will be classified as a left-out . Fully immunised (Option A): A child who received all due vaccines according to the National Immunisation Schedule (NIS) up to the age of 1 year. Completely immunised (Option B): A child who received all due vaccines according to NIS up to 12 to 23 months of age. Dropouts (Option C): Incomplete complete immunisation. Children who started the vaccination schedule but did not complete it (discontinued).

References:

https://main.mohfw.gov.in/?q=Organisation/Departments-of-Health-and-Family-Welfare/immunization/immunization-handbook-medical-officers2017-0

↑ *Back to this question in Part A*

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• [03_Vaccines and Cold Chain] 012 Previous Year Questions

« Back to Folder Directory

[03_Vaccines and Cold Chain] 012 Previous Year Questions — Quick Jump

Q1 (p. 862)	*Q2 (p. 863)*	*Q3 (p. 863)*	*Q4 (p. 864)*	*Q5 (p. 865)*	*Q6 (p. 866)*
Q7 (p. 867)	*Q8 (p. 867)*	*Q9 (p. 868)*	*Q10 (p. 869)*	*Q11 (p. 870)*	*Q12 (p. 871)*
Q13 (p. 871)	*Q14 (p. 872)*	*Q15 (p. 873)*	*Q16 (p. 875)*	*Q17 (p. 876)*	*Q18 (p. 877)*
Q19 (p. 877)	*Q20 (p. 878)*	*Q21 (p. 879)*	*Q22 (p. 879)*	*Q23 (p. 881)*	*Q24 (p. 882)*
Q25 (p. 882)	*Q26 (p. 883)*	*Q27 (p. 884)*	*Q28 (p. 885)*	*Q29 (p. 885)*	*Q30 (p. 886)*
Q31 (p. 887)	*Q32 (p. 888)*	*Q33 (p. 889)*	*Q34 (p. 889)*	*Q35 (p. 890)*	

Q1: Which vaccine among the options exhibits a seroconversion rate that is quicker than the incubation period of the corresponding disease? (Q857698)

A. Coronavirus

B. Measles

C. Polio

D. Mumps

Correct Answer: B. Measles

Explanation: mongst the above options, measles vaccine has a faster seroconversion rate as compared to the incubation period of the disease and this is why measles vaccine is given when a disaster or an epidemic occurs. Seroconversion: is the transition from the point of viral infection to when antibodies of the virus become present in the blood. Seroconversion rates are one of the methods used for determining the efficacy of a vaccine. The higher the rate of seroconversion, the more protective the vaccine for a greater proportion of the population. Seroconversion does not inherently confer immunity or resistance to infection. Only some antibodies, such as anti-spike antibodies for COVID-19, confer protection. Coronavirus (Option A): The coronavirus vaccine has almost the same seroconversion rate as compared to the incubation period of the disease. Polio (Option C): The seroconversion rate of the polio vaccine is slower than its incubation period. Mumps (Option D): The mumps vaccine has a slower seroconversion rate than its incubation period.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC7519951/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Open vial policy is accepted for? (Q855881)

A. BCG

B. Measles

C. Live JE

D. IPV

Correct Answer: D. IPV

Explanation: : The BCG (Bacillus Calmette-Guérin) vaccine does not typically follow the open vial policy. Once opened, the vaccine should be used within a short period, usually within the same day, due to its potential instability and risk of contamination. Measles (option B): The measles vaccine does not follow the open vial policy in the same manner as IPV. Once opened, it must be used within 6 hours . Live JE (option C): The Japanese encephalitis (JE) vaccine does not follow the open vial policy either. Similar to BCG, the JE vaccine requires strict guidelines for handling and storage, and open vials should be discarded after a specific time. VACCINES THAT DO NOT FOLLOW OPEN VIAL POLICY VACCINES THAT FOLLOW OPEN VIAL POLICY Reconstituted vaccines/freeze-dried vaccines/ lyophilised vaccines E.g.: BCG Measles/MR JE (live) YF Used upto 4 weeks E.g.: All t series vaccines: Hepatitis B, DPT, Tt, Td, Pentavalent, Rotavac PCV IPV OPV JE (killed) JEEV, JENVAC (Kolar strain)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 121

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which vaccine is administered as part of the immunization program for a 10-year-old student in school? (Q856039)

A. BCG

B. MMR

C. TT/ Td

D. DPT

Correct Answer: C. TT/ Td

Explanation: According to the National Immunization Schedule (NIS) of India, children at the age of 10 years receive the Td vaccine (Tetanus and Diphtheria, previously TT). This booster dose maintains immunity provided by earlier doses given during infancy and early childhood. Vaccine Age Route Site Type of Vaccine BCG (Option A ruled out) At birth (up to 1 year) Intradermal Left upper arm Live attenuated Hepatitis B (Birth Dose) At birth (within 24 hrs) Intramuscular Anterolateral thigh Inactivated OPV (Zero Dose) At birth (within 15 days) Oral - Live attenuated Pentavalent (DPT + Hib + Hep B) 6, 10, 14 weeks Intramuscular Anterolateral thigh DPT (toxoid), Hib & Hep B (inactivated) OPV 6, 10, 14 weeks Oral - Live attenuated Rotavirus 6, 10, 14 weeks Oral - Live attenuated IPV (Fractional) 6 & 14 weeks Intradermal Right upper arm Inactivated PCV (Pneumococcal Conjugate Vaccine) 6, 14 weeks, and 9 months Intramuscular Anterolateral thigh Conjugate Measles & Rubella (MR) (Option B ruled out) 9-12 months & 16-24 months Subcutaneous Right upper arm Live attenuated JE (Japanese Encephalitis) 9-12 months & 16-24 months Subcutaneous Left upper arm Live attenuated DPT Booster-1 16-24 months Intramuscular Anterolateral thigh Toxoid OPV Booster 16-24 months Oral - Live attenuated PCV Booster 9-12 months Intramuscular Anterolateral thigh Conjugate Measles/MR Booster 16-24 months Subcutaneous Right upper arm Live attenuated DPT Booster-2 5-6 years Intramuscular Deltoid Toxoid TT (Tetanus Toxoid) 10 years & 16 years Intramuscular Deltoid Toxoid Cervical Cancer (HPV) 9-14 years (girls) Intramuscular Deltoid Recombinant National Immunization Schedule (India) DPT (Option D): Used for children below 7 years. Beyond this age, the Td vaccine replaces DPT to minimize side effects from higher diphtheria toxoid content.

References:

https://www.pmc.gov.in/en/NIS-for-Infants-Children-and-Pregnant-Women

https://mohfw.gov.in/sites/default/files/4101639587148966752.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Considering the immune status of a girl child who has been experiencing repeated yeast infections and respiratory virus infections since the age of 3 months, which vaccine should be avoided? (Q856082)

A. Killed IPV

B. Measles/MMR

C. DPT

D. TT/Td

Correct Answer: B. Measles/MMR

Explanation: Measles/MMR should be avoided due to the live virus components, which can be risky for immunocompromised children. A child who has a history of repeated yeast infections and respiratory viral infections may have an underlying immune deficiency or immunodeficiency disorder . Immunocompromised

children, particularly those with T-cell deficiency (such as in conditions like DiGeorge syndrome or severe combined immunodeficiency (SCID)), should avoid live vaccines due to the risk of severe infection. The Measles, Mumps, and Rubella (MMR) vaccine contains live attenuated viruses for measles, mumps, and rubella. In immunocompromised children, live vaccines pose a risk of causing active infections or serious complications due to their weakened immune system. National Immunization Schedule (India) Vaccine Age Route Site Type of Vaccine BCG At birth (up to 1 year) Intradermal Left upper arm Live attenuated Hepatitis B (Birth Dose) At birth (within 24 hrs) Intramuscular Anterolateral thigh Inactivated OPV (Zero Dose) At birth (within 15 days) Oral - Live attenuated Pentavalent (DPT + Hib + Hep B) 6, 10, 14 weeks Intramuscular Anterolateral thigh DPT (toxoid), Hib & Hep B (inactivated) OPV 6, 10, 14 weeks Oral - Live attenuated Rotavirus 6, 10, 14 weeks Oral - Live attenuated IPV (Fractional) 6 & 14 weeks Intradermal Right upper arm Inactivated PCV (Pneumococcal Conjugate Vaccine) 6, 14 weeks, and 9 months Intramuscular Anterolateral thigh Conjugate Measles & Rubella (MR) 9-12 months & 16-24 months Subcutaneous Right upper arm Live attenuated JE (Japanese Encephalitis) 9-12 months & 16-24 months Subcutaneous Left upper arm Live attenuated DPT Booster-1 16-24 months Intramuscular Anterolateral thigh Toxoid OPV Booster 16-24 months Oral - Live attenuated PCV Booster 9-12 months Intramuscular Anterolateral thigh Conjugate Measles/MR Booster 16-24 months Subcutaneous Right upper arm Live attenuated DPT Booster-2 5-6 years Intramuscular Deltoid Toxoid TT (Tetanus Toxoid) 10 years & 16 years Intramuscular Deltoid Toxoid Cervical Cancer (HPV) 9-14 years (girls) Intramuscular Deltoid Recombinant Killed IPV (Option A) : The Inactivated Polio Vaccine (IPV) contains inactivated (killed) virus, which is safe for immunocompromised children because it cannot cause infection. DPT (Diphtheria, Pertussis, Tetanus) (Option C) : The DPT vaccine is an inactivated vaccine and is safe for immunocompromised children. TT/Td (Tetanus Toxoid) (Option D) : This is a toxoid vaccine and is also safe for immunocompromised children, as it does not contain live bacteria.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 112, 162

https://www.pmc.gov.in/en/NIS-for-Infants-Children-and-Pregnant-Women

https://mohfw.gov.in/sites/default/files/4101639587148966752.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: There is an outbreak of acute encephalitis in the community and a vaccination drive is launched. Which of the following is true about the vaccine given in this condition? (Q856088)

A. Killed and intramuscular

B. Live and subcutaneous

C. Live and intramuscular

D. Killed and subcutaneous

Correct Answer: A. Killed and intramuscular

Explanation: Japanese Encephalitis (JE) is the most common cause of viral encephalitis outbreaks in endemic regions. The Japanese Encephalitis vaccine (JE vaccine) is available in two types: inactivated (killed) and live attenuated. The inactivated (killed) vaccine is commonly given intramuscularly (IM) as part of mass vaccination programs in outbreak settings. Live attenuated vaccines (like SA 14-14-2) are administered subcutaneously (SC), but they are generally used for routine immunization rather than in acute outbreak settings. Types of Japanese Encephalitis Vaccines Vaccine Type Examples Route of Administration Usage Inactivated (Killed) JEEV, IXIARO Intramuscular (IM) Used in outbreaks & travelers Live Attenuated SA 14-14-2 Subcutaneous (SC) Routine immunization Live and subcutaneous (Option B) : Incorrect. Although there is a live attenuated JE vaccine (e.g., SA 14-14-2), it is usually administered subcutaneously, not intramuscularly. However, this option does not align with standard killed vaccines used in most vaccination drives. Live and intramuscular (Option C) : Incorrect. Live attenuated vaccines for JE are administered subcutaneously, not intramuscularly. Killed and subcutaneous (Option D) : Incorrect. Killed vaccines are administered intramuscularly, not subcutaneously.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 332, 333

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the options listed below indicates the degree of heat resistance exhibited by vaccines? (Q856467)

A. VMV

B. VVM

C. MVV

D. VMM

Correct Answer: B. VVM

Explanation: The Vaccine Vial Monitor (VVM) is used to indicate the degree of heat resistance and the extent to which a vaccine has been exposed to heat. It is a color-changing indicator attached to vaccine vials to help assess whether a vaccine has been stored or transported at the correct temperature. This helps in determining if a vaccine remains safe and effective for use. VMV (Option A) : There is no known vaccine-related term called VMV. MVV (Option C) : This is not a recognized term related to vaccine heat resistance. VMM (Option D) : This also is not related to heat resistance in vaccines.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 24, Page 118

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of these vaccines do not follow open vial policy? (Q857086)

A. OPV

B. DPT

C. TT

D. Measles

Correct Answer: D. Measles

Explanation: g : Hepatitis B , DPT, Pentavalent, OPV, IPV, PCV, Td. Reconstituted vaccines such as MMR, BCG, JE, Yellow fever vaccine along with Rotavirus vaccine do not follow open vial policy

References:

Park’s Textbook of Preventive and Social Medicine 26th edition page 120

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A 10-week-old infant comes for routine vaccination. The baby had a history of inconsolable crying following vaccination at 6 weeks. What should be the next step regarding vaccination? (Q857357)

A. Don't give DT

B. Give DPT

C. Don't give DPT

D. Defer for 1 month

Correct Answer: B. Give DPT

Explanation: Assess if symptoms were directly related to vaccine Contraindications to pertussis vaccine: anaphylaxis, encephalopathy, family history of CNS disorders, concurrent febrile illness Baby's symptoms are likely vaccine-related; no contraindications present Proceeding with DPT vaccination is recommended Update:

inconsolable crying following DPT/Pentavalent vaccine → no longer an absolute contraindication to subsequent doses

Conditions	Contraindications
Pregnancy	All live vaccines are contraindicated except yellow fever vaccine
Symptomatic HIV	Adult- all live vaccines are C/I except measles, measles-rubella, Influenza, MMR, and varicella vaccines. Newborn- all live vaccines are C/I except measles, OPV, BCG
Progressive neurological disease	DPT (pertussis component)
Corticosteroids	All live vaccines
Egg Allergy	Yellow fever vaccine

@Neet_pg_bot

References:

DTP in progressive neurological disorder

Egg allergy- Yellow fever vaccine

Vaccines in HIV patients -adults,children.

Park's Textbook of Preventive and Social Medicine 26th edition Pg 111, 178

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following is the initial step when an immunization survey is being conducted? (Q857697)

A. Cluster identification

B. Conducting the survey

C. Completing the cluster and summary forms

D. Calculating the total fertility rate of the area

Correct Answer: A. Cluster identification

Explanation: luster identification. The major steps of an immunization survey are as follows: Planning the survey by finding the clusters and deciding how many interviewers are required. To conduct the survey in which the interviewers visit houses and get information on the immunization status of the clusters (Option B) To tabulate the data by completing the cluster and the summary forms (Option C) To analyse the data which helps in evaluating the immunization status and the reasons for the failure of immunization. To take action on the reports made by evaluating the data. Calculating the total fertility rate of the area (Option D): This is not typically part of an immunization survey; it is more relevant to demographic studies.

References:

https://iris.who.int/bitstream/handle/10665/69087/WHO_IVB_04.23.pdf;jsessionid=D82166D631381385A04DE4AE37EF648E?sequence=1

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: What would be the most appropriate approach to managing a young male patient who has presented at the hospital with a clean-cut wound that is not bleeding, and who received a complete tetanus vaccination 10 years ago? (Q855529)

A. Human tetanus immunoglobulin and full course of vaccine

B. Human tetanus immunoglobulin

C. Single-dose tetanus toxoid

D. Full course tetanus toxoid

Correct Answer: C. Single-dose tetanus toxoid

Explanation: Single-dose tetanus toxoid needed for clean cut wound with previous booster within 10 years Thorough wound cleaning advised, removal of foreign bodies Tetanus Management Protocol: Category Clean wound Unclean wound Category A Has had a complete course of toxoid or a booster dose (full immunisation) within the past 5 years. Only wound care. Only wound care. Category B Full immunization > 5 years ago < 10 years. Wound Care + TT single dose. Wound Care + TT single dose. Category C Full Immunization > 10 years ago. Wound Care + TT single dose. Wound Care + TT single dose + Human Tetanus Immunoglobulin. Category D Unknown, not known, never taken immunisation. Wound Care + TT complete course. Wound Care + TT complete course + Human Tetanus Immunoglobulin.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 361

↑ *Back to this question in Part A*

@Neet_pg_bot

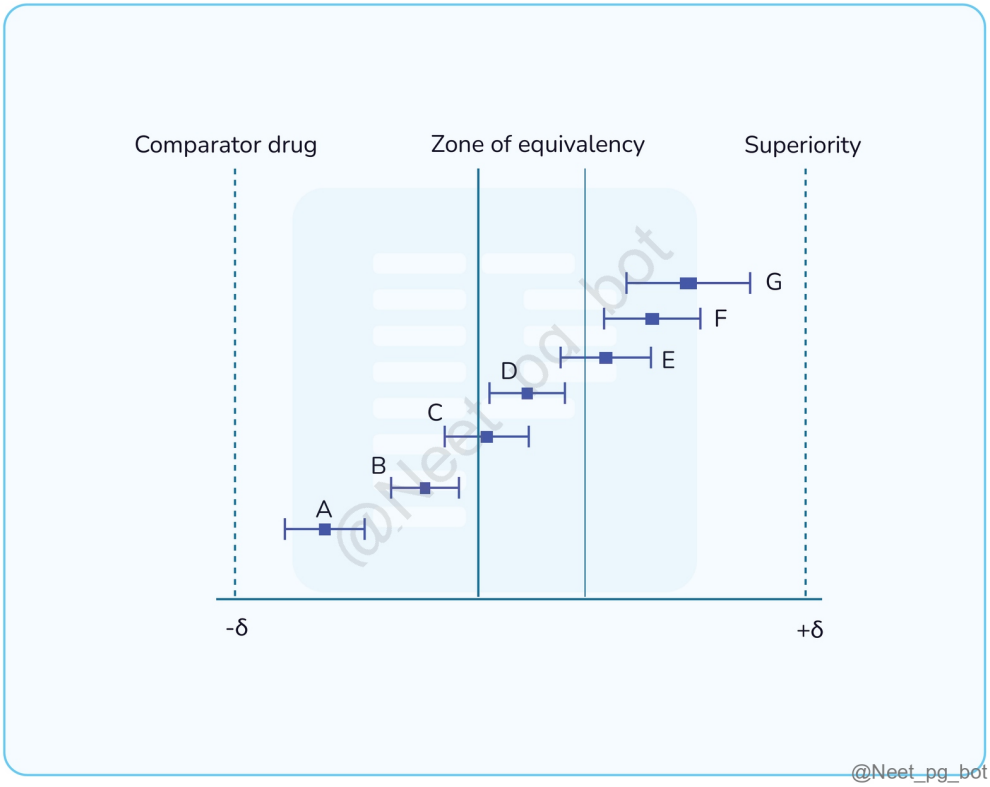
Q11: In the market, there are several new vaccines being researched, and their effectiveness is being evaluated and displayed in the image provided. Which of the recently developed vaccines demonstrate comparable efficacy to the previous vaccine? (Q858172)

A. D only

B. D and E

C. C, D and E

D. A, B, C and D



Correct Answer: C. C, D and E

Explanation: Option C is correct because vaccines C, D, and E show comparable efficacy to the previous vaccine. Conclusion based on forest plot, comparing efficacies. Confidence intervals overlap, indicating similar efficacy. D only (Option A): Only includes plot D, neglecting C and E. D and E (Option B): Only includes plots D and E, neglecting C. A, B, C and D (Option D): Includes plots A and B, which differ significantly from efficacy zone, unlike C, D, and E.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 116

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: When are the three doses of fIPV ideally given as per the National Immunization Schedule? (Q860575)

A. 3 doses at 6 weeks, 14 weeks, and 9 completed months

B. At 10 weeks, 14 weeks, and 9 completed months

C. At 6 weeks, 10 weeks, and 18 completed months

D. 3 doses at 6 weeks, 14 weeks, and 18 completed months

Correct Answer: A. 3 doses at 6 weeks, 14 weeks, and 9 completed months

Explanation: IPV (Inactivated Polio vaccine) is administered by intramuscular or fractional dose by intradermal injection Schedule of fIPV (fractional IPV): 6 and 14 weeks; 0.1 ml ID Right upper arm. fIPV: 1/5th of the full dose. From 1 January 2023, the third dose of IPV is introduced into the NIS, which is administered at 9 completed months of age: 0.1 ml ID Left upper arm (as the MR vaccine is administered in the right upper arm). Incorrect Options: Options B, C, and D are incorrect

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 240

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: A 10 year old child is brought to the clinic for his regular immunization. What vaccine is given as a part of the national immunization schedule? (Q860600)

A. TT/Td

B. BCG

C. MMR

D. DPT

Correct Answer: A. TT/Td

Explanation: TT/Td (Tetanus Toxoid/Tetanus-diphtheria) vaccine is given as a part of the immunization program for a 10-year-old school child. TT/Td (Tetanus Toxoid/Tetanus-diphtheria) vaccine: The TT/Td vaccine is given to provide protection against tetanus and diphtheria. It is often administered as a booster dose every 10 years to maintain immunity. At the age of 10, a child may receive a TT/Td vaccine as a part of their routine immunization schedule. National Immunization Schedule: Time Vaccines At birth BCG, OPV0 (OPV birth dose), Hep B (birth dose) 6 weeks OPV1, Penta1, RVV1, fIPV1, PCV1 10 weeks OPV2, Penta2, RVV2 14 weeks OPV3, Penta3, RVV3, fIPV2, PCV2 9 completed months MR1, JE1, PCV booster, fIPV3, vitamin A 16-24 months MR2, JE2, OPV booster, DPT booster 1 5-6 years DPT booster 2 10 years Td 16 years Td Incorrect Options: BCG (Option B): The BCG vaccine is typically given at birth or during infancy to protect against tuberculosis. It is not part of the immunization program for a 10-year-old child. MMR (Option C): The MMR vaccine is usually administered around 12-15 months of age and a second dose at 4-6 years of age. It protects against measles, mumps, and rubella. By the age of 10, most children would have already received the recommended doses of the MMR vaccine. DTP (Option D): The DPT vaccine is typically given during infancy and early childhood to protect against diphtheria, pertussis (whooping cough), and tetanus. By the age of 10, children would have already completed the recommended doses of the DPT vaccine series.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no:136
https://main.mohfw.gov.in/sites/default/files/24545352106148966387 3.pdf https://nhm.gov.in/New_Updates_2018/NHM_Components/Immunization/report/National_%20Immunization_Schedule.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which of the following vaccines is contraindicated in a child with immunodeficiency? (Q865301)

A. Hepatitis B (Hep B)

B. DPT (Diphtheria, Pertussis, Tetanus)

C. MMR (Measles, Mumps, Rubella)

D. Inactivated Polio Vaccine (IPV)

Correct Answer: C. MMR (Measles, Mumps, Rubella)

Explanation: MMR is a live attenuated vaccine and is generally contraindicated in immunocompromised individuals, whereas Hepatitis B, DPT, and IPV are inactivated vaccines and are considered safe for them. Category Recommendations HIV+ Individuals Inactivated Vaccines: Most are recommended, but effectiveness may vary based on immune deficiency. Live Vaccines: Generally contraindicated, with exceptions: MMR: Administer if asymptomatic or with mild symptoms (CD4+ ≥ 15%). Varicella: Consider if CD4+ ≥ 15%; MMRV

is not recommended. Yellow Fever : Contraindicated for severely immunocompromised under 6; specific precautions for others. Other Vaccines: Pneumococcal: PCV13 and PPSV23 are recommended. Meningococcal: MCV4 is recommended for children ≥ 2 months. Hib: Recommended if not given during infancy. Immunocompromised General Principles: Vaccination varies by condition, severity, risk, and vaccine type. Live Vaccines: Typically contraindicated; exceptions based on condition and vaccine. (Option C) Inactivated Vaccines: Effective but may be reduced based on immune deficiency. (Option A, B, D ruled out) Preterm Infants General Recommendations: Vaccinate based on chronological age, similar to full-term infants. Hepatitis B Vaccine: For ≥ 2 kg and stable: Birth dose within 24 hours. For < 2 kg: Birth dose deferred until 1 month or hospital discharge (if HBsAg-negative mother). All preterm, low-birthweight infants born to HBsAg-positive mothers should receive HBIG and hepatitis B vaccine within 12 hours of birth, with three additional doses starting at 1 month. Vaccination in elderly Influenza (flu): Annual vaccination, especially with high-dose or adjuvanted vaccines, helps protect against flu complications such as pneumonia and organ failure. Pneumococcal vaccine: A one-time vaccine against bacterial infections that can cause severe pneumonia. Shingles: A two-dose series to prevent shingles and its complications, like postherpetic neuralgia. Tdap (Tetanus, Diphtheria, Pertussis): Booster shots every 10 years to maintain immunity. RSV (Respiratory Syncytial Virus): Newly approved for older adults, especially those with heart or lung conditions.

References:

Vaccines in HIV patients -adults,children.

Park’s Textbook of Preventive and Social Medicine, 26th Edition, Page 111, 178.

Nelson Textbook of Paediatrics, 21st Edition, Pages 1359-1360, 1362-1363.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following vaccines will you use in the clinic? (Q866471)

A. Use 1 only

B. Use 1 and 2

C. Use 1, 2, and 3

D. Use 4 only



Correct Answer: B. Use 1 and 2

Explanation: Vaccine Vial Monitor (VVM): Purpose: A heat-sensitive label on vaccine vials to ensure vaccine potency during transportation and storage. Function: The VVM contains a heat-sensitive material that changes colour irreversibly when exposed to heat over time. Healthcare providers use this visual indicator to assess if a vaccine has been exposed to inappropriate temperatures. Usage Criteria: The vaccine is usable if the inner square of the VVM is lighter than the outer circle. (Option B) The vaccine should be discarded if the inner square is the same colour as or darker than the outer circle.





References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A mother brings her 9-month-old baby, concerned that no BCG scar has appeared, although the baby received the BCG vaccine at birth. What is the next best step? (Q866770)

A. Reassure the mother

B. Give the BCG vaccine immediately

C. Do the Mantoux test & wait for the result

D. Refer the baby for a chest X-ray & further evaluation

Correct Answer: A. Reassure the mother

Explanation: After BCG vaccination, some children may not develop a visible scar, even though they have adequate immunity. No BCG scar is not an indication for revaccination if the child is otherwise healthy. WHO and national immunization guidelines recommend no further action in such cases- simply reassure the caregiver. BCG Vaccine Type : Live attenuated strain of Mycobacterium bovis Schedule : Single dose at birth (or as early as possible till 1 year of age) Dose & route : 0.05 mL (infants <1 yr), 0.1 mL (≥1 yr) — intradermal, left upper arm Purpose : Protection against severe forms of childhood TB (TB meningitis, miliary TB) Contraindications : Symptomatic HIV infection, immunodeficiency, pregnancy, generalized skin disease Storage : Lyophilized form at 2–8 °C ; reconstituted vaccine stable for 3–4 hours only Adverse events : Local ulcer at site, regional lymphadenitis, keloid (rare) Coverage target : Universal Immunization Programme (UIP) Give the BCG vaccine immediately (Option B): Revaccination is not recommended; lack of scar doesn't mean lack of immunity. Do Mantoux test & wait for the result (Option C): Not required in an asymptomatic, healthy, vaccinated child. Refer for chest X-ray & further evaluation (Option D): Only indicated if there are clinical features suggestive of TB.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Out of the MR & Pentavalent vaccine, which can be reused, and which one should be discarded when the vial is opened according to the open vial policy? (Q866771)

A. Discard MR, reuse Pentavalent

B. Discard Pentavalent, reuse MR

C. Discard both MR and Pentavalent

D. Reuse both MR and Pentavalent

Correct Answer: A. Discard MR, reuse Pentavalent

Explanation: Open Vial Policy (WHO guidelines) allows certain multi-dose vials to be reused for up to 28 days after opening if: They have no preservative contamination. They are kept under proper cold chain conditions (2–8 °C). Pentavalent vaccine → liquid formulation with preservative → can be reused until expiry within the 28-day rule. MR (Measles-Rubella) vaccine → lyophilized (freeze-dried) powder without preservative, reconstituted with diluent before use → must be discarded within 4 hours of reconstitution, irrespective of remaining doses. Open Vial Policy: Allows certain vaccines to be used in multiple immunization sessions after opening the vial, if stored and handled properly. If the vaccine is under the open vial policy then VVM will bw on the body (not on cap/neck). Purpose: Reduce vaccine wastage Ensure uninterrupted immunization services Lower programme costs without compromising safety. The vaccine can be kept and used for up to 28 days after opening only if: Vaccine is WHO-prequalified for MDVP use Vaccine vial is kept at recommended storage temperature (+2°C to +8°C) VVM (Vaccine Vial Monitor) has not crossed discard point Expiry date has not passed Aseptic technique used every time vial is opened Reconstituted vaccines (like BCG, Measles, MR, JE) must be discarded within 6 hours or at the end of the session — no exception. Vaccines NOT under Open Vial Policy: BCG Measles / MR COVID 19 (use within 8 hours) Discard Pentavalent, reuse MR (Option B): Wrong - MR cannot be used after 4 hous of

reconstitution, so it must be discarded. Discard both MR and Pentavalent (Option C): Wrong - Pentavalent can be reused if stored properly. Reuse both MR and Pentavalent (Option D): Wrong - MR cannot be reused after 4 hours of reconstitution.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: A person has recently moved from Nigeria to the United States. Which of the following vaccines is required for international travel from Nigeria to the USA? (Q866776)

A. Yellow Fever (17D) vaccine

B. Japanese Encephalitis (JE) vaccine

C. Measles vaccine

D. Rabies vaccine

Correct Answer: A. Yellow Fever (17D) vaccine

Explanation: Yellow fever is endemic in several African countries, including Nigeria. The WHO's International Health Regulations require travelers from countries with risk of yellow fever transmission to present a valid yellow fever vaccination certificate when entering certain countries, including the USA. This prevents international spread of the disease. Yellow Fever (17D) vaccine is a live-attenuated viral vaccine. Single subcutaneous dose provides immunity for life Required for travel from yellow fever-endemic areas to prevent spread to countries where the disease is not endemic. Nigeria is a yellow fever endemic zone; hence proof of vaccination is mandatory. Must be given at least 10 days before travel to be valid. Contraindications: Infants <9 months, severe egg allergy, immunocompromised persons, pregnancy (relative). Japanese Encephalitis (JE) vaccine (Option B): Recommended for travelers to rural Asia-Pacific regions, not Nigeria–USA travel. Measles vaccine (Option C): Important for general immunization but not an international travel requirement between Nigeria and USA. Rabies vaccine (Option D): Given for post-exposure prophylaxis or pre-exposure for high-risk groups, not a routine travel requirement for this route.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: In a 10-year-old school child, which of the following vaccines is given as a part of the school immunization program? (Q855456)

A. Measles vaccine

B. Rotavirus vaccine

C. Td vaccine

D. Hepatitis B vaccine

Correct Answer: C. Td vaccine

Explanation: TT/Td vaccine given at 10 years in school program Pentavalent vaccine given at 6, 10, 14 weeks with boosters TT boosters at 10, 16 years Prevents Tetanus from Clostridium tetani Tetanospasmin is dangerous exotoxin Soil is source Herd immunity ineffective National Immunization Schedule: Vaccine Due age Dose Route Site BCG At birth < 1 month - 0.05 ml > 1 month - 0.1 ml Intradermal Left upper arm Hepatitis B (Option D) At birth 0.5 ml Intramuscular Anterolateral aspect of left mid thigh OPV -0 At birth 2 drops Oral Oral OPV 1,2,3 6, 10,14 weeks 2 drops Oral Oral Pentavalent 1,2,3 6,10,14 weeks 0.5 ml Intramuscular Anterolateral aspect of left mid thigh IPV 6,14 weeks 0.1 ml Intradermal Right upper arm Rotavirus (Option B) 6,10,14 weeks 5 drops Oral Oral Pneumococcal vaccine 6,14 weeks At 9 completed months 0.5 ml Intramuscular Anterolateral aspect of right mid thigh 1st dose Measles/ Rubella (Option A) At 9 completed months - 12 months 0.5 ml Subcutaneous Right upper arm 1st dose JE At 9 completed months - 12 months 0.5 ml Subcutaneous Left upper arm 1st dose Vitamin A At 9 completed months 1 ml Oral Oral DPT- booster 1 16-24 months 0.5 ml Intramuscular Anterolateral aspect of left mid thigh 2nd dose Measles/ Rubella (Option A) 16-24 months 0.5 ml Subcutaneous Right upper arm OPV booster 16-24 months 2 drops Oral Oral 2nd dose JE 16-24 months 0.5 ml Subcutaneous Left upper arm 2nd-9th dose Vit A At 16, then one dose every 6 months 2 ml Oral Oral DPT- booster 2 5-6 years 0.5 ml Intramuscular Upper arm TT 10 years and 16 years 0.5 ml Intramuscular Upper arm For Pregnant women TT-1 Early pregnancy 0.5 ml Intramuscular Upper arm TT-2 4 weeks following TT1 0.5 ml Intramuscular Upper arm TT booster If mother has taken TT disease in pregnancy within the last 3 years 0.5 ml Intramuscular Upper arm

References:

Park textbook of preventive and social medicine, 25th edition, Pg. no. 135.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Which of the following is not a polysaccharide vaccine? (Q839877)

A. Hep B

B. Pneumococcal

C. Meningococcal

D. Hib

Correct Answer: A. Hep B

Explanation: Correct Option A - Hep B: Hepatitis B vaccine is a recombinant protein vaccine, not a polysaccharide vaccine. It contains HBsAg (Hepatitis B surface antigen) produced through recombinant DNA technology. Incorrect Options: Options B, C, and D: They are examples of polysaccharide vaccines.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Which of the following statements about the rotavirus vaccine is incorrect? (Q839888)

A. Given orally

B. Cannot be given after 6 months of age

C. Live vaccine

D. It has monovalent and pentavalent form

Correct Answer: B. Cannot be given after 6 months of age

Explanation: Option B - Cannot be given after 6 months of age: Incorrect : This statement is not accurate. The rotavirus vaccine is typically given in multiple doses, starting at around 2 months of age. The series is usually completed by 8 months of age. While the first dose should not be given after 15 weeks of age, the series can and should be completed by 8 months. The recommendation is to complete the vaccination series by 8 months of age. Incorrect Options: Correct Option A - Given orally : True : The rotavirus vaccine is administered orally. It is designed to immunize the gastrointestinal tract directly, which is the site of rotavirus infection. Option C - Live vaccine: True : The rotavirus vaccine is a live attenuated vaccine. It contains a weakened form of the virus that stimulates the immune system without causing disease in healthy individuals. Option D - It has monovalent and pentavalent form: True : There are two types of rotavirus vaccines available: the monovalent vaccine (Rotarix) and the pentavalent vaccine (RotaTeq). Rotarix contains one strain of the rotavirus, while RotaTeq contains five different strains.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Which of the following vaccine is kept at lowest level in the equipment shown below? (Q844097)

A. OPV

B. DPT

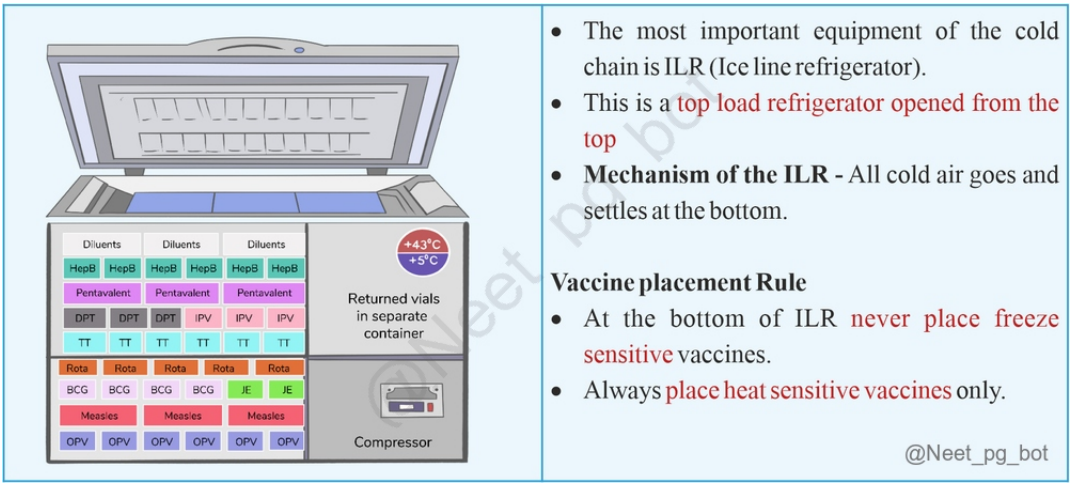
C. Hep B

D. Rota



Correct Answer: A. OPV

Explanation: Correct Option A - OPV: The OPV (Oral Polio Vaccine) is kept at the lowest level in Intermediate-Level Refrigerators (ILRs) compared to the other vaccines listed. Incorrect Options: Option B - DPT (Diphtheria, Pertussis, Tetanus): DPT is a combination vaccine and is sensitive to temperature changes. It needs to be stored in a controlled environment to maintain its efficacy, typically at a temperature range of 2°C to 8°C in ILRs. Option C - Hep B (Hepatitis B Vaccine): Hepatitis B vaccine is sensitive to temperature and must be kept at a stable temperature of 2°C to 8°C, similar to DPT, but it is more sensitive to freezing. Thus, it requires careful monitoring to avoid freezing. Option D - Rota (Rotavirus Vaccine): The Rotavirus vaccine is sensitive to temperature fluctuations and is generally stored in ILRs at 2°C to 8°C. However, it is often kept at a higher level in the cold chain to ensure stability.



References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: Shanchol vaccine consists of? (Q844099)

A. Monovalent 2 doses

B. Monovalent 1 dose

C. Bivalent 2 doses

D. Bivalent 1 dose

Correct Answer: C. Bivalent 2 doses

Explanation: Correct Option C - Bivalent 2 doses: This refers to a vaccine that targets two different strains of Vibrio cholerae and requires two doses for complete immunization. The Shanchol vaccine is a bivalent vaccine, meaning it covers two different strains of Vibrio cholerae (O1 and O139) and typically requires two doses for full protection. Incorrect Options: Option A, B, and D are incorrect.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: Which of the following is the schedule of the OPV vaccine? (Q852607)

A. 6th week, 10th week and 14th week

B. 6th week, 10th week & 9th month

C. 6th week, 14th week & 9th month

D. 6 to 12 weeks

Correct Answer: A. 6th week, 10th week and 14th week

Explanation: Oral Polio Vaccine (OPV) is administered as part of the routine immunisation schedule at 6, 10, and 14 weeks along with DPT and other vaccines. Additionally, a booster dose is given at 16–24 months. Differences between IPV and OPV: Characteristic IPV (salk type) OPV (sabin type) Type of vaccine Killed formalised virus Live attenuated virus Mode of administration S/C or IM (0.5 mL) Oral (2 drops) Type of immunity Only humoral Humoral and intestinal Prevention of Paralysis Paralysis + Intestinal re-infection Control of epidemics Not useful Effective Storage & transport Less stringent conditions Requires sub-zero temperatures Shelf life Longer Short VAPP (Vaccine Associated Paralytic Polio) Zero incidences 1 per 1 million vaccines Schedule of OPV: 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years; 2 oral drops Schedule of fIPV (fractional IPV): 6 and 14 weeks; 0.1 ml ID Right upper arm. fIPV: 1/5th of the full dose. From 1 January 2023, the third dose of IPV is introduced into the NIS, which is administered at 9 completed months of age: 0.1 ml ID Left upper arm (as the MR vaccine is administered in the right upper arm).

References:

Park, 27th Edition, Page 240

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: Which of the following is the fIPV dose schedule under the National Immunization Schedule? (Q852673)

A. 6 weeks, 10 weeks, 14 weeks

B. At birth, 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years

C. 6 weeks, 14 weeks, 9 months

D. 6 weeks, 10 weeks, 12 weeks

Correct Answer: C. 6 weeks, 14 weeks, 9 months

Explanation: Fractional Inactivated Polio Vaccine (fIPV) is administered intradermally at 6 weeks and 14 weeks as part of the routine immunisation schedule. Additionally, a booster dose is given at 9 months. Differences between IPV and OPV: Characteristic IPV (salk type) OPV (sabin type) Type of vaccine Killed formalised virus Live attenuated virus Mode of administration S/C or IM (0.5 mL) Oral (2 drops) Type of immunity Only humoral Humoral and intestinal Prevention of Paralysis Paralysis + Intestinal re-infection Control of epidemics Not useful Effective Storage & transport Less stringent conditions Requires sub-zero temperatures Shelf life Longer Short VAPP (Vaccine Associated Paralytic Polio) Zero incidences 1 per 1 million vaccines Schedule of OPV: 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years; 2 oral drops Schedule of fIPV (fractional IPV): 6 and 14 weeks; 0.1 ml ID Right upper arm. fIPV: 1/5th of the full dose. From 1 January 2023, the third dose of IPV is introduced into the NIS, which is administered at 9 completed months of age: 0.1 ml ID Left upper arm (as the MR vaccine is administered in the right upper arm). 6 weeks, 10 weeks, 14 weeks (Option A) is incorrect because fIPV is given at 6 and 14 weeks , not at 10 weeks. At birth, 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years (Option B) is incorrect because this schedule includes OPV doses and does not match the fIPV schedule, which is 6 weeks, 14 weeks, and a booster at 9 months . 6 weeks, 10 weeks, 12 weeks (Option D) is incorrect because fIPV is not given at 10 and 12 weeks. The correct schedule is 6 weeks and 14 weeks , with a booster at 9 months .

References:

Park, 27th Edition, Page 240

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: Which of the following vaccines is not recommended after 65 years? (Q852856)

A. Influenza

B. Herpes Zoster

C. Pneumococcal

D. Human papilloma virus

Correct Answer: D. Human papilloma virus

Explanation: HPV vaccine is not routinely recommended after 26 years and is generally not given after 45 years, as older individuals are less likely to benefit. Influenza, Pneumococcal, and Herpes Zoster vaccines are strongly recommended for adults ≥65 years to prevent severe infections. HPV vaccination is primarily for younger individuals to prevent cervical and other HPV-related cancers. Older adults have likely been exposed to HPV already , reducing vaccine efficacy. Adult Vaccination Recommendations (≥65 Years) Aging individuals face an increased risk of respiratory infections, viral reactivation, and opportunistic infections due to immune decline. Vaccination is a critical preventive strategy. Recommended Vaccines for Adults ≥65 Years Vaccine Purpose Recommended After 65? Influenza Prevents seasonal flu complications Yes, annually Pneumococcal (PCV15/PCV20, PPSV23) Prevents pneumonia, bacteremia, meningitis Yes, once or as per schedule Herpes Zoster (Recombinant Zoster Vaccine - RZV) Prevents shingles and postherpetic neuralgia Yes, 2 doses after 50

years Tetanus, Diphtheria, Pertussis (Tdap/Td) Prevents tetanus and pertussis Yes, booster every 10 years COVID-19 Reduces risk of severe COVID-19 Yes, as per updated recommendations HPV Prevents cervical and other cancers Not recommended after 45 years Why is the HPV Vaccine Not Given After 65? Most individuals are already exposed to HPV by this age. Vaccine efficacy is highest in younger populations (9-26 years). No added benefit in older adults, as HPV-related cancer risk decreases. Influenza (Option A): Incorrect because annual flu vaccination is recommended to prevent severe complications. Herpes Zoster (Option B): Incorrect because shingles risk increases with age, so vaccination is advised after 50 years . Pneumococcal (Option C): Incorrect because pneumococcal vaccine is recommended after 65 years to prevent pneumonia and invasive infections .

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC4928529/

https://pmc.ncbi.nlm.nih.gov/articles/PMC4928530/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: All are live vaccines except: (Q852858)

A. Rota virus

B. Hepatitis B

C. Measles

D. Varicella

Correct Answer: B. Hepatitis B

Explanation: Hepatitis B vaccine is a recombinant subunit vaccine , not a live vaccine. Live vaccines contain attenuated (weakened) pathogens that induce a strong immune response. Rotavirus, Measles, and Varicella vaccines are all live attenuated vaccines. Hepatitis B vaccine contains HBsAg (Hepatitis B surface antigen) and is inactivated. Live vs. Inactivated Vaccines Vaccines can be classified into live attenuated vaccines and inactivated vaccines based on their mechanism of inducing immunity. Live Attenuated Vaccines (LAVs) Contain weakened versions of the pathogen. Provide strong, long-lasting immunity with fewer doses. Not given to immunocompromised individuals due to risk of reactivation. Examples of Live Vaccines: Vaccine Disease Prevented Rotavirus Rotavirus gastroenteritis Measles, Mumps, Rubella (MMR) Measles, Mumps, Rubella Varicella Chickenpox Oral Polio Vaccine (OPV) Poliomyelitis Yellow Fever Yellow Fever BCG Tuberculosis Inactivated Vaccines Contain killed or non-infectious components of the pathogen. Require booster doses for sustained immunity. Safer for immunocompromised patients. Examples of Inactivated Vaccines: Vaccine Disease Prevented Type Hepatitis B Hepatitis B Recombinant subunit Polio (IPV) Poliomyelitis Inactivated Rabies Rabies Inactivated Influenza (Injectable) Influenza Inactivated COVID-19 (Covaxin, Sinopharm) COVID-19 Inactivated Rotavirus (Option A): Incorrect because it is a live oral vaccine used to prevent severe rotavirus diarrhea. Measles (Option C): Incorrect because it is part of the MMR vaccine , which is live attenuated. Varicella (Option D): Incorrect because it is a live attenuated vaccine used to prevent chickenpox .

References:

Park’s Textbook of Preventive and Social Medicine 27th edition. Pg. 111-112

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: What is the schedule and route of administration of MR vaccine and vitamin A? (Q854773)

A. MR vaccine administered subcutaneously along with oral vitamin A at 8 months

B. MR vaccine administered intramuscularly along oral vitamin A at 8 months

C. MR vaccine administered subcutaneously along with oral vitamin A at 9 months

D. MR vaccine administered intramuscularly along with oral vitamin A at 9 months

Correct Answer: C. MR vaccine administered subcutaneously along with oral vitamin A at 9 months

Explanation: National Immunization Schedule: Time Vaccines At birth BCG, OPV0 (OPV birth dose), Hep B (birth dose) 6 weeks OPV1, Penta1, RVV1, fIPV1, PCV1 10 weeks OPV2, Penta2, RVV2 14 weeks OPV3, Penta3, RVV3, fIPV2, PCV2 9 completed months MR1, JE1, PCV booster, fIPV3, vitamin A 16-24 months MR2, JE2, OPV booster, DPT booster 1 5-6 years DPT booster 2 10 years Td 16 years Td Age Vitamin A Dosage(Oral route) <6 months 50,000 IU 6 - 12 months 100,000 IU 9 months 100,000 IU 1-5 years (every 6 months) 200,000 IU Route Vaccine Dose Site Oral OPV 2 drops Oral Rotavirus 5 drops Oral Intradermal BCG 0.1 ml (0.05 ml until 1 month) Left upper arm fIPV 0.1 ml Right upper arm Intramuscular Pentavalent (DPT, Hep B, Hib) 0.5 ml Antero-lateral side of mid-thigh PCV 0.5 ml Antero-lateral side of mid-thigh Td 0.5 ml Upper arm Subcutaneous MR 0.5 ml Right upper arm JE 0.5 ml Left upper arm Live vaccine via S.C Killed vaccine via I.M Intranasal Influenza 0.2 mL (0.1 mL each nostril) Nasopharynx

References:

Park’s Textbook of Preventive and Social Medicine 27 edition, pg no 115, 136, 459

https://main.mohfw.gov.in/sites/default/files/24545352106148966387 3.pdf

https://nhm.gov.in/New_Updates_2018/NHM_Components/Immunization/report/National_%20Immunization_Schedule.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: Vaccine protocol followed after Disaster? (Q854861)

A. Everyone is given diphtheria

B. Everyone is given tetanus toxoid

C. Everyone is given cholera vaccine

D. Only the health worker given cholera, typhoid, tetanus toxoid

Correct Answer: D. Only the health worker given cholera, typhoid, tetanus toxoid

Explanation: Correct Option: D) Only the health worker given cholera, typhoid, tetanus toxoid Health workers receive additional protection in disaster situations Cholera, typhoid, and tetanus toxoid vaccinations provided to minimize infection risk Ensures safety while providing medical care Vaccination protocol post- disaster : All vaccines except for measles are contraindicated post-disaster. Multidose vaccines, such as typhoid and cholera vaccines, have poor compliance and have not yet proven to be effective as a large-scale public health measure. The most common post-disaster outbreak is measles. For this reason, measles vaccines can be given within three days of exposure since the time taken for antibodies to form is less than the natural incubation period of the disease. Tetanus vaccine is given based on previous vaccinations and severity of injury. Vaccines for healthcare workers: Cholera, Typhoid, Tetanus, Hep B. Everyone is given diphtheria (Option A) : Diphtheria vaccination likely already part of routine immunization schedules Everyone is given tetanus toxoid (Option B) : Tetanus toxoid crucial in disaster scenarios, especially for those with injuries Everyone is given cholera vaccine (Option C) : Cholera vaccination not typically administered to everyone in general disaster response

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 111

↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: A 7-year-old child is bitten on the hand by a neighbor’s dog whose vaccination status is unknown. On examination, there are two small puncture wounds with slight bleeding. Which of the following statements is/are correct? The wound is classified as Category III exposure. The wound should be washed with soap and running water for at least 15–20 minutes. The wound should be cleaned thoroughly with spirit. Rabies immunoglobulin (RIG) should be infiltrated into and around the wound as much as anatomically possible. The intradermal anti-rabies vaccine schedule is given on days 0, 3, 7, and 28. (Q855133)

A. 1, 2, 4, 5

B. 1, 2, 3, 5

C. 2, 3, 4, 5

D. 1, 3, 4, 5

Correct Answer: A. 1, 2, 4, 5

Explanation: The statements 1, 2, 4, and 5 are correct. Category Description I Touching or feeding animals, licks on intact skin II Nibbling of uncovered skin, minor scratches or abrasions without bleeding III Single or multiple transdermal bites or scratches, licks on broken skin, contamination of mucosa with saliva, exposure to bats (Statement 1) Wound washing: Immediate and thorough washing of the wound with soap and running water for at least 15–20 minutes is essential and recommended to reduce viral load and prevent infection.■ (Statement 2) Cleaning with spirit: Use of spirit (alcohol) is generally not recommended because it can cause tissue damage and delay healing. Povidone-iodine or simple washing is preferred. Hence, this statement is incorrect.■ (Statement 3 ruled out) Rabies immunoglobulin infiltration: Rabies immunoglobulin (RIG) should be infiltrated into and around the wound as much as anatomically possible in Category III exposure if the patient is not previously vaccinated.■ (Statement 4) Intradermal vaccine schedule: The WHO-recommended schedule of days 0, 3, 7, and 28 is recommended for PEP following Category III exposures. (Statement 5)

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC5790559/

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 324-327

↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: Which of the following statements is false regarding rabies immunoglobulin? (Q855277)

A. It is exclusively given only in the deltoid

B. The dose is 20 IU/kg

C. Administer it immediately after exposure

D. If human RIG is unavailable, equine is preferred

Correct Answer: A. It is exclusively given only in the deltoid

Explanation: RIG is not exclusively given in the deltoid . It is administered by infiltrating as much of the dose as possible around and into the wound site, with the remaining dose injected intramuscularly (usually in the gluteal region). It should not be given in the deltoid or gluteal region alone without infiltrating the wound. The dose is 20 IU/kg (Option B) is true for human rabies immunoglobulin (HRIG). For equine RIG (ERIG), the dose is 40 IU/kg.

Administer it immediately after exposure (Option C) is true . RIG should be given as soon as possible after exposure, especially in Category III wounds, to neutralise the virus at the site of entry. If human RIG is unavailable, equine is preferred (Option D) is true . ERIG is used when HRIG is unavailable, and it is equally effective when administered correctly.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 324-327

↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: Which of the following regarding the vaccine vial monitor (VVM) is true? 1. It is used for monitoring heat exposure of the vaccine by healthcare workers in primary healthcare. 2. It shows cumulative exposure of the vaccine to the heat. 3. It can be used to assess the potential efficacy of the vaccine 4. Calculation of the expiry date can be done using VVM. 5. The expiry date of the vaccine can be relaxed if VVM is an acceptable range. 6. If the square and the circle are the same in color, then the vaccine can be safely used. (Q855309)

A. 3, 4

B. 1, 2

C. 1, 2, 3, 4, 5

D. 5, 6

Correct Answer: B. 1, 2

Explanation: 1. It is used for monitoring heat exposure of the vaccine by healthcare workers in primary healthcare. This is true. VVM is a tool used in primary healthcare to monitor the exposure of vaccines to heat during transportation and storage. It is particularly useful in areas with unreliable cold chain systems. 2. It shows cumulative exposure of the vaccine to the heat. This is also true. The VVM works by showing the cumulative amount of heat the vaccine has been exposed to, indicating whether the vaccine has been subjected to conditions that might reduce its efficacy. 3. It can be used to assess the potential efficacy of the vaccine. This is false. The VVM does not directly assess the efficacy of the vaccine. It only shows whether the vaccine has been exposed to heat beyond its acceptable limit, which might affect its effectiveness. 4. Calculation of the expiry date can be done using VVM. This is false. The VVM does not calculate the expiry date of the vaccine. It is used to monitor heat exposure, not to predict or calculate the expiry date. 5. The expiry date of the vaccine can be relaxed if VVM is in an acceptable range. This is false. The VVM cannot be used to relax the expiry date of a vaccine. If the vaccine has been exposed to temperatures beyond the recommended limit, its efficacy may be compromised regardless of its expiration date. 6. If the square and the circle are the same in color, then the vaccine can be safely used. This is false. When the square and circle on the VVM are the same color, it indicates that the vaccine has been exposed to

heat for too long and should not be used, as it may have lost its potency.

References:

Park's Textbook of Preventive and Social Medicine, 26th Edition, Page 121, 122

↑ *Back to this question in Part A*

@Neet_pg_bot

Q33: In how many days should the post exposure Measles vaccine be given? (Q793727)

A. With in 7 days

B. With in 3 days

C. With in 1 days

D. With in 10 days

Correct Answer: B. With in 3 days

Explanation: Incorrect Option B - Within 3 days: Incubation period for measles is 10-14 days. 10th day- fever stars 14th day -rashes start IP of vaccine-induced measles is 7 days. Post-exposure vaccine must be used with in 3 days of exposure Incorrect Options: Option A, C and D

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q34: Which of the following vaccines are given at birth? (Q793843)

A. Pentavalent, MR, HiB

B. BCG, OPV, MR

C. BCG, OPV, Hepatitis B

D. BCG, IP, Hepatitis B

Correct Answer: C. BCG, OPV, Hepatitis B

Explanation: Correct Option C - BCG, OPV, Hepatitis B: BCG, OPV, and Hepatitis B vaccines given at birth in many countries BCG: Tuberculosis protection OPV: Polio protection Hepatitis B vaccine: Protects against Hepatitis B Administered within 24 hours of birth Incorrect Options: Option A - Pentavalent, MR, HiB: Pentavalent, MR, and HiB not given at birth Option B - BCG, OPV, MR: MR vaccine given at 9 months, not at birth Option D - BCG, IP, Hepatitis B: IP vaccine usually given at 6, 10, and 14 weeks, not at birth

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q35: At what age is the first dose of hepatitis B vaccine given? (Q793732)

A. Birth

B. 6 weeks

C. 10 weeks

D. 6 months

Correct Answer: A. Birth

Explanation: Correct Option A - At Birth: First dose of hepatitis B vaccine: Administered within 24 hours of birth Provides timely protection against transmission from mother to baby Subsequent doses: At 1-2 months and 6 months of age to complete the series Recommended as routine childhood vaccination by WHO and CDC Incorrect Options: Option B - 6 weeks: Safe to administer at 6 weeks but recommended to complete series as soon as possible Option C - 10 weeks: 10 weeks would be too long a delay Option D - 6 months: Vaccine is safe and effective after 6 months, but recommended to administer as early as possible, ideally within 24 hours of birth

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

• [04_Screening of Diseases] 013 Screening Of Diseases - I

« Back to Folder Directory

[04_Screening of Diseases] 013 Screening Of Diseases - I — Quick Jump

Q1 (p. 891)	*Q2 (p. 892)*	*Q3 (p. 892)*	*Q4 (p. 893)*	*Q5 (p. 894)*	*Q6 (p. 894)*
Q7 (p. 895)	*Q8 (p. 896)*	*Q9 (p. 897)*	*Q10 (p. 897)*	*Q11 (p. 898)*	*Q12 (p. 900)*
Q13 (p. 901)	*Q14 (p. 902)*	*Q15 (p. 903)*	*Q16 (p. 904)*	*Q17 (p. 905)*	*Q18 (p. 905)*
Q19 (p. 906)	*Q20 (p. 907)*	*Q21 (p. 908)*	*Q22 (p. 909)*	*Q23 (p. 909)*	*Q24 (p. 910)*

Q1: In syphilis screening, the RPR test is performed first. All individuals who test positive on RPR are then subjected to the FTA-ABS test. If multiple tests are conducted in parallel, what pattern of results would be expected? (Q840993)

A. Sensitivity increases, specificity decreases.

B. Sensitivity decreases, specificity increases.

C. PPV increases, NPV decreases.

D. Both specificity and PPV increase

Correct Answer: A. Sensitivity increases, specificity decreases.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: When multiple tests are done in parallel, the sensitivity increases and specificity decreases. Tests done in series Tests done in parallel A population is subjected to one screening test followed by a second one. The second test is done only if the first test is positive. Multiple tests are done concurrently. A person is considered positive for disease if any tests give a positive result. Evaluation of screening tests: Tests in series Tests in parallel Sensitivity Decreases Increases Specificity Increases Decreases PPV Increases Decreases NPV Decreases Increases PPV: Positive predictive value, NPV: Negative predictive value.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 156

Medical Biostatistics, 4th edition, Page 56

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following is the primary reason for using randomized control trials to assess the effectiveness of a screening program? (Q846617)

A. To determine the cost-effectiveness of the screening program

B. To assess whether early detection through screening reduces disease-specific mortality

C. To evaluate the prevalence of the disease in the population

D. To compare the compliance rates of different screening methods

Correct Answer: B. To assess whether early detection through screening reduces disease-specific mortality

Explanation: The main goal of a screening program is to detect a disease early to improve outcomes i.e. to reduce disease-specific mortality. Randomized controlled trials are used to establish causation and ensure the observed benefits are due to the screening intervention itself. Cost-effectiveness analysis (Option A) involves assessing the financial and resource implications of a screening program relative to its benefits. RCTs are primarily designed to evaluate clinical effectiveness, such as reducing mortality or morbidity and not for assessing the cost effectiveness. Prevalence studies(Option C) measure how widespread a disease is in a population at a specific time. They are observational and do not require RCTs. Compliance rates (Option D) are studied using observational studies or implementation research and not via randomized controlled trail

References:

Park's Textbook of Preventive and Social Medicine 26th Edition Pg: 151-153

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: All comprise inherent properties of a screening test except? (Q841006)

A. Negative predictive value

B. Accuracy

C. Yield

D. Positive predictive value

Correct Answer: C. Yield

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Yield is not one of the inherent properties of a screening test. Yield is defined as the number of new cases detected due to a screening test. It can be increased by restricting the sample size to high-risk groups, e.g., the presence of cardiovascular diseases in those who smoke. Disadvantage: identifying a small high-risk group can be difficult since some diseases might need a tedious filtration process to identify the high-risk population. Inherent properties of a screening test: Predictive accuracy Negative predictive value (Option A). Positive predictive value (Option D). Accuracy (Option B) - sensitivity & specificity.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 156

https://www.bmj.com/about-bmj/resources-readers/publications/epidemiology-uninitiated/10-screening

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A 45-year-old man presents to the emergency department with chest pain and the doctor suspects myocardial infraction thus orders a blood test to evaluate for a specific cardiac marker for the same which has a sensitivity of 95% and a specificity of 90%. In the general population, the prevalence of acute myocardial infarction is 2%, while in patients presenting to the emergency department with chest pain, the prevalence increases to 30%. Based on this scenario, which of the following statements is true concerning the test? (Q841003)

A. Positive predictive value remains constant when prevalence <25%

B. Negative predictive value increases as prevalence increases

C. Positive predictive value is directly proportional to the prevalence

D. Negative predictive value remains constant when prevalence >75%

Correct Answer: C. Positive predictive value is directly proportional to the prevalence

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The positive predictive value (PPV) of a test is directly proportional to the prevalence of a disease it detects, i.e., PPV increases as the prevalence increases provided the sensitivity and specificity of the test remains unchanged over the course of time (since prevalence can be considered as the pre-test probability of a disease) Since the sensitivity & specificity are going to be considered as constants throughout, the number of true positives and hence the positive predictive values will increase proportionately to the given prevalences over these three different time periods.

References:

Park’s textbook of Preventive and Social Medicine, 27th edition, page 156

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Among the population of 5 million people in a city, 1 in every 200 undergoes sudden cardiac arrest each year. A new government formed recently wanted to know the total number of sudden cardiac arrests in this population during the last 5 years. What will be the estimate per million population? (Q841002)

A. 21000

B. 23500

C. 25000

D. 28500

Correct Answer: C. 25000

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The question asks about the occurrence of an event over a defined period of time, called “prevalence.” Prevalence is the total number of cases (old & new) documented over a specific period. It can interchangeably be used with the term “point prevalence.” Incidence can be defined as the total number of new cases which occur over a specified point in time. Prevalence = Incidence x Duration In the above example, Incidence = 1 in every 200 people = 5000 per million = 25000 in total every year Duration = 5 years. Hence, prevalence = 1,25,000 in 5 million people = 25000 per million over the last 5 years. Prevalence can also be derived from the formula below:

$$\text{Prevalence} = \frac{\text{Total number of cases (old\&new) over a period of time}}{\text{Total population over the same period}} \times 100$$

@Neet_pg_bot

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 69

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: In a population of 1000 people who are at high risk of contracting syphilis, 650 were confirmed to be positive by serological studies. A new test that acts by detecting a new biomarker "X" has been introduced and 600 were found to be positive among serology-positive patients. 120 out of the remaining 350 people were also found to be having “X”. What is the positive predictive value of this new test? (Q841001)

A. 71%

B. 94%

C. 83%

D. 68%

Correct Answer: C. 83%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The positive predictive value of a test reflects the ratio of patients who actually have the disease to those who had positive test results. From the data given above, Serology positive Serology negative "X" positive 600 (a-true positive) 120 (b-false positive) "X" negative 50 (c-false negative) 230 (d-true negative) Positive predictive value = a/a+b = 600/600+120 = 83% The negative predictive value of a test reflects the probability that it will be negative in healthy, non-diseased individuals. In the above example, Negative predictive value = d/c+d = 230/230+50 = 82%

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 156

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A new imaging test has been introduced to diagnose breast cancer in a sample of 1500 people. Among those 600 people who have biopsy-confirmed breast carcinoma, 480 were found to be positive. 60 were also found positive among the remaining 900 biopsy-negative people. What is the sensitivity and specificity of this new test, respectively? (Q841000)

A. 72%; 90%

B. 88%; 79%

C. 94%; 89%

D. 80%; 93%

Correct Answer: D. 80%; 93%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The sensitivity of a test is defined as its ability to detect the presence of a disease in truly diseased people (true positives). The specificity of a test is defined as its ability to exclude the presence of a disease in healthy, non-diseased people (true negatives). From the data given above, Biopsy positive Biopsy negative BRight positive 480 (a- true positive) 60 (b- false positive) BRight negative 120 (c- false negative) 840 (d- true negative) Sensitivity = a/a+c = 480/480+120 = 80% Specificity = d/b+d = 840/840+60 = 93%

References:

Park’s textbook of preventive and social medicine 27th edition, page : 155

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following is incorrect regarding Cronbach's alpha? (Q840998)

A. Cronbach's alpha is a measure of internal consistency reliability.

B. It ranges from 0 to 1, with higher values indicating greater reliability.

C. Cronbach's alpha can be used to assess the validity of a measurement instrument.

D. Cronbach's alpha assumes that all items in the scale measure the same underlying construct.

Correct Answer: C. Cronbach's alpha can be used to assess the validity of a measurement instrument.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Cronbach's alpha is a measure of internal consistency reliability, not validity. Cronbach’s alpha: It measures the internal consistency of a test or scale, indicating the extent to which all items measure the same concept or construct. Alpha ranges between 0 and 1; higher values indicate greater internal consistency. To ensure validity, it should be calculated before a test is used. Reliability interpretation: Alpha reflects the measurement error in a test; higher alpha indicates less error variance. Recommended Values: Acceptable alpha values typically range from 0.70 to 0.95; extremely high values may indicate redundant items.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4205511/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Sensitivity/(1-specificity) is the formula to find which among the following? (Q840997)

A. Positive likelihood ratio

B. Negative likelihood ratio

C. Positive predictive value

D. Negative predictive value

Correct Answer: A. Positive likelihood ratio

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Positive likelihood ratio = Sensitivity/(1-specificity). Negative likelihood ratio = (1-sensitivity)/specificity. Likelihood ratios (LRs) compare the probability of a particular test result in people with the disease to the probability of the same result in people without the disease. Interpretation: LR of 1.0 means the test result is equally likely in those with and without the disease (no discrimination). Positive likelihood ratio Negative likelihood ratio It represents how much more likely a positive test result is in individuals with the disease than those without it. LR+ > 1 indicates a positive test result is more likely in those with the disease. Higher LR+ values (>10) indicate strong evidence of disease. Indicates how much less likely a negative test result is in individuals with the disease compared to those without the disease. LR- < 1 indicates a negative test result is less likely in those with the disease. Lower LR- values (<0.1) suggest strong evidence for excluding the disease.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5950618/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: What purpose is Kaplan-Meier analysis used primarily for? (Q840996)

A. Assessing the impact of economic factors on survival rates.

B. Estimating the probability of survival over time.

C. Analysing the correlation between lifestyle choices and health outcomes.

D. Predicting future trends in population demographics.

Correct Answer: B. Estimating the probability of survival over time.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Kaplan-Meier estimate is used to calculate the probability of survival over time after a certain treatment or intervention. It's particularly useful in clinical trials and community trials to assess the effect of interventions on survival outcomes. Censored Observations: These are the situations when subjects do not experience the event of interest (e.g., death) before the study ends or are lost to follow-up. Advantages: Handles censored data effectively, accommodating subjects who do not experience the event of interest during the study period. Provides a clear visual representation of survival probabilities over time. Clinical Relevance: Widely used in clinical research to evaluate treatment efficacy and compare interventions based on survival outcomes.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3059453/

↑ *Back to this question in Part A*

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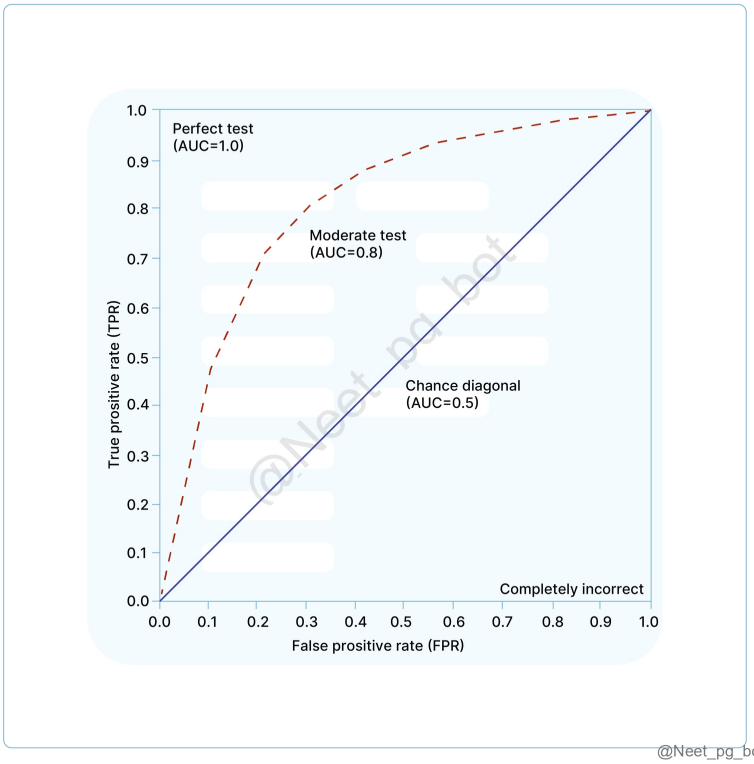
Q11: Given below are a few statements regarding the receiver operating curve. Which among the following is a false statement? (Q840995)

A. The best investigation is the one whose curve is most upward and left

B. The test with the minimum surface area under the cure is the most effective

C. Can be used for comparing two or more diagnostic tests

D. Can be used for deciding optimal cut-off points



@Neet_pg_bot

Correct Answer: B. The test with the minimum surface area under the cure is the most effective

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The test with the maximum surface area under its curve is the most effective in the receiver operating curve - incorrect and is the false statement The Area Under the Curve (AUC) ranges from 0.5 to 1 . AUC = 0.5: Test is no better than chance. AUC = 1: Perfect test. A larger AUC means better diagnostic accuracy. Therefore, the test with the maximum AUC is the most effective — not the one with the minimum area. The ROC curve illustrates the performance of a diagnostic test by plotting sensitivity (true positive rate) against 1 – specificity (false positive rate) for various threshold values. Incorrect options The best investigation is the one whose curve is most upward and left (Option A): True .A curve that bows most towards the upper left corner represents a test with high sensitivity and specificity, i.e., an excellent diagnostic test. The closer the curve is to the top-left corner , the better the test's discriminative ability. Can be used for comparing two or more diagnostic tests(Option C): True . ROC curves are commonly used to compare the performance of two or more diagnostic tests. You can visually and statistically compare the AUCs of different tests to see which is superior. Can be used for deciding optimal cut-off points (Option D): True. ROC curves help in identifying the threshold value that balances sensitivity and specificity. The optimal cut-off is often selected using the Youden index (sensitivity + specificity - 1) , which maximizes test accuracy.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8831439/

↑ *Back to this question in Part A*

@Neet_pg_bot

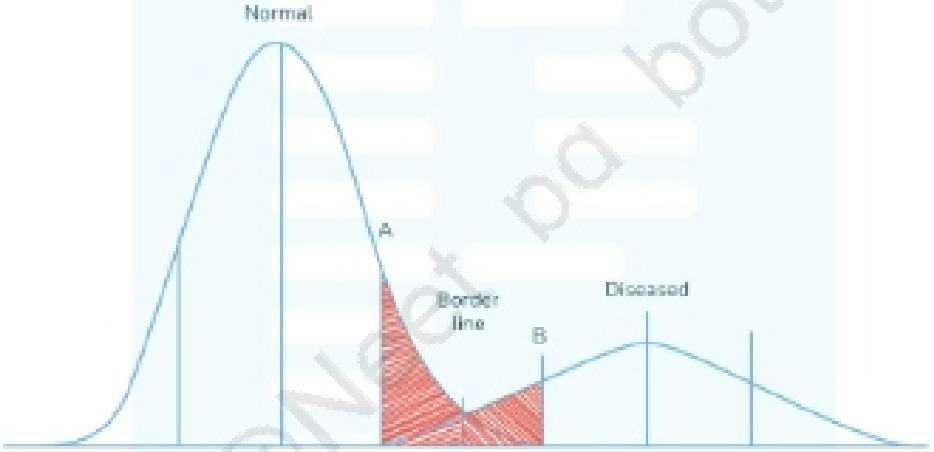
Q12: Below is a graph showing the results of a screening test. If the cut-off point is reduced from point B to A, what will be its effect on this screening test? (Q840994)

A. No effect at all

B. Sensitivity increases

C. Sensitivity decreases

D. Specificity increases



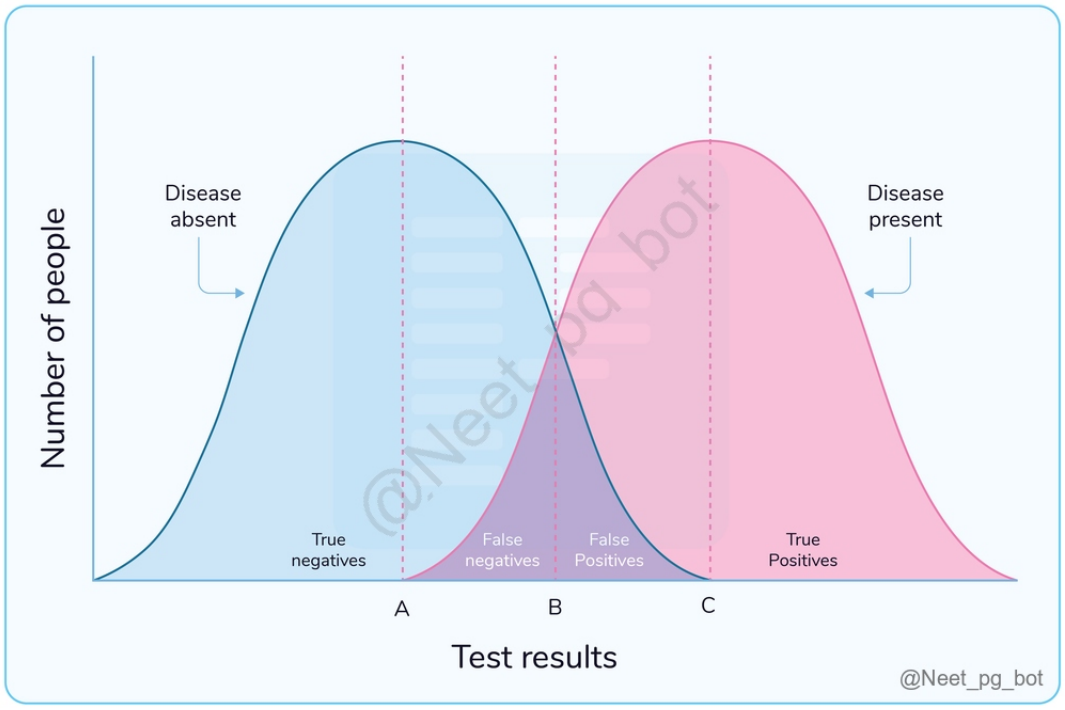
@Neet_pg_bot

Correct Answer: B. Sensitivity increases

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In a screening test, if the cut-off value that differentiates normal and diseased populations is changed from point B to point A on the curve [ie. Value reduced] the test's sensitivity will be increased [i.e. high true positives], but specificity will be reduced [high false positives]. If the cut-off is increased from point A to point B, sensitivity is reduced, and specificity is increased.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 157

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: A 40-year-old healthy man visits his family physician for a routine check-up. His physician recommends a series of tests to identify potential diseases that might be present without causing symptoms. This proactive approach is an example of which of the following? (Q840532)

A. Diagnosis

B. Surveillance

C. Screening

D. Lead time

Correct Answer: C. Screening

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Screening: Identifying unrecognized diseases or defects in apparently healthy individuals using rapidly applied tests or other procedures. Purpose: early detection of disease before the person develops signs and symptoms The screening test is applied to the hidden (healthy) portion of the iceberg with the maximum disease burden. Advantages of Screening: Early Detection. Secondary level of prevention Reduce Disease Burden Cost-Effectiveness Public Health Benefit Diagnosis refers to identifying a disease after the patient presents with symptoms or signs of a disease. (Option A) Surveillance refers to constant search for diseases (Option B) . Lead time is the period between earliest possible point of diagnosis when there are no signs and symptoms to the usual time of diagnosis (Option C)

References:

Park's Textbook of Preventive and Social Medicine 26th Edition Pg: 151-152

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: The patient's blood pressure is 120/80 mm Hg. Four different sphygmomanometers measure his BP, each with 3 readings. Match the sphygmomanometers with their respective accuracy and precision parameters. Sphygmomanometer readings Accuracy and Precision parameters 1. 120/80, 120/80, 120/80 a. Precise but inaccurate 2. 140/96, 108/62, 96/82 b. Imprecise but accurate 3. 140/96, 140/96, 140/96 c. Precise and accurate 4. 122/82, 120/80, 118/78 d. Imprecise and inaccurate (Q840992)

A. 1-c, 2-b, 3-d, 4-a

B. 1-b, 2-c, 3-d, 4-a

C. 1-c, 2-d, 3-a, 4-b

D. 1-d, 2-a, 3-b, 4-c

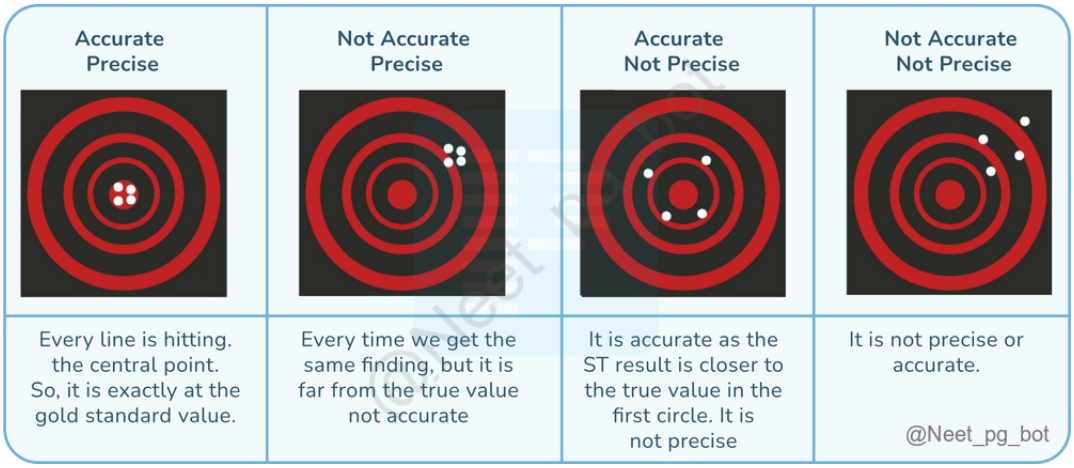
Correct Answer: C. 1-c, 2-d, 3-a, 4-b

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A game of darts can help one understand precision and accuracy. Let the centre point be the true value or gold standard value. Accuracy: Closeness to true value. Precision: Findings are replicable. Accurate & precise Not accurate & precise Accurate & not precise Not accurate & not precise Every line hits the central point exactly at the gold standard value. The same finding is seen, but far from the true value; it is inaccurate. It is accurate as the result is closer to the true value in the first circle; it is not precise. It is not precise or accurate. Correct Matching: 120/80, 120/80, 120/80 - c) Precise and accurate. This set of readings consistently measures 120/80 mm Hg, indicating both precision (reproducibility of measurements) and accuracy (close to the true value).

140/96, 108/62, 96/82 - d) Imprecise and inaccurate. These readings vary significantly (140/96, 108/62, 96/82), indicating both lack of precision (inconsistent measurements) and accuracy (not close to the true value). 140/96, 140/96, 140/96 - a) Precise but inaccurate. Readings are consistent (140/96 each time), indicating precision (reproducibility) but they are consistently incorrect, hence inaccurate. 122/82, 120/80, 118/78 - b) Imprecise but accurate. The readings vary slightly (122/82, 120/80, 118/78), indicating lack of precision (slightly inconsistent measurements), but they are close to the true value (accurate).



References:

IAPSM textbook of Community medicine, 2nd edition, Page.133

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: The diagnostic power of a test to correctly exclude the disease is reflected by? (Q840991)

A. Sensitivity

B. Specificity

C. Positive Predictive Value

D. Negative Predictive Value

Correct Answer: D. Negative Predictive Value

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Negative Predictive Value (NPV): It is the probability that individuals with a negative test result do not have the disease, reflecting the diagnostic power of a test to exclude disease correctly. It indicates how well a

negative test result predicts the absence of the disease. Formula: Negative predictive value = True negative / True negative +False negatives Positive Predictive Value (PPV): It is the probability that individuals with a positive test result truly have the disease or condition of interest. It indicates how well a test result predicts the presence of the disease. (Option C) Formula: Positive predictive value = True positive / True positives +False positives Specificity is the ability of a test to correctly identify individuals who do not have the disease (true negative rate). (Option B) Sensitivity is a test's ability to correctly identify individuals who have the disease (true positive rate) (Option A)

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.155,156

IAPSM textbook of Community medicine (2nd edition) Page.133,134

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Specificity is a property of a screening test .Specificity of a test means all except? (Q840990)

A. Refers to the ability of a test to identify those without a condition as negative.

B. It is calculated as the ratio of true negatives to the sum of true negatives and false positives.

C. A highly specific test will rarely produce false positives.

D. It is related to the condition's prevalence in the population being tested.

Correct Answer: D. It is related to the condition's prevalence in the population being tested.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Specificity is the ability of a test to correctly identify individuals who do not have the disease (true negative rate). It is expressed as the proportion of true negatives (those who do not have the disease) among all disease-free individuals. Specificity is independent of the condition's prevalence in the population being tested. Positive predictive value is directly proportional to prevalence Negative Predictive value is inversely proportional to prevalence Formula: Specificity = True negatives / True negatives + False positives Importance: High specificity is important to minimise the number of false positive results, which can lead to further testing and potentially harmful treatments.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page.155

IAPSM textbook of Community medicine, 2nd edition, Page.134

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Sensitivity is the ability of a test to detect? (Q840987)

A. Individuals who do not have the disease

B. Individuals who have the disease

C. Individuals who have the disease but test negative

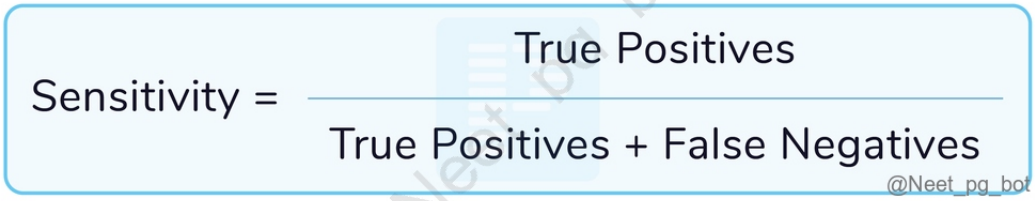
D. Individuals who do not have the disease but test positive

Correct Answer: B. Individuals who have the disease

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Sensitivity is a test's ability to correctly identify individuals who have the disease (true positive rate). It is expressed as the proportion of true positives (those who have the disease) among all individuals who have the disease. Formula: Importance: High sensitivity is crucial for screening tests to ensure that most diseased individuals are identified and can receive further diagnostic testing or treatment.



References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.155

IAPSM textbook of Community medicine (2nd edition) Page.134

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which of the following is not a test used for assessing accuracy? (Q840986)

A. Mean Chart

B. Levey-Jennings (LJ) Chart

C. Shewhart Control Chart

D. Scatter Plot

Correct Answer: D. Scatter Plot

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Scatter plot is used to assess precision. Validity/accuracy refers to the extent to which a measurement or diagnostic tool accurately identifies or measures what it is intended to. It measures accuracy, indicating how well the tool distinguishes between those with a disease or condition and those without it. Importance of accuracy: Correct Diagnosis and Treatment. Public Health Decision-Making. Epidemiological Research. Screening Programs. Components of accuracy: Sensitivity and Specificity. Accuracy tests: Mean chart (Option A). Levy Jenning (LJ) chart (Option B). Shewhart control chart (Option C).

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page.154,155

IAPSM textbook of Community medicine, 2nd edition, Page.134

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: A 45-year-old male patient presents to the emergency department with chest pain. An ECG is performed. Doctor 1 reviews the ECG and reports it as normal. However, Doctor 2 reviewed the same ECG and reported that it was abnormal. What is the most likely explanation for the differing interpretations of the patient's ECG by Doctor 1 and Doctor 2? (Q840985)

A. Intraobserver variation

B. Biological variation

C. Error related to technology

D. Interobserver variation

Correct Answer: D. Interobserver variation

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Interobserver variability refers to the differences in interpreting diagnostic tests or clinical findings between observers. This can occur even when both observers are highly trained and using the same diagnostic

criteria. Individual judgment, experience, and subjective assessment contribute to this variability. Properties of a screening test: Acceptability. Reliability/reproducibility/repeatability/consistency/precision. Validity/accuracy. Reliability: It refers to the consistency of a measurement or diagnostic test. High reliability means repeated measurements or interpretations by different observers produce similar results. Depends on 3 Factors: Observer Variability Biological Variation Errors Related to Technology Interobserver Variation: Differences between different observers. Example: Two doctors interpret the same ECG differently, which leads to different diagnoses. Natural changes in a patient's physiological parameters over time. For example, blood pressure fluctuates daily, and cholesterol levels vary with diet. Inaccuracies in measurement are due to malfunctioning equipment. For example, a faulty thermometer gives inconsistent temperatures. Intraobserver Variation: Differences in interpretation by the same observer at different times. Example: The same doctor interprets an ECG differently when reviewed at different times.

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page. 154

IAPSM textbook of Community medicine (2nd edition) Page.133,134

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: During the COVID-19 pandemic, airports implemented temperature screening and rapid antigen tests for passengers. This approach is an example of which type of public health screening? (Q840984)

A. Prospective Screening

B. Prescriptive Screening

C. Diagnostic Screening

D. Opportunistic Screening

Correct Answer: A. Prospective Screening

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Prospective screening is a proactive method to identify and manage health threats, such as COVID-19, at airports to prevent widespread outbreaks and detect infected individuals. Prescriptive Screening (Option B) Prospective Screening (Option A) Done for one's own benefit. Secondary level of prevention. Early diagnosis. Done for other's benefit. The primary level of prevention. Control/ prevention of disease. E.g. Screening neonates for neonatal hypothyroidism Deafness in children Blood glucose testing for diabetes mellitus and gestational diabetes Mammography for breast cancer Pap smear for cervical cancer Visual acuity for refractive errors. E.g. Screening of immigrants for diseases like TB and COVID HIV screening for blood donation HIV screening in ANC cases Health checkups for workers in the food industry.

References:

https://www.sciencedirect.com/topics/medicine-and-dentistry/predictive-testing

https://www.researchgate.net/publication/323457581_Manual_of_screening

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: A health camp was organized to conduct cervical cancer screening. Which of the following best explains this type of screening test? (Q840982)

A. High-risk Screening

B. Multiphasic Screening

C. Mass Screening

D. Multipurpose Screening

Correct Answer: B. Multiphasic Screening

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Pap smear is a type of multiphasic screening that involves multiple tests, often starting with simple tests followed by more complex ones if initial results indicate a risk. Types of screening tests: 1. Mass Screening (Option C) All individuals screened irrespective of high risk. Least efficient type of screening. 2. High-risk screening/ selective screening/ targeted screening (Option A) Only high-risk individuals are screened. Most efficient form of screening. E.g.: Hypertension screening in the elderly. TB screening in lower socio-economic population. Breast cancer screening with a family history of breast cancer. 3. Multiphasic screening Application of 2 or more screening tests in combination to a large number of people at one time to detect a single disease. E.g., Health camps for cervical cancer: Questionnaire, Pap smear , Visual inspection. 4. Multipurpose screening (Option D) Screen the population with more than one test done simultaneously to detect more than one disease Screening blood tests of pregnant females (Hb, RA, HIV, VDRL, HbsAg) 5. Opportunistic screening or Case-finding Screening conducted during routine healthcare visits for other reasons Presumptive identification was not raised at the patient's request E.g., Screen everyone above 30 for hypertension

References:

Park’s Textbook of Preventive and Social Medicine, 26th Edition, Page: 153

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Which of the following statements about diseases suitable for screening is true? The disease should have a significant impact on public health. Early detection and treatment should reduce morbidity. The disease should have a short latent period. A reliable, invasive, and cost-effective screening test should be available. The disease should have a high prevalence in the population. (Q840981)

A. 2, 4 and 5

B. 1, 2, and 5

C. 2, 3 and 5

D. 2, 3 and 4

Correct Answer: B. 1, 2, and 5

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Disease criteria suitable for a screening test: The disease should have a significant impact on public health The natural history of the disease should be clearly understood (from the latest phase to the developed disease) Disease should have a prolonged latent phase and high prevalence The test should detect diseases in their early stages in asymptomatic individuals Tests should be reliable, accurate, non-invasive , easy to administer, and cost-effective. The facility should be available to confirm the diagnosis Treatment should be available. Evidence should show that early detection and timely treatment reduce mortality and morbidity.

References:

Park’s Textbook of Preventive and Social Medicine 26th Edition Pg: 153

↑ *Back to this question in Part A*

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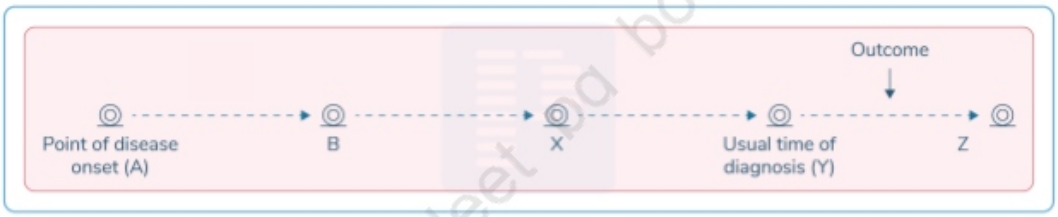
Q23: Which of the following appropriately represents lead time in the given figure (Q840980)

A. C

B. B to Y

C. B to X

D. X to Y

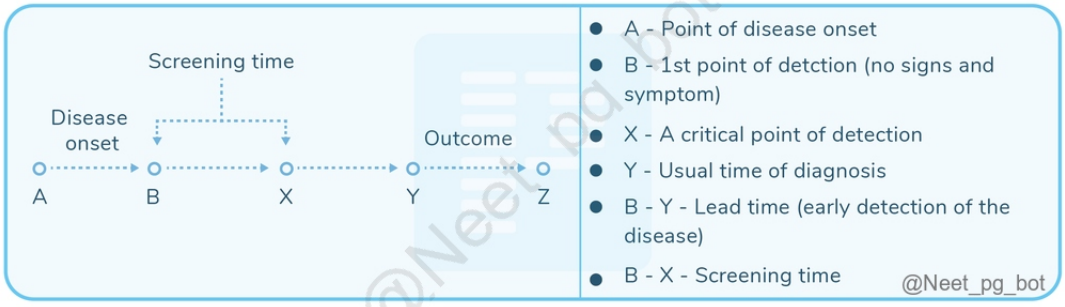


Correct Answer: B. B to Y

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Lead time: Time gained by early detection of disease or time difference between the earliest possible point of diagnosis and the usual time of diagnosis.



References:

Park's Textbook of Preventive and Social Medicine, 26th Edition, Page: 151-152

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: All of the following are features of a screening test except? (Q840979)

A. Aimed at early detection of disease in asymptomatic individuals.

B. High specificity is more important than high sensitivity.

C. Often less accurate and applied to a large population.

D. Typically involves simple, cost-effective and non-invasive procedures.

Correct Answer: B. High specificity is more important than high sensitivity.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Screening test Diagnostic test Done on apparently healthy people (Option A) Done for those who are sick Applied to groups/ large populations (Option C) Applied on individuals Test results are arbitrary and final. Diagnosis is not final but modified in the light of new evidence/ sum of evidence. Based on one criterion or cut-off value and lab findings. Based on the evaluation of signs and symptoms. Less accurate More accurate Tests are simple, non-invasive and cost-effective (Option D). Tests are complex, invasive, or costly procedures. It cannot be used as a basis for treatment. It can be used as a basis for treatment. The initiative comes from govt organizations/NGOs. The initiative comes from the patient. High sensitivity is prioritized to avoid false negatives. High specificity is prioritized to avoid false positives. (Option B)

References:

Park’s Textbook of Preventive and Social Medicine, 26th Edition, Page: 151-153

↑ *Back to this question in Part A*

@Neet_pg_bot

• [04_Screening of Diseases] 014 Previous Year Questions

« Back to Folder Directory

[04_Screening of Diseases] 014 Previous Year Questions — Quick Jump

Q1 (p. 912) *Q2 (p. 913)* *Q3 (p. 914)* *Q4 (p. 914)* *Q5 (p. 915)* *Q6 (p. 916)*
Q7 (p. 917) *Q8 (p. 918)* *Q9 (p. 919)* *Q10 (p. 920)* *Q11 (p. 920)*

Q1: Secondary prevention is most useful in the early detection and treatment of which of the following cancers? (Q866881)

A. Pancreatic cancer

B. Ovarian cancer

C. Glioblastoma

D. Cervical cancer

Correct Answer: D. Cervical cancer

Explanation: Secondary prevention involves early detection and prompt treatment to halt disease progression. It is most effective for cancers with a long preclinical phase and a reliable screening test. Cervical cancer fits these criteria - it has a well-defined precancerous stage (CIN), and screening via Pap smear or HPV testing can detect lesions early, allowing for effective intervention. Pancreatic, ovarian, and glioblastoma cancers typically lack effective population-based screening methods and have short asymptomatic phases, making secondary prevention less useful. Screening methods: Pap smear – Cytological detection of abnormal cervical cells. HPV DNA testing – Detects high-risk HPV strains. Visual Inspection with Acetic Acid (VIA) – Low-cost alternative in low-resource settings. WHO recommendation: Screen women aged 30–49 years at least once, preferably every 3–5 years. Early treatment of CIN significantly reduces invasive cervical cancer incidence. Levels of Prevention in Cancer: Level Goal Example in Cervical Cancer Primary Prevent onset HPV vaccination Secondary Early detection & prompt treatment Pap smear screening Tertiary Reduce complications & recurrence Radiotherapy, chemotherapy for invasive CA Pancreatic cancer (Option A): Usually diagnosed late due to lack of early symptoms and reliable screening tests; secondary prevention is limited. Ovarian cancer (Option B): No cost-effective, sensitive population-level screening; early detection remains challenging. Glioblastoma (Option C): Highly aggressive, short preclinical phase, and no screening method for asymptomatic individuals.



References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: You have gone to a village for screening where people have diabetes and hypertension. What type of screening is done for family members of these patients who show up in large numbers? (Q852849)

A. Multiphasic screening

B. Mass screening

C. High-risk screening

D. Anonymous screening

Correct Answer: C. High-risk screening

Explanation: High-risk screening targets individuals at increased risk due to family history, occupation, or exposure. In this case, family members of diabetic and hypertensive patients are at a higher genetic and lifestyle risk of developing these conditions. This approach optimizes resources by focusing on a subgroup with a greater probability of disease, improving early detection and intervention. Types of Screening in Public Health Screening programs are classified based on population coverage and purpose . Type of Screening Description Example Mass screening Testing entire populations , regardless of risk. Screening all adults in a village for hypertension. High-risk screening Targeting individuals with known risk factors . Screening family members of diabetics for early detection. Multiphasic screening Conducting multiple tests in one session to detect various diseases. Screening for diabetes, hypertension, and cholesterol simultaneously. Anonymous screening Testing where

participants' identities remain unknown . HIV screening in high-risk populations without recording names. Multiphasic screening (Option A): Incorrect because this involves testing multiple diseases in one go , rather than focusing on a high-risk group. Mass screening (Option B): Incorrect because mass screening includes everyone , not just high-risk individuals. Anonymous screening (Option D): Incorrect because identity is not concealed in this scenario; screening is based on family history.

References:

Park’s Textbook of Preventive and Social Medicine 26th Edition Pg: 153

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Diabetic screening for the pregnant mother in India is done between: (Q820601)

A. 24-28W

B. 32-36W

C. 18-24W

D. 14-18W

Correct Answer: A. 24-28W

Explanation: Correct Option A - 24-28 weeks: Diabetic screening for pregnant mothers is typically done during the second trimester, specifically between 24 and 28 weeks of pregnancy. This screening is important to identify gestational diabetes mellitus (GDM), a type of diabetes that develops during pregnancy and can pose risks to both the mother and the baby. GDM is characterized by elevated blood sugar levels that occur during pregnancy and usually resolves after childbirth. Incorrect Options: Option B - 32-36 weeks: It is not the typical timeframe for diabetic screening in pregnancy. By this time, if GDM has not been identified earlier, it might be too late to implement effective interventions. Option C - 18-24 weeks: It is relatively early in the pregnancy and not the standard time for diabetic screening. GDM usually becomes more evident as pregnancy progresses. Option D - 14-18 weeks: It is also relatively early in the pregnancy and not the standard time for diabetic screening. GDM typically develops later in pregnancy due to changes in hormone levels and insulin resistance.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: The current approach for the initial screening of women for cervical cancer at a primary health center is- (Q857104)

A. Visual inspection after application of freshly prepared solution 5% acetic acid solution

B. Colposcopy

C. Cervical biopsy

D. High vaginal biopsy

Correct Answer: A. Visual inspection after application of freshly prepared solution 5% acetic acid solution

Explanation: - Visual inspection after application of freshly prepared solution 5% acetic acid solution: Visual inspection after the application of a 5% acetic acid solution, also known as VIA (Visual Inspection with Acetic Acid) is a widely used and effective method for the initial screening of cervical cancer in resource-limited settings. Visual inspection with acetic acid (VIA): is a simple and cost-effective method that involves the application of 5% acetic acid to the cervix. The acid causes any abnormal areas to turn white, which can be visually detected. VIA is a suitable screening method in primary health centers as it does not require sophisticated equipment or extensive training. If an abnormal area is detected, further diagnostic tests such as colposcopy and cervical biopsy may be recommended. Colposcopy (Option B): Is not typically used as an initial screening method in primary health centers due to the need for specialized equipment and trained personnel. Cervical biopsy (Option C): Is an invasive procedure and is not typically performed as part of the initial screening process. High vaginal biopsy (Option D: Is not a specific screening method for cervical cancer and is not commonly used as an initial screening strategy.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC4478664/

↑ *Back to this question in Part A*

@Neet_pg_bot

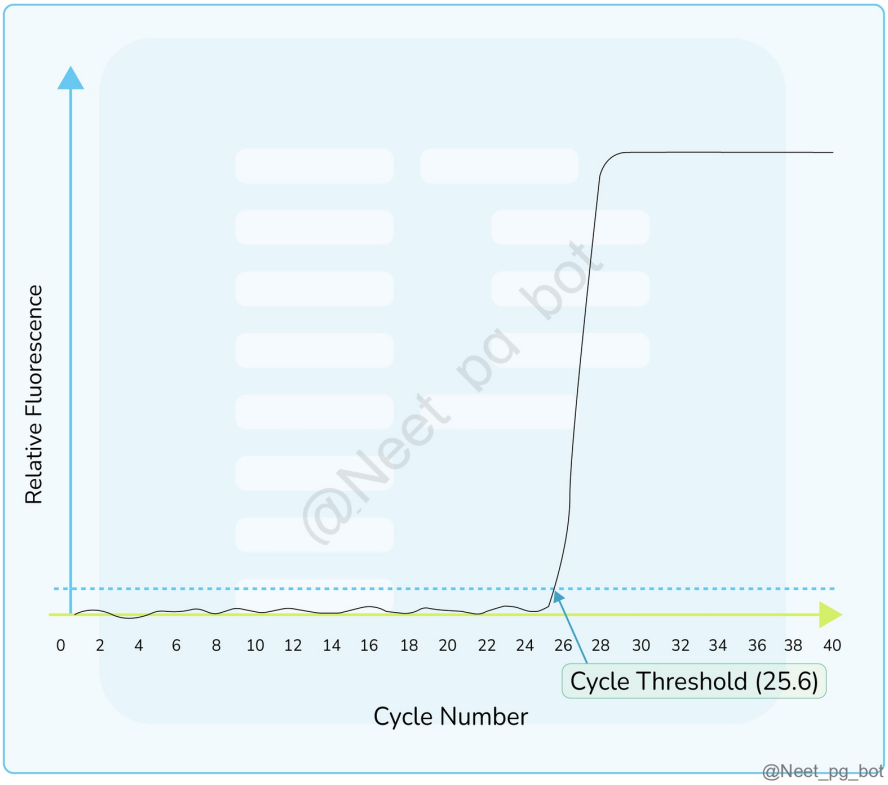
Q5: For assessing the viral load in a test sample, which test utilizes the provided graph? (Q857696)

A. Antigen test

B. Real-time RT PCR

C. CBNAAT

D. TruNat



Correct Answer: B. Real-time RT PCR

Explanation: rapid antigen test, is a rapid diagnostic test suitable for point-of-care testing that directly detects the presence or absence of an antigen. CBNAAT (Option C): The cartridge-based nucleic acid amplification test (CBNAAT) assay is a real-time polymerase chain reaction (PCR) cartridge-based assay for the simultaneous detection of Mycobacterium tuberculosis complex and rifampicin resistance from biological specimen samples within two hours. TruNat (Option D): TrueNat is a comprehensive test for screening and confirming the COVID-19 virus in India.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC8232180/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the statements below is correct? (Q856578)

A. In a population with low prevalence of the disease, positive result with a highly sensitive test means true positive

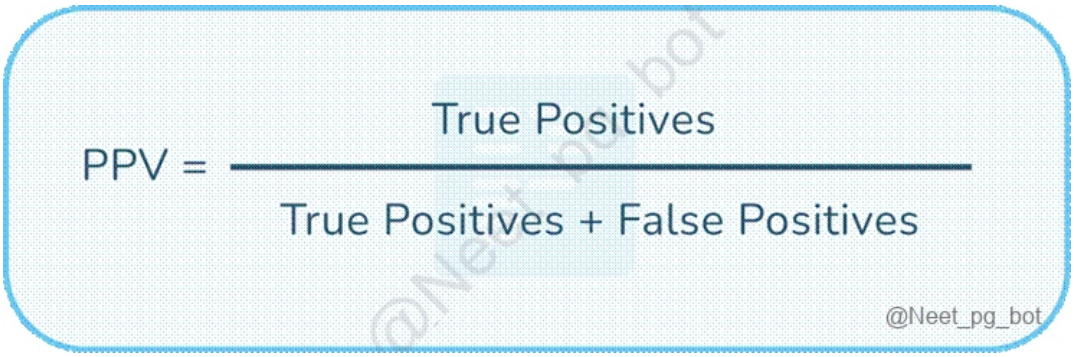
B. Sensitivity depends on prevalence of the disease

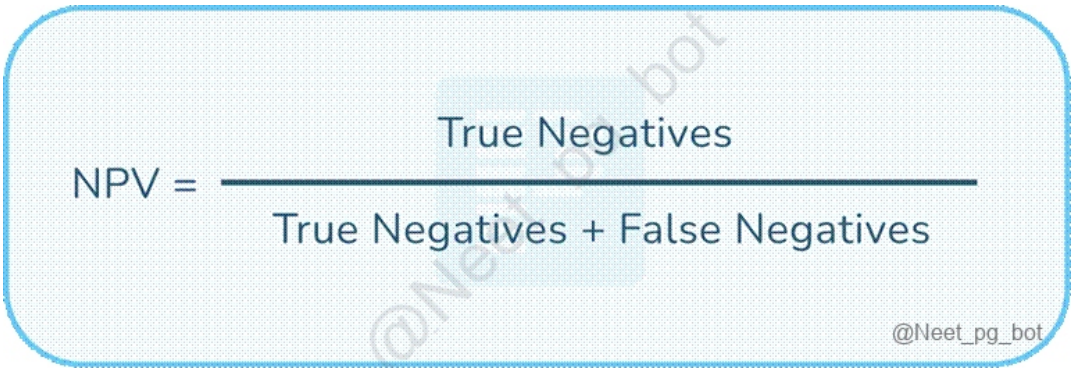
C. Positive predictive value depends on prevalence of disease

D. Specificity depends on prevalence of the disease

Correct Answer: C. Positive predictive value depends on prevalence of disease

Explanation: Positive Predictive Value (PPV): It is the probability that individuals with a positive test result truly have the disease or condition of interest. It indicates how well a test result predicts the presence of the disease. Formula: Negative Predictive Value (NPV): It is the probability that individuals with a negative test result do not have the disease, reflecting the diagnostic power of a test to exclude disease correctly. It indicates how well a negative test result predicts the absence of the disease. Formula: Incorrect Options: In a population with low prevalence of the disease, positive result with a highly sensitive test means true positive (Option A): In low disease prevalence, a positive result with a highly sensitive test doesn't always mean a true positive. Sensitivity depends on prevalence of the disease (Option B): Sensitivity isn't influenced by disease prevalence; it measures a test's ability to identify individuals with the disease. Specificity depends on prevalence of the disease (Option D): Specificity isn't influenced by disease prevalence; it measures a test's ability to identify individuals without the disease.





References:

Monaghan TF, Rahman SN, Agudelo CW, Wein AJ, Lazar JM, Everaert K, Dmochowski RR. Foundational Statistical Principles in Medical Research

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: What factor is the external validity of a screening test associated with? (Q856603)

A. Stability

B. Objectivity

C. Generalizability

D. Repeatability

Correct Answer: C. Generalizability

Explanation: External validity of a screening test is related to its generalizability, which determines if the test results can be applied to a broader population beyond the study sample. Incorrect Options: Stability (Option A): Stability refers to consistency over time. Objectivity (Option B): Objectivity pertains to bias. Repeatability (Option D): Repeatability concerns consistency within individuals.

References:

Patino CM, Ferreira JC. Internal and external validity: can you apply research study results to your patients? J Bras Pneumol. 2018 May-Jun;44(3):183. doi: 10.1590/S1806-37562018000000164. PMID: 30043882; PMCID: PMC6188693.

O M Dekkers and others, How to assess the external validity of therapeutic trials: a conceptual approach, International Journal of Epidemiology, Volume 39, Issue 1, February 2010, Pages 89–94

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following is an example of prospective screening? (Q854819)

A. Cervical Pap smear in a 40-year-old patient

B. Neonatal screening of a new-born baby for hypothyroidism

C. Screening of immigrants for infectious diseases such as tuberculosis

D. Urine for sugar screening in a 40-year-old man

Correct Answer: C. Screening of immigrants for infectious diseases such as tuberculosis

Explanation: Correct Option: C) Screening of immigrants for infectious diseases such as tuberculosis Screening immigrants for diseases like tuberculosis ensures the health of both immigrant and host populations and is an example of prospective screening. Prescriptive Screening Prospective Screening Done for their own benefit. Secondary level of prevention. Early diagnosis. Done for other's benefit. The primary level of prevention. Control/ prevention of disease. E.g. Screening neonates for neonatal hypothyroidism (Option B ruled out) Deafness in

children Blood glucose testing for diabetes mellitus and gestational diabetes Mammography for breast cancer Pap smear for cervical cancer (Option A ruled out) Visual acuity for refractive errors. Urine sugar screening for diabetes (Option D ruled out) E.g. Screening of immigrants for diseases like TB and COVID (Option C) HIV screening for blood donation HIV screening in ANC cases Health checkups for workers in the food industry.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition Pg: 161-162

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A healthy person got in contact with an infected case, and they have to separate him as he is sick now. This is: A person who has become sick after contact with an infected case is separated from healthy individuals to prevent disease spread. This practice is called: (Q859450)

A. Absolute quarantine

B. Isolation

C. Interruption of transmission

D. Serial interval

Correct Answer: B. Isolation

Explanation: Isolation separates individuals who are already ill and potentially infectious from others to prevent disease spread, occurring either in healthcare facilities or at home based on illness severity and resource availability. Isolation Quarantine For people who are sick For well people who may have been exposed to a communicable disease Separates people who are sick from those who are not sick Applies to people who may or may not become sick Restricts movement of people with an infectious disease to stop the spread of the Illness Restricts the movement of healthy people who may develop a disease after possible exposure to an infectious agent Allows for appropriate treatment in a hospital type/setting Requires people to stay in a designated location, e.g. their home. For a specified period of time Requires appropriate personal protective equipment (ppe) for those coming into contact with the person who is sick Requires active monitoring including taking temperature twice daily and checking for other symptoms Requires proper infection control, sterilization and waste management PPE not required for contact with people who are not ill Absolute Quarantine (Option A): It separates and restricts the movement of individuals exposed to a contagious disease but not yet symptomatic to monitor for symptoms and prevent potential disease spread upon becoming infectious. Interruption of transmission (Option C): Tactics to halt disease spread, including tracing, quarantine, and hygiene. Serial interval (Option D): Time between primary and secondary case symptoms, revealing transmission patterns.

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pg 132

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which factor has the greatest impact on positive predictive value? (Q859799)

A. Sensitivity

B. Prevalence

C. Specificity

D. Relative risk

Correct Answer: B. Prevalence

Explanation: The positive predictive value (PPV) of a test is directly proportional to the prevalence of a disease it detects, i.e., PPV increases as the prevalence increases provided the sensitivity and specificity of the test remains unchanged over the course of time (since prevalence can be considered as the pre-test probability of a disease) Example: Total population of a town is 2000. Prevalence of a disease at three different time periods are 10,20 and 30% based on a definitive investigation. Sensitivity and specificity of a new test are 40% & 70% respectively Since the sensitivity & specificity are going to be considered as constants throughout, the number of true positives and hence the positive predictive values will increase proportionately to the given prevalences over these three different time periods. Sensitivity (Option A): Sensitivity impacts the true positive rate, not PPV. Specificity (Option C): Specificity affects the true negative rate, not PPV. Relative Risk (Option D): Relative risk does not affect PPV.

References:

Park’s textbook of Preventive and Social Medicine, 27th edition, page 151-153, 156

↑ *Back to this question in Part A*

@Neet_pg_bot

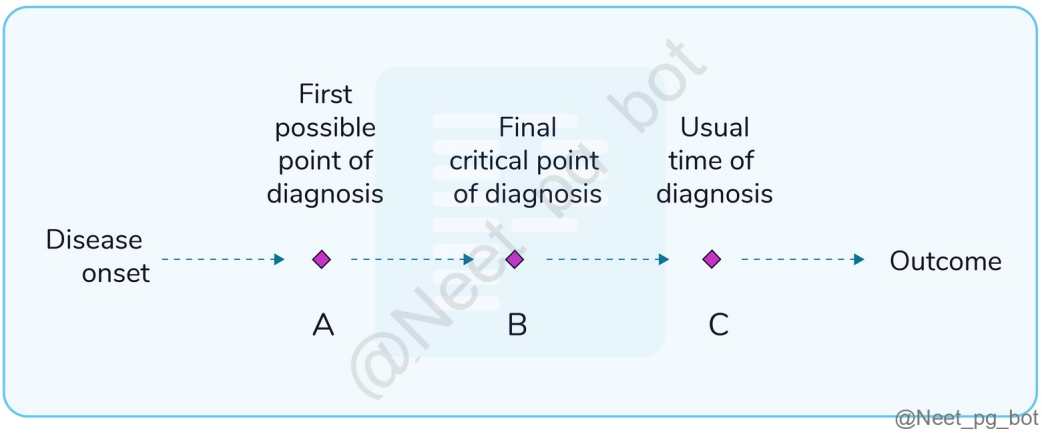
Q11: What is the term used to describe the time interval between points A and B in the flowchart depicting the natural progression of the disease? (Q859821)

A. Lead time

B. Screening time

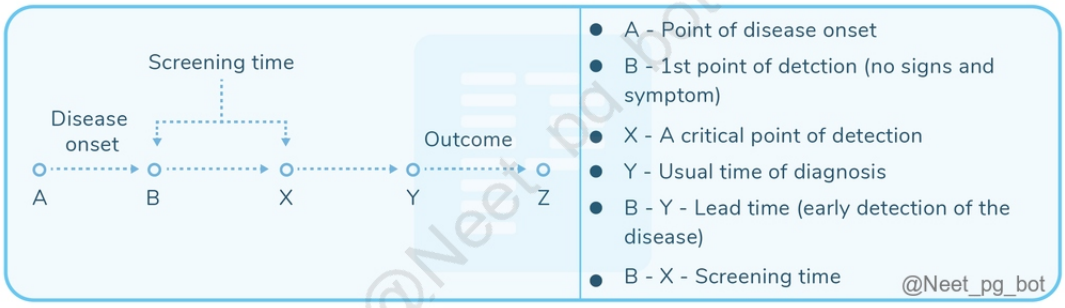
C. Generation time

D. Lag time



Correct Answer: B. Screening time

Explanation: Screening time: Time from the earliest possible diagnosis point (A) to the critical diagnosis point (B). Lead time: Time gained by early detection of disease or time difference between the earliest possible point of diagnosis and the usual time of diagnosis. (Option A ruled out) Generation time (Option C): It refers to the interval of time between receipt of infection by a host and maximal infectivity of that host. This option is incorrect. Lag Time (Option D): Not shown in the image; refers to symptom development to diagnosis. Hence, this is incorrect option.



References:

Park’s Textbook of Preventive and Social Medicine 26th Edition Pg: 107-08, 151-52

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 015 Infectious Epidemiology

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 015 Infectious Epidemiology — Quick Jump

Q1 (p. 922)	*Q2 (p. 923)*	*Q3 (p. 923)*	*Q4 (p. 925)*	*Q5 (p. 926)*	*Q6 (p. 927)*
Q7 (p. 928)	*Q8 (p. 929)*	*Q9 (p. 930)*	*Q10 (p. 931)*	*Q11 (p. 932)*	*Q12 (p. 933)*
Q13 (p. 933)	*Q14 (p. 935)*	*Q15 (p. 935)*	*Q16 (p. 936)*	*Q17 (p. 937)*	*Q18 (p. 937)*
Q19 (p. 938)	*Q20 (p. 939)*	*Q21 (p. 940)*			

Q1: Match the following terms with their correct definitions: 1. Subclinical case a. The first case of a disease identified in a group or population 2. Primary case b. A person who contracts the disease directly from the primary case. 3. Secondary case c. A person who exhibits mild or no symptoms but is still infected 4. Index case d. The first case that comes to the attention of health authorities (Q841054)

A. 1-b, 2-d, 3-c, 4-a

B. 1-b, 2-a, 3-c, 4-d

C. 1-c, 2-a, 3-b, 4-d

D. 1-d, 2-b, 3-a, 4-c

Correct Answer: C. 1-c, 2-a, 3-b, 4-d

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Subclinical case: A subclinical case is one where an individual is infected with a disease but doesn't show any apparent symptoms. However, they can still transmit the disease to others. This is important in epidemiology because these cases can silently spread infections. Primary case: It is the first case of a disease identified in a group or population. This case introduces the disease to a previously unaffected population and is often the source of an outbreak. Secondary case: It results from direct contact with a primary case. These individuals contract the disease from the primary case, representing the spread of the infection within the population. Index case: It is the first case that health authorities have noticed. It's important to note that the index case is not always the same as the primary case. Sometimes, health authorities might identify a case that turns out to have been infected by an earlier, previously undetected case.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 103

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: In the context of infectious disease epidemiology, what does a basic reproduction number (R0) of greater than 1 signify? (Q845076)

A. The infection is in decline.

B. The infection is endemic.

C. The infection has epidemic potential.

D. The infection is eliminated.

Correct Answer: C. The infection has epidemic potential.

Explanation: A basic reproduction number (R 0) >1 signifies that the infection has epidemic potential. The basic reproduction number (R 0)■ is a crucial metric in epidemiology that helps to understand the potential for an infectious disease to spread within a population. Biological, sociobehavioral, and environmental factors influence it. R 0 ■> 1: It indicates that each infected individual transmits the infection to more than one person. It suggests that the disease has the potential to cause an epidemic, as the number of infections is likely to increase over time. R 0 < 1: It indicates that each infected individual transmits the infection to less than one person. It suggests the infection will likely decline and eventually die out in the population. R 0 = 1: It indicates each infected individual transmits the infection to precisely one other person. It suggests a stable state where the infection is endemic; it persists in the population without causing an outbreak.

References:

https://www.cebm.net/covid-19/when-will-it-be-over-an-introduction-to-viral-reproduction-numbers-r0-and-re/
Complexity of the Basic Reproduction Number (R0) - Volume 25, Number 1—January 2019 - Emerging Infectious Diseases journal - CDC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A 6-year-old child visits the pediatric clinic with a high fever, cough, runny nose, and conjunctivitis. Three days later, the child develops a distinctive maculopapular rash that starts behind the ears and spreads rapidly. The oral pharyngeal examination is shown below. During what period is this child most likely contagious and should be

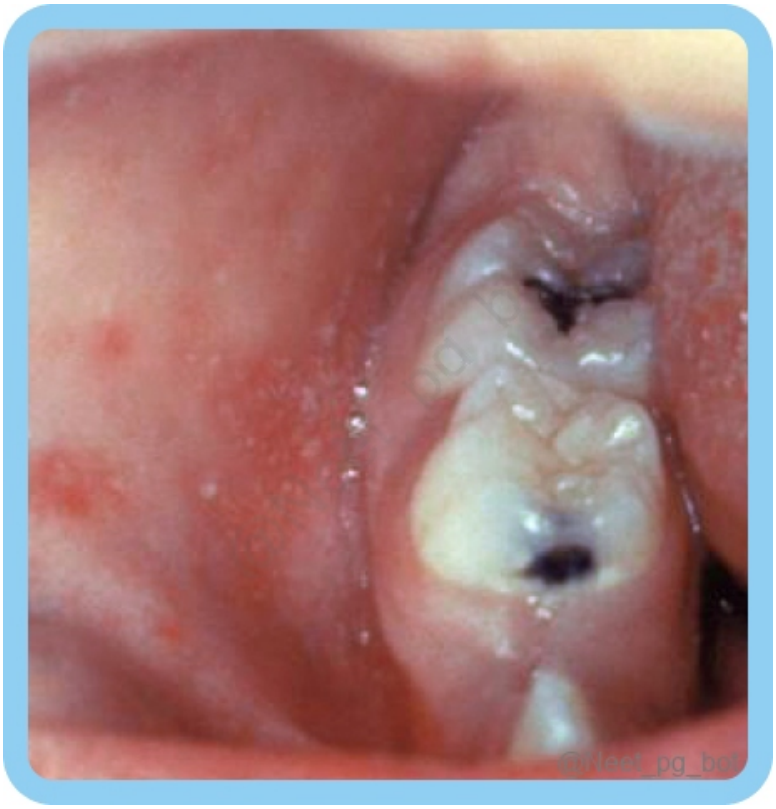
isolated to prevent transmission to others? (Q841250)

A. 1-2 days before to 4-5 days after the appearance of rash

B. 4-6 days before symptoms to 7 days thereafter

C. From 4 days before to 4 days after rash onset.

D. 7 days before symptoms to 7 days after the appearance of the rash



Correct Answer: C. From 4 days before to 4 days after rash onset.

- *Listen (English)*
- *Listen (Hindi)*

Explanation: The image shows Koplik spots. The child has measles. Measles is communicable for 4 days before the onset of rash and 4 days after. A period of communicability is when an infectious agent can be transferred directly or indirectly from an infected person to others, from infected animals to humans, or from infected individuals to animals or arthropods. Disease Period of communicability Measles 4 days before to 4 days after the rash appearance (Option C) Chickenpox 1-2 days before to 4-5 days after the appearance of rash (Option A) Mumps 4-6 days before symptoms to 7 days thereafter (Option B) Rubella 7 days before symptoms to 7 days after the appearance of the rash (Option D)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 133, 165, 169, 170.

https://en.wikipedia.org/wiki/Koplik%27s_spots

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A 5-year-old child presents to the community health centre with a fever, malaise, and an itchy, vesicular rash (shown in the image below) that began two days ago. The child's mother asks when it will be safe for her child to return to school without posing a risk of spreading the infection to other children. What is the appropriate advice regarding the duration of isolation for this child to prevent the spread of this infection? (Q841249)

A. 7 days after rash onset

B. 48 hours after starting antibiotics

C. Until 3 negative stool cultures

D. Until all lesions are crusted



Correct Answer: D. Until all lesions are crusted

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The given scenario and rash in the image depict Chickenpox caused by the varicella-zoster virus. It is highly contagious and primarily spreads through respiratory droplets and direct contact with vesicular fluid from the rash. Proper isolation and prevention strategies are crucial to prevent the spread of this infection, especially in settings like schools. Period of isolation: The separation of infected individuals or animals from others during the period when they can transmit the infection. Disease Duration of isolation Chickenpox Until all lesions are crusted, usually 6 days after the onset of the rash (Option D) Measles 7 days after the onset of rash (Option A) Diphtheria Until 48 hrs of antibiotics or negative cultures after treatment (Option B) Salmonellosis Until 3 negative stool cultures (Option C) Pertussis 4 weeks or until paroxysms cease Mumps Until swelling subsides Tuberculosis Until 3 weeks of effective chemotherapy Cholera 3 days after tetracycline started

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 133

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Match the following diseases with their typical incubation periods: 1. COVID-19 a. 18-72 hours 2. Typhoid b. 3-21 days 3. Influenza c. 10-14 days (Q841248)

A. 1-b, 2-c, 3-a

B. 1-b, 2-a, 3-c

C. 1-c, 2-a, 3-b

D. 1-a, 2-c, 3-b

Correct Answer: A. 1-b, 2-c, 3-a

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The incubation period is the time between the invasion by an infectious agent and the appearance of the first symptom. During the incubation period, the infectious agent multiplies within the host. Once the agent reaches a sufficient density, it disrupts the host's health equilibrium, leading to overt disease The incubation period of different diseases: Diseases Incubation period COVID-19 3-21 days Typhoid 10-14 days Influenza 18-72 hours Measles 10-14 days Mumps 14-21 days Rubella 2-3 weeks Varicella 14-16 days Hepatitis A 15 to 50 days Hepatitis B 30 to 180 days Hepatitis C 14 to 180 days Hepatitis E 15 to 60 days

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 108

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: During an outbreak of measles in a small community, a primary case was identified in a household of 6 people. Within the next two weeks, 4 additional household members developed measles. What is the secondary attack rate (SAR) for this household? (Q841247)

A. 50%

B. 60%

C. 66.7%

D. 80%

Correct Answer: D. 80%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The secondary attack rate is the number of secondary cases that develop after exposure to a primary case. To calculate the Secondary Attack Rate (SAR): Number of new cases (secondary cases) = 4 Number of susceptible people initially exposed = 5 (since the primary case is not considered susceptible) SAR = (4 / 5) × 100 = 80%



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 108

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: What specific measure does the term "secondary attack rate" refer to? (Q841246)

A. The burden of a disease.

B. Communicability of a disease.

C. Number of deaths due to a disease.

D. Carrier status of a disease

Correct Answer: B. Communicability of a disease.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The secondary attack rate measures the communicability of a disease. Definition: "The number of exposed persons developing the disease within the incubation period range, following exposure to the primary case." Formula: Advantages: Can compare attack rates in vaccinated vs. unvaccinated groups. Created to measure the communicability of an infection within families or closed groups. Limitations: It is less effective for diseases with long infective periods (e.g., tuberculosis) where exposure duration impacts spread. Using history, it is easier to measure diseases like measles and chickenpox but harder to measure diseases like influenza. All exposed family members must be included when susceptibles are hard to identify. Limited usefulness in diseases with many subclinical cases; requires lab confirmation. The Burden of the disease (Option A) measures the Proportional mortality rate, not a secondary attack rate. The number of deaths due to a disease (Option C): measures the Case fatality rate. Carrier status of a disease (Option D): The Secondary attack rate does not measure the carrier status of a disease.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 108

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: During a local polio outbreak, a routine health check reveals poliovirus in the stool of a 10-year-old boy who shows no symptoms of illness. He has been participating in community sports events. What type of carrier is this boy most likely to be?

(Q841064)

A. Convalescent carrier

B. Healthy carrier

C. Incubatory carrier

D. Chronic carrier

Correct Answer: B. Healthy carrier

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A healthy or asymptomatic carrier harbours the polio virus without showing symptoms and can transmit it through faecal-oral routes. These carriers play a significant role in spreading the virus by shedding it in their stool. While convalescent carriers can occur with polio, they are less commonly associated with the transmission than healthy carriers. Types of Carrier Definition Examples Healthy (Asymptomatic) Harbours and transmits a pathogen without showing symptoms. Polio Typhoid fever COVID-19 Meningitis Cholera Incubatory (Option C ruled out) Can transmit the disease during the incubation period before symptoms appear. Measles Influenza Pertussis Polio Mumps Convalescent (Option A ruled out) Continues to harbour and shed the pathogen for a short period after recovering from acute illness. Diphtheria Meningococcal meningitis Typhoid Cholera Chronic (Option D ruled out) Harbours and excretes the pathogen for an extended period (often >1 year) after initial infection. Hepatitis B Typhoid fever Malaria Gonorrhoea

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 103-104

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following best describes the median incubation period? (Q841063)

A. Shortest time from exposure to symptom onset in 50% of cases

B. Longest time from exposure to symptom onset in 50% of cases

C. Average time from exposure to recovery in 50% of cases

D. Average time from exposure to symptom onset in 50% of cases

Correct Answer: D. Average time from exposure to symptom onset in 50% of cases

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The median incubation period is the time for 50% of cases to show symptoms after exposure. The incubation period is the time between infection and the first symptom appearance. During incubation, the pathogen multiplies until it reaches a threshold to cause symptoms. Most diseases aren't communicable during incubation, except for measles and chickenpox. Incubation periods vary by disease and individual, ranging from hours to years. Examples: Short (hours to days): Food poisoning, cholera. Medium (10 days to 3 weeks): Typhoid, COVID-19, measles. Long (weeks to years): Hepatitis, Rabies, leprosy. Non-infectious diseases like cancer also have incubation periods, often lasting months or years. Shortest time from exposure to symptom onset in 50% of cases (Option A) describes the minimum incubation period, not the median. Longest time from exposure to symptom onset in 50% of cases (Option B) describes the maximum incubation period, not the median. Average time from exposure to recovery in 50% of cases (Option C) describes the average recovery time, not the incubation period.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 107

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Match the following terms with their correct definitions: 1.Serial Interval a. The time from infection to the onset of symptoms. 2.Incubation Period b. The time between the onset of symptoms in a primary case and the onset of symptoms in secondary cases. 3.Window Period c. The time between infection and when the pathogen can be detected by laboratory tests. 4.Generation Time d. The time from infection in a new host to the onset of symptoms in that new host. (Q841060)

A. 1-b, 2-a, 3-c, 4-d

B. 1-a, 2-b, 3-d, 4-c

C. 1-d, 2-c, 3-a, 4-b

D. 1-c, 2-d, 3-b, 4-a

Correct Answer: A. 1-b, 2-a, 3-c, 4-d

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Serial Interval: It is the duration between the onset of symptoms in a primary case (the first person infected in a chain of transmission) and the onset of symptoms in secondary cases (people infected by the primary case). It helps epidemiologists understand how quickly a disease spreads from one person to another within a community or population. Incubation Period: The incubation period refers to the time it takes for an individual to

develop symptoms after being infected with a pathogen. It begins with exposure to the pathogen and ends with the appearance of recognisable symptoms. Window Period: The window period is the time between infection and when the infection can be reliably detected by diagnostic tests. The individual may be infectious during this period, but tests might not yet show positive results. This concept is important in screening and testing strategies for infectious diseases. Generation Time: Generation time refers to the time the newly infected person takes to show symptoms. It encompasses the entire cycle of infection, transmission, and symptom onset in the context of disease spread.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 107-108

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following statements best describes the difference between a carrier state and a latency period? (Q841057)

A. Carrier state: Symptomatic Latency period: Asymptomatic

B. Carrier state: Pathogen transmissible, even asymptomatic. Latency period: Pathogen dormant, not transmissible

C. Carrier state: Time before initial exposure to the pathogen Latency period: Time before symptoms appear.

D. Carrier state: Occurs when the person is recovering from the disease. Latency period: Occurs after symptoms have resolved

Correct Answer: B. Carrier state: Pathogen transmissible, even asymptomatic. Latency period: Pathogen dormant, not transmissible

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: During the latency period, the pathogen is dormant and not transmissible, while in a carrier state, the pathogen is actively transmissible even if the person shows no symptoms. Aspects Carrier State Latency Period Pathogen Activity The pathogen is present and active. The pathogen is present but dormant. Symptoms No symptoms were shown by the person. Transmissibility The pathogen is transmissible to others. Pathogen is not transmissible. Stage in Disease Course It can occur after recovery or without any disease phase. Typically, it occurs between the initial infection and the onset of symptoms. Detection Pathogens can be detected through tests. Pathogens may not be easily detectable.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 103

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Match the following: 1) Virulence a) Ability of the pathogen to cause disease by producing toxins and evading host defenses 2) Infectivity b) Ability of the pathogen to enter, survive, and multiply in the host 3) Pathogenicity c) Ability of the pathogen to induce an immune response in the host 4) Antigenicity d) Ability of the pathogen to cause disease by invading tissues and producing toxins (Q840836)

A. 1-b, 2-a, 3-c, 4-d

B. 1-a, 2-b, 3-d, 4-c

C. 1-d, 2-c, 3-a, 4-b

D. 1-c, 2-d, 3-b, 4-a

Correct Answer: B. 1-a, 2-b, 3-d, 4-c

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Virulence It refers to the killing power or severity of the disease. It is the ability of a microorganism to cause severe disease by producing toxins and evading the host's immune defences. It indicates how damaging or harmful the microorganism can be to the host. It doesn’t depend on the disease duration. Infectivity The ability of the pathogen to enter, survive, and multiply in the host. A highly infective pathogen can spread easily and establish an infection. Pathogenicity The ability of the pathogen to cause disease. It involves the pathogen's capacity to invade host tissues and produce toxins or other factors that lead to disease signs and symptoms. Antigenicity The ability of the pathogen to induce an immune response in the host. Pathogens with high antigenicity can be recognized and targeted by the host's immune system, which can affect the severity and duration of the infection.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 100

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: The transfer of infectious agents within the vector from one stage of life to the next occurs in which type of transmission? (Q841052)

A. Transovarian transmission

B. Propagative transmission

C. Cyclopropagative transmission

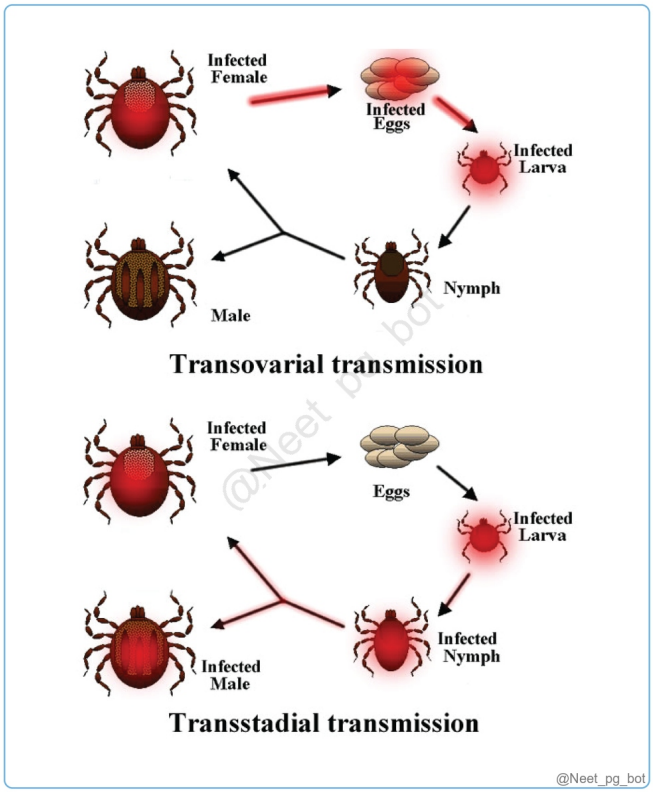
D. Transstadial transmission

Correct Answer: D. Transstadial transmission

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Transstadial transmission refers to transferring infectious agents within the vector from one stage of life to another. Transovarian transmission (Vertical) Transstadial transmission (Horizontal) Definition Transfer of infectious agent from the mother vector to its progeny. Transfer of infectious agent within the vector from one stage of life to another. Examples E.g., Kyasanur forest disease, scrub typhus, Q fever, and Rocky Mountain spotted fever. E.g., Borrelia burgdorferi (Lyme disease) Larve gets infected, which develops into a nymph and, lastly, an infected adult. Propagative (Option B) and Cyclopropagative (Option C) transmission are types of biological transmission in which the multiplication of infectious agents occurs within the vector.



References:

.Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 106

↑ *Back to this question in Part A*

Q14: A 38-year-old male has had a fever of 103°F, chills, and severe headaches that have persisted for three days. A blood smear confirms the presence of Plasmodium falciparum trophozoites in erythrocytes. Which type of biological transmission does this parasite undergo within the vector? (Q841048)

A. Propagative transmission

B. Cyclodevelopmental transmission

C. Cyclopropagative transmission

D. Both A and B

Correct Answer: C. Cyclopropagative transmission

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Plasmodium falciparum undergoes Cyclopropagative transmission within the female Anopheles mosquito. Cyclopropagative transmission in a biological vector refers to the multiplication and development of the agents into their infective form within the vector. Types of biological transmission: Propagative transmission The agent only multiplies in number within the vector. E.g., Yersinia pestis in rat flea. Cyclodevelopmental transmission Agent develops into infective form within the vector without multiplying. E.g.,Microfilaria in culex mosquito Cyclopropagative transmission Agent develops into infective form and multiplies in number within the vector. E.g., Malarial parasite in Anopheles mosquito

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 106

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following diseases is spread via droplet nuclei? (Q841045)

A. Whooping cough

B. Diphtheria

C. Common cold

D. Chickenpox

Correct Answer: D. Chickenpox

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Chickenpox is spread via droplet nuclei transmission of the varicella-zoster virus. Droplet Droplet nuclei Direct mode of transmission Indirect mode of transmission It can spread via contact with the oromucosal membrane, conjunctiva. Enters the alveoli. Heavier particles that are more than 5 microns in size Lighter particles which are less than 5 microns in size They fall on the ground due to gravity They remain suspended in the air, and it can disseminate along with air currents Can travel less than 1 meter in distance (Up to 30-60 cm) Can travel more than 1 meter in distance Examples: Common cold (Option C) Diphtheria (Option B) Whooping cough (Option A) Tuberculosis COVID-19 Meningococcal meningitis Examples: Tuberculosis Influenza Chickenpox Measles Q fever COVID-19

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 105-106

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A 28-year-old pregnant woman was screened for TORCH infections in her third trimester. Which of the following diseases is typically associated with vertical transmission during this trimester of pregnancy? (Q841044)

A. Rubella

B. Parvovirus

C. Varicella

D. Toxoplasmosis

Correct Answer: D. Toxoplasmosis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Toxoplasmosis is one of the TORCH infections associated with vertical transmission during the third trimester of pregnancy. Vertical transmission refers to the transplacental transmission of infectious agents from the mother to the fetus. TORCH infections include toxoplasmosis, rubella, CMV, Herpes and HIV. Vertical transmission of diseases 1st trimester Rubella, Chickenpox/varicella 2nd trimester Parvovirus 3rd trimester Toxoplasmosis, CMV, Hepatitis B and Syphilis. During delivery HIV and herpes Other agents that are non-living can also be transferred vertically: Thalidomide Diethylstilbestrol

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 105

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: A 37-year-old male presents with sudden onset fever and a rapidly enlarging tender lymph node in the left axilla. Considering the clinical history of plague, which of the following is true regarding the vector responsible for transmission of this infection? (Q841034)

A. Pathogens undergo multiplication within the vector

B. Pathogen undergoes development within the vector.

C. None of the above

D. All of the above

Correct Answer: A. Pathogens undergo multiplication within the vector

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A rat flea infected with Yersinia pestis is a biological vector for plague, within which the Yersinia bacilli undergo multiplication (Propagative transmission). Mechanical vector Biological vector Infectious agent is mechanically transported on the feet or proboscis of the agent It can also get passively excreted unchanged from the agent GIT Infectious agents are taken up by the vector, where they can undergo a necessary development cycle (Option B) An agent does not undergo multiplication or development within the vector. E.g., the spread of bacillary dysentery by houseflies. Agent undergoes Multiplication (propagative) - plague bacilli in fleas (Option A) Development (cyclo-developmental) - microfilariae in culex mosquito. Both (cyclo-propagative) - malaria parasites in Anopheles.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 105-106

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which of the following diseases exclusively involves obligate hosts in its transmission cycle? (Q840863)

A. Measles

B. Sleeping sickness

C. Hydatid disease

D. Filaria

Correct Answer: A. Measles

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Obligate hosts are the only hosts that are necessary for the completion of a pathogen's life cycle. Person-to-person transmission is present. E.g., Typhoid, Measles Sleeping sickness (Option B): Sleeping sickness (African trypanosomiasis) involves multiple hosts in its transmission cycle, not just obligate hosts. The cycle includes: Tsetse flies (vector) Humans (Main host for Trypanosoma brucei gambiense) Wild and domestic animals (Reservoir hosts for Trypanosoma brucei rhodesiense). This complex cycle involves both obligate and non-obligate hosts. Hydatid disease (Option C): Hydatid disease is caused by the tapeworm Echinococcus. Definitive hosts: dogs and other canines Intermediate hosts: sheep, cattle, humans This cycle doesn't rely solely on obligate hosts. Filaria (Option D): Filariasis is caused by filarial worms (e.g., Wuchereria bancrofti, Brugia malayi). It involves multiple hosts in its transmission cycle: Mosquitoes (vector), Humans (main host)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 101

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Which of the following diseases are seen in the transmission cycle of dead-end hosts? (Q840859)

A. Tetanus

B. TB

C. Dengue fever

D. Malaria

Correct Answer: A. Tetanus

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Dead-end hosts are hosts in which the infectious agent cannot be transmitted from one human to another susceptible human. Tetanus : Clostridium tetani, the causative agent, does not spread from person to person. Infection occurs through wound contamination with spores found in soil or animal faeces. Other examples are Japanese encephalitis, Rabies, and Plague. Tuberculosis (Option B) is caused by Mycobacterium tuberculosis . It is transmitted from person to person through airborne droplets. As humans are the primary and continuous hosts, it does not involve dead-end hosts in its transmission cycle. Dengue fever (Option C) primarily involves Aedes mosquitoes as vectors. Humans are incidental hosts, not dead-end hosts, as they can transmit the virus back to mosquitoes. Malaria (Option D) involves a complex transmission cycle with Anopheles mosquitoes as vectors. Humans are necessary hosts for the parasite's life cycle to complete, not dead-end hosts.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 101

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Which of the following correctly identifies the primary and secondary hosts? (Q840850)

A. Malaria: Primary Host - Mosquitoes, Secondary Host - Humans

B. Filaria: Primary Host - Mosquitoes(Anopheles), Secondary Host - Humans

C. Dengue: Primary Host - Ticks, Secondary Host - Humans

D. Chikungunya: Primary Host - Humans, Secondary Host - Ticks

Correct Answer: A. Malaria: Primary Host - Mosquitoes, Secondary Host - Humans

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Primary Host Secondary Host Definition The organism in which the parasite reaches maturity. Agent reproduces sexually in the primary host. The organism in which the parasite lives for a shorter period, often as an intermediate stage. There is no sexual maturation of the agent in the secondary agent. Examples Malaria Mosquitoes (Anopheles species) Humans Filaria Humans Mosquitoes Dengue Mosquitoes (Aedes species) Humans Chikungunya Humans Mosquitoes (Aedes species)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 101

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Which of the following correctly pairs the disease with its primary reservoir and source of infection? (Q840842)

A. Disease: Measles, Reservoir: Humans, Source of Infection: Respiratory droplets

B. Disease: Plague, Reservoir: Soil, Source of Infection: Contaminated wounds

C. Disease: Tetanus, Reservoir: Humans, Source of Infection: Mosquito bites

D. Disease: Malaria, Reservoir: Wild rodents, Source of Infection: Flea bites

Correct Answer: A. Disease: Measles, Reservoir: Humans, Source of Infection: Respiratory droplets

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Disease Reservoir Source of Infection TB Humans Respiratory droplets. HIV Blood, sexual contact, mother-to-child. Typhoid Contaminated food and water. Measles (Option A) Respiratory droplets. Malaria (Option D) Mosquito bites (Anopheles species). Cholera Contaminated water and food. KFD (Kyasanur Forest Disease) Small mammals, monkeys Tick bites. Tetanus (Option C) Soil Plague (Option B) Wild rodents (e.g., rats) Flea bites. JE (Japanese Encephalitis) Pigs, wild birds Mosquito bites (Culex species).

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 102

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 016 Mumps Measles Rubella Pertussis

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 016 Mumps Measles Rubella Pertussis — Quick Jump

Q1 (p. 941) *Q2 (p. 942)* *Q3 (p. 942)* *Q4 (p. 943)* *Q5 (p. 944)* *Q6 (p. 947)*
Q7 (p. 947) *Q8 (p. 948)* *Q9 (p. 950)* *Q10 (p. 951)*

Q1: A 2-year-old child presents to the clinic with a persistent cough lasting for 2 weeks. The cough consists of rapid, consecutive coughs followed by an inspiratory gasp and post-tussive vomiting. The child's 5-year-old sibling, who attends preschool, developed similar symptoms 10 days ago.Based on the clinical presentation and exposure history described, what is the likelihood that the child's sibling will develop similar symptoms within the next few weeks? (Q840557)

A. 10%

B. 25%

C. 50%

D. >90%

Correct Answer: D. >90%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The secondary attack rate refers to the probability that an infection will occur among susceptible individuals after exposure to an infected person. The secondary attack rate of pertussis is greater than 90%. Measles has a secondary attack rate of more than 80%, with cyclical seasonal outbreaks occurring every 2–3 years in unvaccinated populations. Mumps has a secondary attack rate of 86%. Disease Agent Source Period of Communicability Host Factors Mumps ssRNA virus of the family Paramyxovirus . Cases and subclinical cases 4 to 6 days before onset of symptoms and 1 week after. Affects children between 5-9 years old. Both genders can be affected.

References:

Parks Textbook of Preventive and Social Medicine 27th edition, Page no:164, 170,180-182

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Match the following pathogen with its incubation period? Pathogen Incubation period A. Mumps 1. 10 - 14days B. Measles 2. 18 days C. Rubella 3. 14 - 18 days D. Pertussis 4. 7-14 days (Q840587)

A. A-3, B-1, C-2, D-4

B. A-1, B-2, C-3, D-4

C. A-2, B-3, C-4, D-1

D. A-4, B-1, C-2, D-3

Correct Answer: A. A-3, B-1, C-2, D-4

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Incubation Periods: Mumps- 14–18 days Measles: 10–14 days Rubella: 14–21 days (avg ~18 days) Pertussis (Whooping Cough): 7–14 days (may extend to 3 weeks)

References:

Parks Textbook of Preventive and Social Medicine 27th edition, Page no: 164, 170,180-182

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A 10-year-old child presents with a low-grade fever for the past 5 days . Upon examination, the child appears as shown below. Which of the following is true about this condition? (Q840598)

A. It is the leading cause of pancreatitis in children

B. Infectious cause of conductive hearing loss

C. 0.5 ml of Jeryl Lynn strain vaccine given intradermally

D. Septic meningitis is a common complication



Correct Answer: A. It is the leading cause of pancreatitis in children

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The given clinical vignette suggests mumps (characterized by low-grade fever and bilateral parotitis). The true statement regarding this condition is that mumps is the leading cause of pancreatitis in children. Complications Orchitis The most common extra salivary gland manifestation of mumps in post pubertal patients. Common among adolescents and is usually unilateral. Oophoritis Most common among adolescents and is mostly unilateral. Pancreatitis Mumps is the leading cause of pancreatitis in children. Aseptic Meningitis The most common complication of mumps. (Option D) Sensorineural Deafness Mumps is one of the most common infectious causes of sensorineural hearing loss. (Option B)

References:

Parks Textbook of Preventive and Social Medicine 27th edition Page no 170-171

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A 6-month-old infant is brought to the pediatric clinic to receive the third dose of the DPT (Diphtheria, Pertussis, Tetanus) vaccine. Which of the following is a potential side effect of the pertussis component of the vaccine? (Q840610)

A. Intussusception

B. Toxic shock syndrome

C. Guillain-Barré syndrome

D. Inconsolable cry

Correct Answer: D. Inconsolable cry

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: DPT Vaccine: Adverse effects: Fever and mild local reaction common following DPT vaccine. Due to pertussis component: Inconsolable cry, Reye's syndrome, Hypotensive hyporesponsive encephalopathy (HHE) Intussusception (Option A) is commonly a potential side effect seen with the Rotavirus vaccine. Toxic shock syndrome (Option B) is seen with the MMR vaccine. Guillain-Barré syndrome (Option C) is more commonly associated with the Influenza vaccine.

References:

Parks Textbook of Preventive and Social Medicine 27th edition Page no: 180

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: A 4 Y/o girl has been brought to the clinic with a high fever, cough, runny nose, and red eyes for the past three days associated with a red, blotchy rash that started on her face and has now spread to her trunk and limbs. On examination, greyish-white spots on the buccal mucosa are noticed. If this febrile illness is caused by a ssRNA paramyxovirus, which of the following is most specific for making a clinical diagnosis in this child? (Q840620)

A. Coryza and conjunctivitis

B. Grayish white spots on buccal mucosa

C. High fever

D. Rash from face spread to trunk and limbs

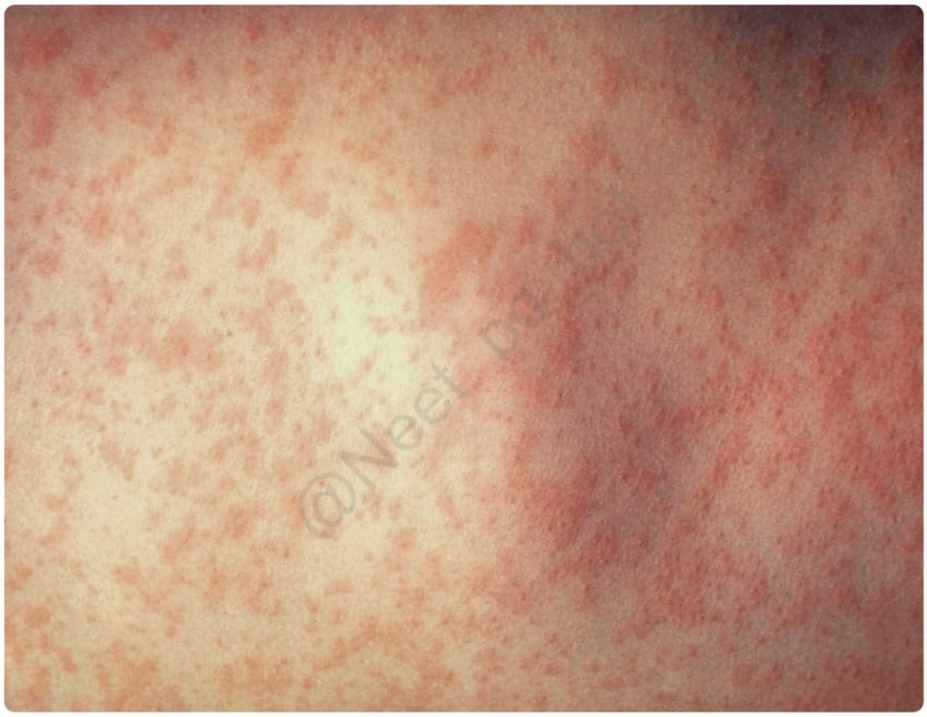
Correct Answer: B. Grayish white spots on buccal mucosa

■ *Listen (English)*

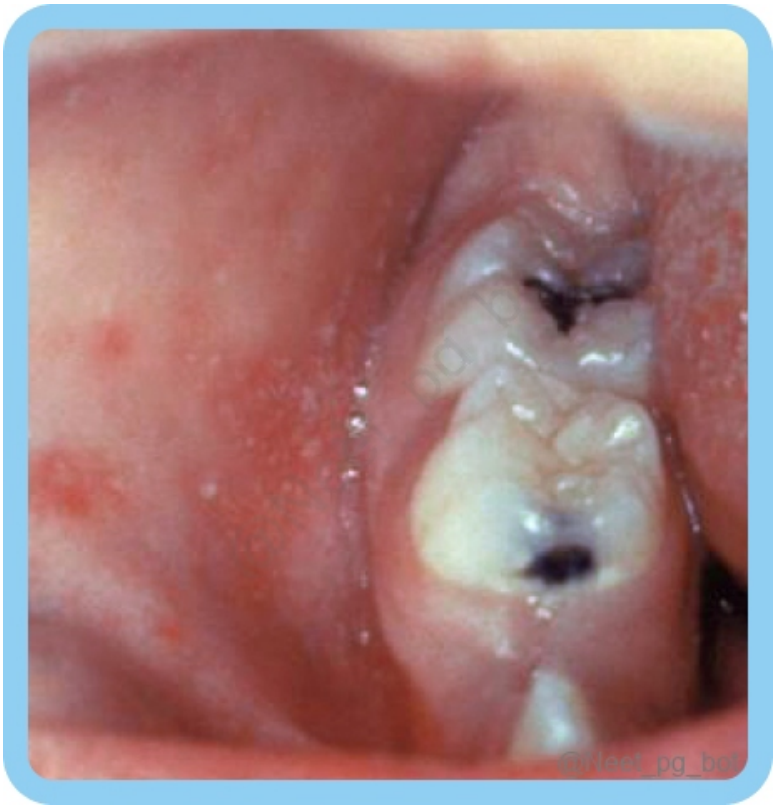
■ *Listen (Hindi)*

Explanation: Based on the above scenario, the child is most probably suffering from measles, which is caused by a ssRNA paramyxovirus and the most specific clinical feature for it is presence of Grayish white spots on the buccal

mucosa. Measles Prodromal stage : Fever Cough Coryza with sneezing Conjunctivitis with lacrimation Koplik’s spots- grayish-white spots on the buccal mucosa (Pathognomonic feature) (Option B) Eruptive stage : Dusky red macular/maculopapular rash, which starts behind the ears and progresses to the face, neck and then to trunks and limbs. In the absence of complications, the lesions and fever disappear after 3-4 days. Post measles stage: After the eruptive stage, it leads to weight loss, weakness, fatigue, diarrhea. Measles Rash Rubella rash Koplik spots







References:

Parks Textbook of Preventive and Social Medicine 27e, pg no: 164-165

Rubella rash image:https://www.bbc.com/news/health-35419445

Measles rash image:https://www.shutterstock.com/image-photo/measles-rash-408024511

Koplik spots image:https://thefuturedentistry.com/kopliks-spots/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following complications is the most common cause of death in measles? (Q840649)

A. Protein-losing enteropathy

B. Subacute sclerosing panencephalitis

C. Pneumonia

D. Otitis Media

Correct Answer: C. Pneumonia

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The most common complication of measles causing death is pneumonia. COMPLICATIONS OF MEASLES Otitis Media (Option D) M/c complication in young children. Covered under IMNCI programme. Subacute Sclerosing Panencephalitis (SSPE) (Option B) A rare, fatal brain disease that occurs years after measles infection, causing neurological damage and mortality Pneumonia (Option C) Most common fatal complication & cause of death Persistent Diarrhea Long-lasting diarrhea, potentially leading to protein-losing enteropathy . Prevalent in developing countries, impacting infants significantly. Keratomalacia Measles causes acute vitamin A deficiency in children. Giant Cell Pneumonia, Measles Inclusion-body Encephalitis Primarily affects immunocompromised individuals. Other complications: Laryngotracheobronchitis (Croup), Encephalitis, Spontaneous abortion, Premature delivery Complications in the post-measles stage: Diarrhea, fatigue & weight loss

References:

Parks Textbook of Preventive and Social Medicine 27th edition Page no 166

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following statements about the measles vaccine is incorrect? (Q840657)

A. The measles vaccine is available in monovalent and combination forms.

B. The first dose of the measles vaccine is administered at 9 completed months.

C. The MR variant is used under the National Immunisation Schedule

D. The measles vaccine follows the open vial policy and can be used for multiple doses once reconstituted.

Correct Answer: D. The measles vaccine follows the open vial policy and can be used for multiple doses once reconstituted.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Measles vaccine is a reconstituted vaccine (freeze-dried vaccine) & does not follow open vial policy. Measles Vaccine Available in: Monovalent (measles only), measles-rubella (MR)- Used in NIS (Option C ruled out) Measles-Mumps-Rubella (MMR), and Measles-Mumps-Rubella-Varicella (MMRV) forms (Option A ruled out) Strains used: Edmonston-Zagreb First dose: 9 completed months (MR1-85% protection) (Option B ruled out) Administered along with JE vaccine subcutaneously. Second dose: 16-24 months (MR2-98% protection) In case of delayed immunization, it can be given up to 5 years. MR is given in the right arm. It is a reconstituted vaccine (freeze-dried vaccine) & does not follow open vial policy. Post-vaccination: Measles-like illness (1-3 days)

References:

Parks Textbook of Preventive and Social Medicine 27th edition Page no 166

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following is least likely to be a feature of Congenital Rubella Syndrome (CRS)? (Q840662)

A. Cataracts

B. Sensorineural deafness

C. Patent ductus arteriosus

D. Conductive hearing loss

Correct Answer: D. Conductive hearing loss

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Conductive hearing loss is not typically associated with Congenital Rubella Syndrome. CONGENITAL RUBELLA SYNDROME Definition CRS results from fetal rubella infection, usually between 8–10 weeks of gestation. Affected infants can transmit the virus for 12–18 months after birth. Dermatological presentation Blueberry Muffin Rash Forchheimer Spots- small, red or purple spots that can appear on the soft palate Ophthalmic Defects Cataracts (Option A ruled out) Microphthalmia Glaucoma Salt and pepper retinopathy Chorioretinitis Auditory Defects Sensorineural deafness (Option B ruled out) Cardiac Defects Peripheral pulmonary artery stenosis Patent ductus arteriosus (Option C ruled out) Ventricular septal defects Craniofacial Defects Microcephaly Blueberry muffin rash Forchheimer Spots- are small, red or purple spots that can appear on the soft palate





References:

Parks Textbook of Preventive and Social Medicine 27e 169-170

Blue berry rash image:https://dermnetnz.org/topics/blueberry-muffin-syndrome

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following statements about the rubella-containing vaccine (RCV) is incorrect? (Q840682)

A. The live attenuated RA 27/3 strain is used in the rubella vaccine

B. RCVs have a shelf-life of 2-3 years when stored at 4°C

C. The recommended dose of RCV is 1.0 ml injected subcutaneously

D. Recipients of RCV are advised not to become pregnant for 1 month after vaccination

Correct Answer: C. The recommended dose of RCV is 1.0 ml injected subcutaneously

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: RUBELLA VACCINE AND VACCINATION STRATEGY Strain Used Live attenuated RA 27/3 (Option A ruled out) Formulations Monovalent, MR, MMR, MMRV Dosage Single 0.5 ml dose, subcutaneously in anterolateral thigh or outer upper arm. (Option C) Dose Effectiveness Single-Dose Strategy: Effective for rubella elimination if high coverage is achieved. >95% effectiveness for a single dose Two-Dose Strategy: Practical when combined with measles vaccination using MR or MMR vaccine Storage Conditions RCVs: 2-8°C, protected from light Diluent vials: Ambient temperature, not frozen Shelf-Life 2-3 years at 4°C (Option B ruled out) Target Groups Priority 1: Non-pregnant women of reproductive age Priority 2: Children between 1-14 years Priority 3: Routine vaccination of children <1 year Pregnancy Advisory Recipients advised not to become pregnant for 1 month after vaccination as it increases the risk of congenital rubella syndrome. (Option D ruled out) But it is not an indication for MTP if the woman does get pregnant within 1 month of vaccination

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no 170

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: What is the primary goal of the "Keep up" strategy in the WHO measles and rubella elimination strategy? (Q840687)

A. Conducting a nationwide vaccination campaign targeting all children born after the catch-up campaign

B. Ensuring routine services aimed at vaccinating more than 95% of each successive birth cohort

C. Targeting all children 9 months to 14 years of age, irrespective of history of measles disease

D. Conducting vaccination campaigns every 2-4 years

Correct Answer: B. Ensuring routine services aimed at vaccinating more than 95% of each successive birth cohort

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: WHO measles and rubella elimination strategy Catch up Nationwide vaccination campaign targeting all children 9 months to 14 years of age, irrespective of history of measles disease or vaccination status. (Option C ruled out) (Measles and rubella elimination campaign) Keep up Routine services aimed at vaccinating more than 95% of each successive birth cohort. (Option B) (Routine vaccination) Follow up Subsequent nationwide vaccination campaigns conducted every 2-4 years targeting usually all children born after the catch-up campaign. (Option A and D ruled out)

References:

Parks Textbook of Preventive and Social Medicine 27ePg 166, 177

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 017 Chicken Pox Small Pox And Diphtheria

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 017 Chicken Pox Small Pox And Diphtheria — Quick Jump

Q1 (p. 953) *Q2 (p. 954)* *Q3 (p. 954)* *Q4 (p. 955)* *Q5 (p. 956)* *Q6 (p. 957)*
Q7 (p. 957) *Q8 (p. 958)* *Q9 (p. 959)* *Q10 (p. 961)*

Q1: A 35-year-old man presents with a fever and a rash that started as small, red spots on his trunk and has now progressed to fluid-filled blisters over the past 3 days. He mentions that he recently returned from a business trip where he attended a conference with participants from various countries. What is the most likely period during which he could have contracted chickenpox? (Q840785)

A. 5 days ago

B. 8 days ago

C. 16 days ago

D. None of the above

Correct Answer: C. 16 days ago

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In the above scenario, the patient with small, red spots on his trunk and has now progressed to fluid-filled blisters over the past 3 days is most likely to have chicken pox. 16 days ago would mean he had an incubation period of 13 days (16-3), which falls under the incubation period of chicken pox, which is 7-21 days. Epidemiological factors of chicken pox: Agent: Varicella-zoster virus (HHV-3), a double-stranded DNA virus. Source: Vesicular fluid and respiratory droplets (scabs not infectious). Period of communicability: From 1–2 days before rash onset to 4–5 days after. Host factors: Predominantly affects children <10 years; a single infection usually confers lifelong immunity. Environmental factors: Peaks in winter and early spring; virus survives 24–48 hours outside the body but is readily inactivated by disinfectants. Incubation period: 7–21 days (average ~13 days).

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pages 161-162

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following is transmitted by droplet nuclei? (Q840787)

A. Meningococcal meningitis

B. Chickenpox

C. Diphtheria

D. Herpes simplex virus

Correct Answer: B. Chickenpox

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Droplet nuclei, droplet infection, or direct contact transmit chickenpox. Droplet Droplet nuclei Direct mode of transmission Indirect mode of transmission It can spread via contact with the oromucosal membrane, conjunctiva. Enters the alveoli. Heavier particles that are more than 5 microns in size Lighter particles which are less than 5 microns in size They fall on the ground due to gravity They remain suspended in the air, and it can disseminate along with air currents Can travel less than 1 meter in distance (Up to 30-60 cm) Can travel more than 1 meter in distance Examples: Common cold Diphtheria (Option C) Whooping cough Tuberculosis COVID-19 Meningococcal meningitis (Option A) Examples: Tuberculosis Influenza Chickenpox Measles Q fever COVID-19 HSV (Option D): spreads via sexual contact

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 162, 184, 105, 106

https://www.who.int/news-room/fact-sheets/detail/cholera

https://www.ncbi.nlm.nih.gov/books/NBK47449/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following statements about chicken pox vaccination is true? (Q840788)

A. The chickenpox vaccine is typically administered intravenously.

B. Vaccination is recommended only for adults who have never had chicken pox.

C. Varicella vaccine effectively prevents chickenpox and its complications.

D. Vaccination against chickenpox is only necessary if there is a current outbreak in the community

Correct Answer: C. Varicella vaccine effectively prevents chickenpox and its complications.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The chickenpox vaccine, or varicella vaccine, is effective in preventing chickenpox and reducing the severity of the disease if contracted. Active immunization Vaccine Live vaccine Dose (Option A) 0.5 ml subcutaneous route Schedule (Options B and C) Given in 2 doses, it is recommended for all. If given < 13 years, the duration between two dosages should be 1-3 months For >13 years, the duration between two doses is 4-6 weeks Combination Vaccine Chickenpox vaccine can be given as MMRV– measles mumps rubella varicella. MMRV– administered to 9 months to 12 years of age Two doses schedule with an interval of 4 weeks But it is preferred that 2nd dose be administered 6 weeks to 3 months after 1st dose or at 4-6 years of age. Post Exposure Prophylaxis This can be done if there is known exposure to varicella virus, the vaccine should be given within 5 days of exposure. Pregnancy Vaccine is contraindicated

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 163

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following factors was crucial to the successful global eradication of smallpox? (Q840790)

A. The causative agent of smallpox, Variola virus, could only survive in humans.

B. Smallpox eradication was achieved using a single-dose oral vaccine.

C. The Variola virus had multiple animal reservoirs, which made it easier to track and eliminate.

D. Smallpox was eradicated because it could be easily diagnosed only with advanced laboratory tests.

Correct Answer: A. The causative agent of smallpox, Variola virus, could only survive in humans.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Successful eradication of smallpox: Lifelong immunity due to infection made eradication easier, as infected or vaccinated individuals were no longer susceptible and couldn't spread the disease. The smallpox vaccine, administered via a bifurcated needle, was very effective, and its widespread use helped stop its spread. (Option B) The Variola virus, which causes smallpox, had no animal reservoirs, meaning it could only infect humans. Once eliminated from humans, there were no other sources for re-emergence was crucial to the successful

global eradication of smallpox (Option A and C) Smallpox could be diagnosed based on its distinctive clinical presentation, including a characteristic rash and pustules, without advanced laboratory tests, aiding its eradication. (Option D) Characteristics of Rash: monomorphic , deep-seated, firm, hard vesicles , centrifugal distribution, may become umbilicated , and palms and soles are not spared

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 159.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following is most important to emphasize in educating the public about preventing the spread of diphtheria? (Q840791)

A. Diphtheria is primarily spread through contaminated fomites, so good hygiene is crucial.

B. Maintaining high vaccination coverage is essential to prevent the spread of diphtheria.

C. Individuals who recover from diphtheria are immune to becoming carriers.

D. Diphtheria infection primarily affects older adults with weakened immune systems.

Correct Answer: B. Maintaining high vaccination coverage is essential to prevent the spread of diphtheria.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Diphtheria outbreaks often occur in areas with low vaccination rates, especially among infants and children. Maintaining high vaccination coverage creates herd immunity, reducing the pool of susceptible individuals and making it more difficult for the disease to spread. Epidemiological determinants of diphtheria : Agent: Corynebacterium diphtheriae (Gram-positive, exotoxin-producing). Source: Cases & carriers (nasal carriers more infectious). Communicability: Untreated 14–28 days; treated → non-infectious within 48 hrs; carriers cleared after 2 negative cultures. Host: Mainly children 1–5 yrs; both sexes; transient maternal immunity in infants. Transmission: Droplet infection, direct contact, fomites. Other: Case fatality rate up to 10% if untreated. Option A: While contaminated objects (fomites) can contribute to diphtheria transmission, it is not the primary mode of transmission. Droplet infection is the main route of spread. Option C: Recovering from diphtheria does not guarantee immunity from becoming a carrier.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pages 178-180.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A 5-year-old child presents with sore throat, low-grade fever, a grayish membrane on the tonsils, and swelling of the neck. Which statement about carriers of this infection is true, and how should they be managed? (Q840793)

A. Carriers are asymptomatic and require no treatment.

B. Carriers should receive antibiotics to eliminate bacteria and prevent transmission.

C. Carriers can be identified by the greyish membrane on their tonsils.

D. Carriers are insignificant in disease spread and can be overlooked.

Correct Answer: B. Carriers should receive antibiotics to eliminate bacteria and prevent transmission.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The child's symptoms indicate diphtheria, an infection caused by Corynebacterium diphtheriae. Carriers of this bacteria, even if asymptomatic, can spread the disease to others. Therefore, it is essential to treat carriers with antibiotics to eliminate the bacteria and prevent further transmission of the disease. Types of carriers Healthy carriers → harbor bacteria without symptoms. Chronic carriers → persist for months to >1 year. Incubatory carriers → infectious before symptoms appear. Significance Nasal carriers shed more organisms → more infectious than throat carriers. Diagnosis Declared non-infectious after 2 negative nose & throat cultures taken 24 hrs apart. Management Oral erythromycin for 10 days. Important consideration Immunization does not prevent the carrier state. Important Considerations: Immunization does not prevent the carrier state, meaning immunized individuals can still carry and potentially transmit the bacteria. Carriers do not exhibit the characteristic symptoms of diphtheria.(Option C) Carriers of Corynebacterium diphtheriae are significant in the epidemiology of diphtheria as they can transmit the infection to susceptible individuals .(Option D)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pages 178-179.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A patient presents with suspected diphtheria and has a documented history of severe anaphylaxis to horse serum. What is the most appropriate management strategy for this patient? (Q840795)

A. Administer a full dose of diphtheria antitoxin intravenously, as the benefits outweigh the risks.

B. Administer a reduced dose of diphtheria antitoxin intramuscularly with close monitoring.

C. Avoid diphtheria antitoxin and treat with high-dose penicillin or erythromycin for 5-6 days.

D. Perform skin sensitivity testing with a reduced concentration of diphtheria antitoxin before administration.

Correct Answer: C. Avoid diphtheria antitoxin and treat with high-dose penicillin or erythromycin for 5-6 days.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The patient in above scenario has a history of anaphylaxis to horse serum and now suspected for diphtheria. The diphtheria anti-toxin consists of horse serum, therefore it is contraindicated in this patient. Feature Diphtheria Antitoxin Type Antisera Preparation Prepared in horse serum Administration Given IM or IV; Skin sensitivity testing should always be performed before administration due to the risk of anaphylaxis from the horse serum. (Option A and B) Dosage 20,000 to 100,000 IU or more, depending on the severity of the case. Indications Treatment of diphtheria; Prophylaxis in non-immunized close contacts. Dosage Examples Mild cases: 20,000-40,000 IU Moderate cases: 40,000-80,000 IU Severe cases: 80,000-1,00,000 IU Anterior nasal diphtheria: 10,000-20,000 units Tonsillar diphtheria: 15,000-25,000 units In addition to diphtheria antitoxin, individuals with diphtheria should also be treated with penicillin or erythromycin for 5-6 days to eliminate C. diphtheriae and reduce toxin production. Skin sensitivity testing still carries the risk of triggering a severe allergic reaction in a highly sensitized individual .(Option D)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 180.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A child is diagnosed with diphtheria. The child's parent, who is unvaccinated and asymptomatic, is identified as a close contact. What is the MOST appropriate management for the parent? (Q840797)

A. Administer a single booster dose of diphtheria toxoid.

B. Administer diphtheria antitoxin (DAT) and complete the diphtheria toxoid series.

C. Administer prophylactic penicillin or erythromycin only.

D. No action is needed since the parent is asymptomatic.

Correct Answer: B. Administer diphtheria antitoxin (DAT) and complete the diphtheria toxoid series.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: For Unvaccinated close contacts, administer diphtheria antitoxin (DAT) for immediate passive immunity, complete the diphtheria toxoid series for long-term active immunity and prophylactic antibiotics (it is given to all the contacts). Management of diphtheria contacts: Diphtheria Contact Management All Contacts (Option C) Assess for signs and symptoms of diphtheria. Obtain a sample for Corynebacterium diphtheriae culture. Administer prophylactic antibiotics: Penicillin or erythromycin for 7-10 days, stopping if culture results are negative. Unvaccinated close contact (Option B) Administer diphtheria antitoxin (DAT) for immediate passive immunity. Complete the diphtheria toxoid series for long-term active immunity. Unknown vaccination status or received <3 doses Complete the diphtheria toxoid series: This includes 3 primary and 2 booster doses. Received >3 doses, and the last dose was >5 years ago (Option A) Administer a single diphtheria toxoid booster dose Received >3 doses, and the last dose was <5 years ago The contact should receive the next dose of diphtheria toxoid according to the recommended schedule without needing an additional dose due to the current exposure. Option D: Even though the parent is asymptomatic, they are at high risk of developing diphtheria, given their unvaccinated status.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 180.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A 25-year-old woman presents with a rash that started as small, itchy red bumps on her trunk and has now progressed to fluid-filled blisters over the past 2 days. She reports feeling generally unwell with a mild fever. What is the most common neurological complication associated with this disease? (Q840839)

A. Meningitis

B. Encephalitis

C. Guillain-Barré syndrome

D. Peripheral neuropathy

Correct Answer: B. Encephalitis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This patient with rash that started as small, itchy red bumps on her trunk and has now progressed to fluid-filled blisters over the past 2 days is most likely to have chicken pox. Chickenpox can lead to neurological complications, with encephalitis being the most common. Clinical features of chickenpox: Pre-eruptive : Sudden fever, malaise, back pain, shivering (≈24h; longer in adults). Eruptive : Rash: centripetal (trunk → periphery), mucosa involved, palms/soles spared. Rapid progression: macule → papule → vesicle ("dew drop on rose petal") → scab (4–7d). Pleomorphism : all stages present together. Fever: mild, spikes with new lesions. Complications Immunosuppressed: pneumonia, encephalitis , hemorrhage, disseminated disease (newborn if maternal infection -5 to +2 days). Reye syndrome (with aspirin). Congenital varicella syndrome (≤20 weeks): cicatricial rash, limb hypoplasia, microcephaly.





References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pages 159-162

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A pregnant woman is exposed to chickenpox, but her immune status is unknown. According to the guidelines, what is the recommended course of action? (Q840848)

A. Immediate administration of the varicella vaccine to prevent maternal infection.

B. Test for maternal antibodies to determine immune status.

C. Administration of varicella-zoster immune globulin.

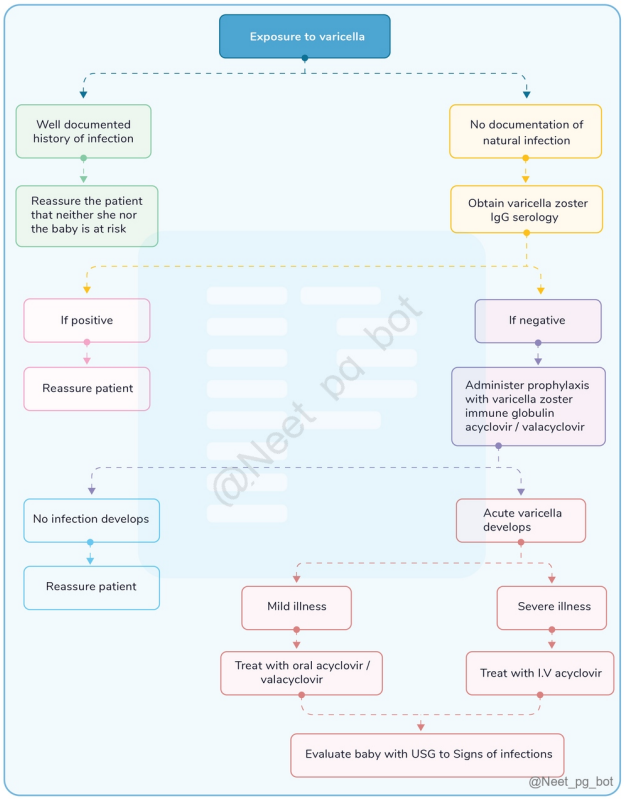
D. Prescription of antiviral medications such as acyclovir to prevent fetal transmission.

Correct Answer: B. Test for maternal antibodies to determine immune status.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: When maternal history of chickenpox is uncertain, she should be tested for IgG antibodies against chickenpox. The full algorithm for maternal exposure to chickenpox: {{caption_text}}



References:

https://www.rcog.org.uk/media/y3ajgkda/gtg13.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 018 Acute Respiratory Infection And Tuberculosis

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 018 Acute Respiratory Infection And Tuberculosis — Quick Jump

Q1 (p. 963) *Q2 (p. 965)* *Q3 (p. 966)* *Q4 (p. 967)* *Q5 (p. 968)* *Q6 (p. 969)*
Q7 (p. 970) *Q8 (p. 971)* *Q9 (p. 972)* *Q10 (p. 972)* *Q11 (p. 973)*

Q1: Under which initiative are acute respiratory illness, malnutrition & diarrhea managed in children aged 0 to 5 years? (Q841121)

A. Expanded Program on Immunization (EPI)

B. National Rural Health Mission (NRHM)

C. Integrated Management of Neonatal and Childhood Illness (IMNCI)

D. National Vector Borne Disease Control Program (NVBDCP)

Correct Answer: C. Integrated Management of Neonatal and Childhood Illness (IMNCI)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The child is 2 years old and weighs only 6 kg; therefore, he is severely malnourished. Frequent watery stools suggest he has diarrhea, and the cough, runny nose, and sore throat suggest he has an Acute Respiratory Infection (ARI). The IMNCI is a strategy that comprehensively manages the most common and serious conditions affecting children under 5 years of age. This includes diseases like ARI (pneumonia) Diarrhea Measles Malaria Malnutrition The Expanded Program on Immunization (EPI) (Option A) focuses on vaccinating children against preventable diseases but does not address broader illness management like pneumonia or malnutrition. Health Mission (NRHM) (Option B) aims to improve rural healthcare in India but does not specifically focus on managing childhood illnesses like pneumonia and malnutrition. National Vector Borne Disease Control Program (NVBDCP) (Option D) focuses on preventing and controlling vector-borne diseases such as malaria, dengue, and chikungunya.



Integrated Management Of Neonatal And Childhood Illness

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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pages 655, 515, 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A 6-month-old infant presents with vomiting, refusal to feed, loose stools for 2 days, and a also had a bout of convulsions an hour ago. On exam, he is lethargic and difficult to wake. According to IMNCI guidelines, which of the following is not a danger sign? (Q841123)

A. Lethargy and difficult to wake

B. Refusal to feed

C. Convulsions

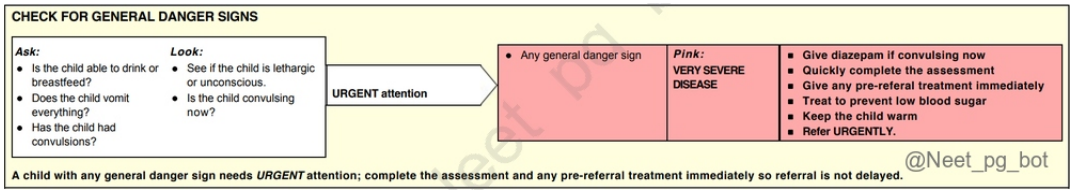
D. Frequent loose stools

Correct Answer: D. Frequent loose stools

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Under IMNCI, The following are considered to be the danger signs in children under 5 years of age Convulsions Lethargy/unconsciousness Inability to drink/breastfeed Vomiting



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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 528

https://cdn.who.int/media/docs/default-source/mca-documents/9789241506823_chartbook_eng.pdf? - Page 5

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A mother brings her 10-month-old daughter to the clinic with complaints of refusal to feed and vomiting everything for the past 2 days. On examination, she is lethargic and also has fever. According to the IMNCI color coding system, how should this child be classified? (Q841125)

A. Green (Mild illness)

B. Yellow (Moderate illness)

C. Pink (Severe illness)

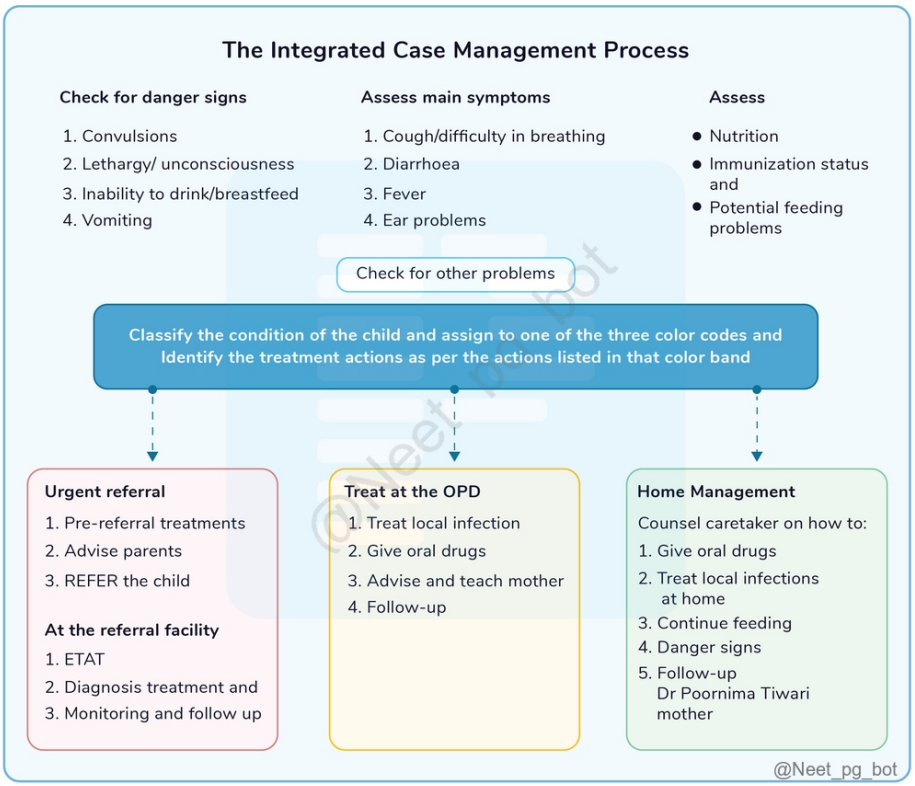
D. Orange (Moderate illness)

Correct Answer: C. Pink (Severe illness)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The IMNCI guidelines use a color-coded system to classify the severity of illness in children. This child is refusing to breastfeed and also vomits up everything. Additionally, she is lethargic. All these are danger signs and warrant urgent treatment. Hence, Pink (Severe illness).



References:

Danger signs and Urgent treatment (Pink) by IMNCI WHO Link Park's Textbook of Preventive and Social Medicine, 27th edition, Page 528

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A child aged 2 months was brought to the PHC by his mother. She reports that he has been very fussy and irritable for the past 3 days. Initially, she noticed that he had a mild cough and a runny nose. Over the past 24 hours, his symptoms worsened and he is breathing rapidly. O/E the child is lethargic and irritable. His respiratory rate was 70/minute, chest drawing was present. The most appropriate line of management for this patient is. (Q841126)

A. Classify as pneumonia and refer urgently to secondary level hospital.

B. Classify as pneumonia, start antibiotic, and advise to report after 2 days

C. Classify as very severe pneumonia, start antibiotics, and refer urgently.

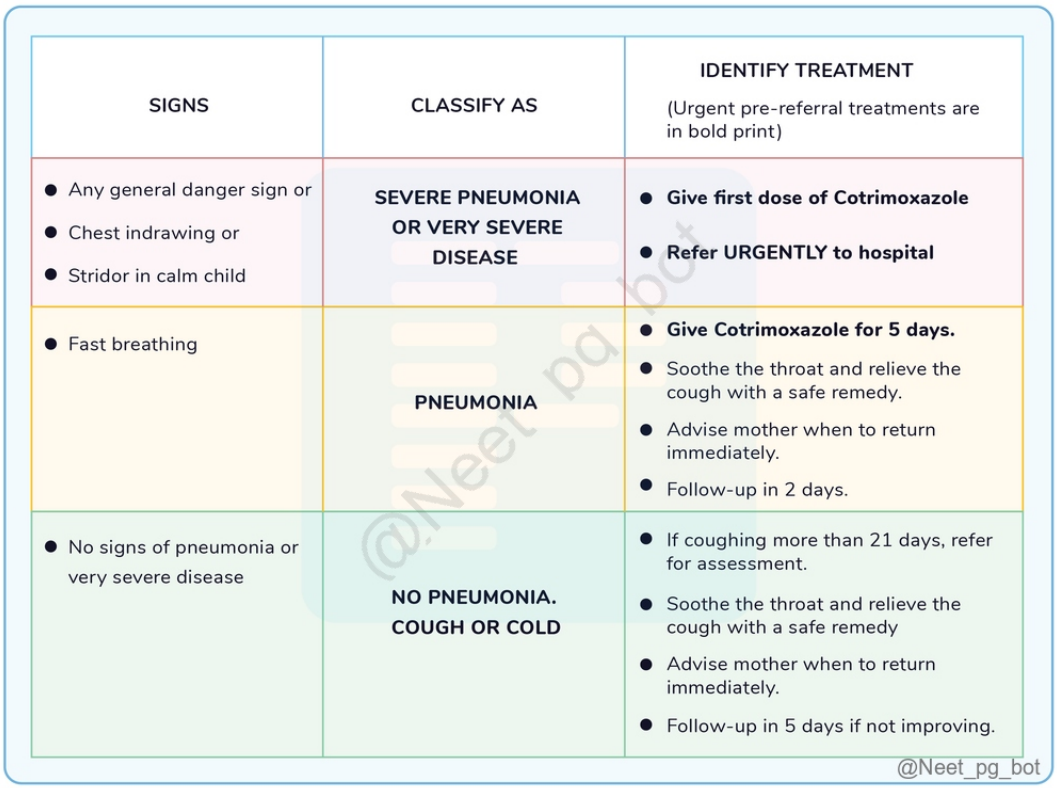
D. Classify as severe pneumonia and keep the baby warm.

Correct Answer: C. Classify as very severe pneumonia, start antibiotics, and refer urgently.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The IMNCI classification of Pneumonia is as follows:



SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Chest indrawing or • Stridor in calm child	SEVERE PNEUMONIA OR VERY SEVERE DISEASE	• **Give first dose of Cotrimoxazole** • **Refer URGENTLY to hospital**
• Fast breathing	PNEUMONIA	• **Give Cotrimoxazole for 5 days.** • Soothe the throat and relieve the cough with a safe remedy. • Advise mother when to return immediately. • Follow-up in 2 days.
• No signs of pneumonia or very severe disease	NO PNEUMONIA. COUGH OR COLD	• If coughing more than 21 days, refer for assessment. • Soothe the throat and relieve the cough with a safe remedy • Advise mother when to return immediately. • Follow-up in 5 days if not improving.

@Neet_pg_bot

References:

www.nhm.gov.in/images/pdf/guidelines/nrhm-guidelines/stg/imnci-2-months-to-5-years.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: A 3yr old boy was brought to the clinic for complaints of cough and runny nose. He is otherwise healthy and is on schedule with his vaccinations. On examination, he had rapid breathing and was restless. Which of the following is considered to be fast breathing in children of 1 to 5 years of age? (Q841128)

A. Respiratory rate > 30/min

B. Respiratory rate > 40/min

C. Respiratory rate > 50/min

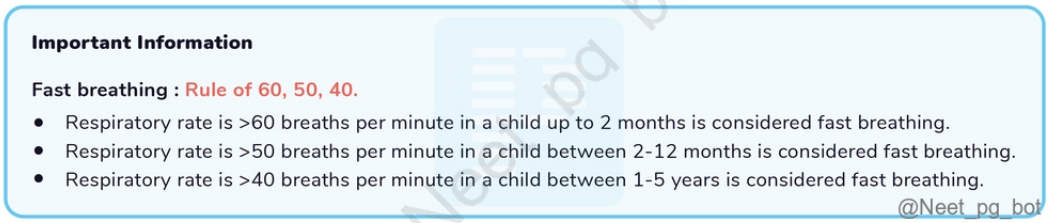
D. Respiratory rate > 60/min

Correct Answer: B. Respiratory rate > 40/min

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Fast breathing is a vital sign indicating respiratory distress in pediatric patients In children 1-5 years of age, a respiratory rate of >40/min is considered fast breathing It signifies respiratory distress and warrants further evaluation and management The other options are incorrect as per the rule of 60, 50, 40. (Option A, C and D ruled out)



References:

www.indianpediatrics.net/feb2004/feb-175-179.htm

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Match the following : a) M. Kansasii i) Rapid growers b) M. Leprae ii) Scotochromogens c) M. Fortuitum iii) Photochromogens d) M. Scrofulaceum iv) Sensitive to INH (Q841129)

A. a-iii, b-iv, c-i, d-ii

B. a-i, b-iii, c-iv, d-ii

C. a-ii, b-i, c-iv, d-iii

D. a-iv, b-ii, c-i, d-iii

Correct Answer: A. a-iii, b-iv, c-i, d-ii

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Differences Between Typical and Atypical Bacteria Characteristic Typical Bacteria Atypical Bacteria Agents : Mycobacterium tuberculosis Nocardia Isospora M. Leprae M. Kansasii - Photochromogens M. Scrofulaceum - Scotochromogens M. intracellulare - Non photochromogens M. Fortuitum - Rapid growers Virulence Highly virulent Less virulent Lung Affected Healthy lungs Diseased lungs (e.g. lung with congenital deformity, cystic fibrosis) Human Transmission Can spread directly from human to human No evidence of direct human spread; spread from the environment to humans Drug Resistance Sensitive to standard anti-mycobacterial drugs (e.g., INH or streptomycin) Usually resistant to standard anti-mycobacterial drugs Growth Rate All are slow growers Some are slow growers, and some are rapid growers Pigment Production All are pigment non-producers Some are photochromogens, some are scotochromogens, and some are non-chromogens

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pages 212-213

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following statements is true about latent TB? A) 10% people with latent TB can develop active TB B) Individual can spread TB to others C) Alpha interferon test will be positive D) The bacilli are non-dormant (Q841131)

A. A and C

B. B and D

C. A, B and D

D. Only B

Correct Answer: A. A and C

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Latent TB: Latent TB - A condition in which an individual is infected with Mycobacterium tuberculosis (M. TB) but does not have active TB disease. Individuals with latent TB are asymptomatic and not contagious . (Statement B) Approximately 40% of the population have latent TB Key Characteristics of Latent TB : The bacilli are dormant. (Statement D) Individuals with latent TB are non-infectious. Around 10% of individuals infected with latent TB eventually develop active TB. (Statement A) Tests for Latent TB : Tuberculin skin test Alpha interferon test (Statement C)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 233

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Tuberculin conversion index aka Annual risk of infection (ARI) is a measure of? (Q841132)

A. Incidence of TB Infection

B. Prevalence of TB infection

C. Incidence of TB disease

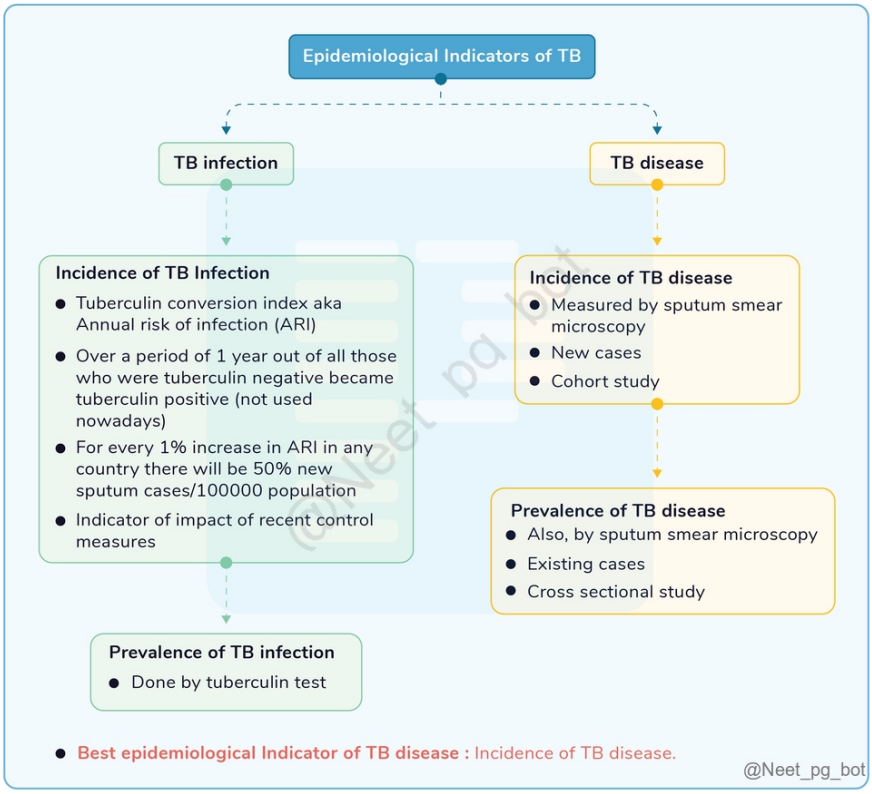
D. Prevalence of TB disease

Correct Answer: A. Incidence of TB Infection

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Tuberculin conversion index aka Annual risk of infection (ARI) is a measure of Incidence of TB Infection.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 210

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: In which of the following is the tuberculin test considered negative? (Q841134)

A. 12 mm induration in a HIV negative drug abuser

B. 10 mm induration in a 2 year old child

C. 8 mm induration in a patient with silicosis

D. 6 mm induration in a person with recent contact with active TB

Correct Answer: C. 8 mm induration in a patient with silicosis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: ≥10 mm induration in a patient with silicosis is considered positive. Since in the question an induration of size 8mm is mentioned, it will be considered negative in a patient of Silicosis. Inference of Mantoux Test: Induration Result > 9 mm Positive (past or current infection) 6-9 mm Doubtful (M.TB or atypical mycobacterium) < 6 mm Negative (never infected) Exception to Normal Mantoux Results : Induration Size for positive test Conditions ≥ 5 mm HIV positive Recent contacts with active TB (Option D ruled out) Fibrotic changes on chest x-ray with prior TB Organ transplants Other immunosuppressive patients ≥ 10 mm Recent immigrants from high TB prevalence countries HIV negative drug abusers (Option A ruled out) Mycobacteriology lab personnel Residents and employees of high-risk areas DM, silicosis , cancers, blood disorders (Option C) Children < 4 years (Option B ruled out) ≥ 15 mm For persons with no risk factors for TB

References:

Parks 27th edition Page: 216

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A 55-year-old healthcare worker with rheumatoid arthritis is started on immunosuppressive therapy. What is the most appropriate reason to perform a two-step tuberculin skin test (TST) before initiating treatment? (Q841135)

A. To assess the patient's baseline immunity against tuberculosis

B. To confirm a recent positive TST result

C. To differentiate between a boosted reaction and a new infection

D. To monitor the effectiveness of immunosuppressive therapy on latent tuberculosis

Correct Answer: C. To differentiate between a boosted reaction and a new infection

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Before starting immunosuppressive therapy, a two-step tuberculin skin test is used to distinguish between a boosted reaction from prior exposure to tuberculosis and a new infection. This approach helps confirm a positive TST result, preventing unnecessary treatment for latent tuberculosis due to misinterpretation. 1st test - read within 48 to 72 hours If positive, consider the patient infected. If negative, 2nd test after 3 weeks. 2nd test - read within 48 to 72 hours - done after 3 weeks. Positive - infected Negative - uninfected To assess the patient's baseline immunity against tuberculosis(Option A): The TST does not assess "immunity" in the protective sense, but rather latent infection . Immunity would relate more to BCG vaccination or T-cell responses. To confirm a recent positive TST result(Option B): That would be a repeat single TST , not a two-step test. To monitor the effectiveness of immunosuppressive therapy on latent tuberculosis(Option D): TST is not used to monitor treatment effectiveness. Also, immunosuppression can cause false negatives in TST.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 217

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: A 2-year-old boy weighing 6 kg was brought to the clinic by his mother. He has been experiencing frequent loose stools and has also had a runny nose, cough, and sore throat for the past two days. Under which initiative are these diseases managed in children aged 0 to 5 years? (Q844338)

A. Expanded Program on Immunization (EPI)

B. National Rural Health Mission (NRHM)

C. Integrated Management of Neonatal and Childhood Illness (IMNCI)

D. National Vector Borne Disease Control Program (NVBDCP)

Correct Answer: C. Integrated Management of Neonatal and Childhood Illness (IMNCI)

Explanation: The child is 2 years old and weighs only 6 kg; therefore, he is severely malnourished. Frequent watery stools suggest he has diarrhea, and the cough, runny nose, and sore throat suggest he has an Acute

Respiratory Infection (ARI). The IMNCI is a strategy that comprehensively manages the most common and serious conditions affecting children under 5 years of age. This includes diseases like ARI (pneumonia) Diarrhea Measles Malaria Malnutrition The Expanded Program on Immunization (EPI) (Option A) is a global initiative that ensures the immunization of all children against common vaccine-preventable diseases. While EPI focuses on vaccination, it does not encompass the broader management of illnesses like pneumonia or malnutrition beyond their prevention through immunization. National Rural Health Mission (NRHM) (Option B) is an Indian initiative designed to improve healthcare delivery across rural areas. While NRHM encompasses various programs and missions, including those targeting maternal and child health, but it is not specifically focused on the integrated management of illnesses like pneumonia and malnutrition in children. National Vector Borne Disease Control Program (NVBDCP) (Option D) focuses on preventing and controlling vector-borne diseases such as malaria, dengue, and chikungunya.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pages 655, 515, 472

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 019 Polio Hepatitis Diarrhoea Cholera Typhoid

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 019 Polio Hepatitis Diarrhoea Cholera Typhoid — Quick Jump

Q1 (p. 975)	*Q2 (p. 976)*	*Q3 (p. 977)*	*Q4 (p. 978)*	*Q5 (p. 979)*	*Q6 (p. 980)*
Q7 (p. 981)	*Q8 (p. 981)*	*Q9 (p. 982)*	*Q10 (p. 983)*	*Q11 (p. 984)*	*Q12 (p. 985)*

Q1: In the context of polio in India, which of the following statements is correct regarding the different types of poliovirus (Type 1, Type 2, and Type 3)? (Q841148)

A. India has successfully eradicated Type 1, but Type 2 and Type 3 still remain a threat.

B. Type 2 poliovirus has been eradicated globally, and India is free from both Type 2 and Type 3 poliovirus, with efforts ongoing to eradicate Type 1.

C. All three types of poliovirus are still prevalent in India, requiring continued vaccination efforts.

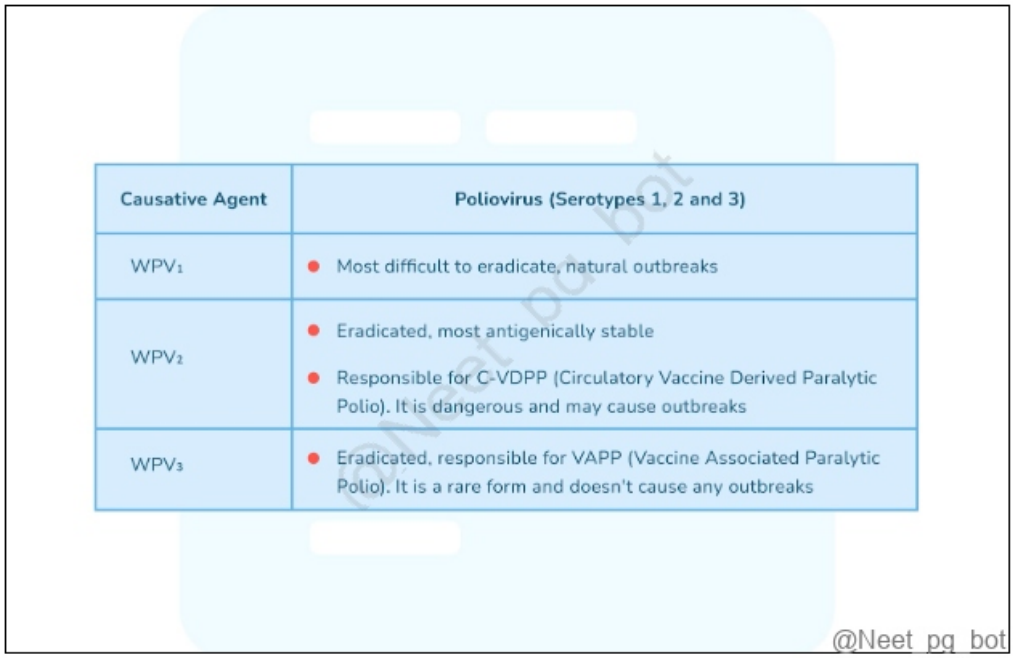
D. World Health Organization declared India polio-free in 2014, and no Type 1, Type 2, or Type 3 poliovirus cases have been reported.

Correct Answer: D. World Health Organization declared India polio-free in 2014, and no Type 1, Type 2, or Type 3 poliovirus cases have been reported.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: India was declared polio-free by the WHO in 2014. The last reported case of Type 1 poliovirus in India was in January 2011. Type 2 poliovirus was eradicated globally in 1999. The last detected Type 3 case was in Nov 2012 and declared eradicated in Oct 2019. Current efforts are focused on Preventing any resurgence of Type 1 poliovirus Regular surveillance Maintaining high vaccination coverage prevents the outbreak and ensures the country remains polio-free.



Causative Agent	Poliovirus (Serotypes 1, 2 and 3)
WPV_1	• Most difficult to eradicate, natural outbreaks
WPV_2	• Eradicated, most antigenically stable • Responsible for C-VDPP (Circulatory Vaccine Derived Paralytic Polio). It is dangerous and may cause outbreaks
WPV_3	• Eradicated, responsible for VAPP (Vaccine Associated Paralytic Polio). It is a rare form and doesn't cause any outbreaks

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References:

K. Park's Textbook of Preventive and Social Medicine, Edition 27,Page: 240-243

www.cdc.gov/orr/polioviruscontainment/diseaseandvirus.htm#

↑ *Back to this question in Part A*

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Q2: Which of the following accurately describes the differences between the Oral Polio Vaccine (OPV) and the Inactivated Polio Vaccine (IPV)? (Q841150)

A. OPV is a killed formalized virus vaccine administered subcutaneously, while IPV is a live attenuated virus vaccine taken orally.

B. OPV provides both humoral and intestinal immunity and is effective in controlling epidemics, while IPV provides only humoral immunity and is not useful in controlling epidemics.

C. OPV requires less stringent storage and transport conditions compared to IPV.

D. Both OPV and IPV have the same shelf life and risk of vaccine-associated paralytic poliomyelitis (VAPP).

Correct Answer: B. OPV provides both humoral and intestinal immunity and is effective in controlling epidemics, while IPV provides only humoral immunity and is not useful in controlling epidemics.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Vaccination against poliovirus involves the use of two distinct types of vaccines: Oral Polio Vaccine (OPV) and Inactivated Polio Vaccine (IPV). Differences between OPV and IPV: Characteristic OPV (Sabin) IPV (Salk) Type of Vaccine Live attenuated virus Killed (inactivated) virus Mode of Administration Oral Intramuscular (IM) or Subcutaneous (SC) Type of Immunity Humoral + Intestinal Humoral Prevention of Paralysis + Intestinal re-infection Paralysis Control of Epidemics Effective Less effective Storage, Transport & Shelf Life Requires sub-zero temperatures, Shorter shelf life Less stringent conditions, Longer shelf life Vaccine-Associated Paralytic Poliomyelitis (VAPP) 1 per 2.7 million first doses (higher in subsequent doses) Zero incidences

References:

K. Park's Textbook of Preventive and Social Medicine, Edition 27, Page: 246 VACCINE-DERIVED POLIOVIRUS

↑ *Back to this question in Part A*

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Q3: Which of the following statements accurately differentiates between OPV and IPV in terms of their composition and the measurement of vaccine strength? (Q841151)

A. OPV contains live attenuated poliovirus, and the quantity of antigen per dose measures its strength. IPV contains killed poliovirus, and the potency of the live virus measures its strength.

B. OPV contains killed poliovirus, and its strength is measured by the quantity of antigen per dose. IPV contains live attenuated poliovirus, and the potency of the live virus measures its strength.

C. OPV contains live attenuated poliovirus, and the potency of the live virus measures its strength. IPV contains killed poliovirus, and the quantity of antigen per dose measures its strength.

D. OPV and IPV both contain live attenuated poliovirus, and their strengths are measured by the quantity of antigen per dose.

Correct Answer: C. OPV contains live attenuated poliovirus, and the potency of the live virus measures its strength. IPV contains killed poliovirus, and the quantity of antigen per dose measures its strength.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Oral Polio Vaccine (OPV) contains live attenuated strains of all three poliovirus serotypes (type 1, type 2, and type 3). The strength of OPV - the potency of the live attenuated virus - ability to induce an immune response that produces antibodies against the 3 poliovirus serotypes. Type 1, Type 2, and Type 3 : The potency of OPV for each serotype is measured in terms of the tissue culture infectious dose 50 (TCID50) , which reflects the

amount of virus required to infect 50% of the cell cultures. Composition of OPV: Inactivated Polio Vaccine (IPV) contains killed (inactivated) poliovirus strains of all three serotypes (type 1, type 2, and type 3). The strength of IPV - amount of antigen (inactivated virus) present in the vaccine - quantified in D-antigen units for each serotype - vaccine's ability to induce protective antibodies. Type 1, Type 2, and Type 3 : Each serotype's strength is specified by the minimum D-antigen units required per dose to ensure immunogenicity. Composition of IPV:

Components	Strength
Poliovirus type 1	3 Lac TCID 50
Poliovirus type 2	1 Lac TCID 50
Poliovirus type 3	3 Lac TCID 50

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Components of SALK vaccine	Strength
Poliovirus type 1	20D antigen units
Poliovirus type 2	2D antigen unit
Poliovirus type 3	4D antigen units

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References:

www.researchgate.net/publication/22387963_Killed_poliovirus_antigen_titration_in_humans

↑ *Back to this question in Part A*

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Q4: Which of the following Hepatitis B virus (HBV) markers is correctly paired with its significance? (Q841181)

A. HBsAg + HBeAg + IgM - Indicates acute infection with high infectivity

B. HBsAg + HBeAg + IgG- Indicates acute infection in recovery phase

C. Anti-HBc only - Indicates immunity due to vaccination

D. Anti-HBs + HBeAg + IgG - Indicates recovery from infection in recent past

Correct Answer: A. HBsAg + HBeAg + IgM - Indicates acute infection with high infectivity

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Hepatitis B is a viral infection that affects the liver and can lead to acute and chronic diseases. Diagnosis and management of Hepatitis B virus (HBV) infection rely on detecting specific viral markers in the blood . These markers help determine the phase of disease, the degree of infectivity, and the patient's immune status. Understanding the significance of each marker is crucial for accurate diagnosis and effective treatment. Markers of Hepatitis-B Infection: Marker Indicates HBsAg (Option A) Active HBV infection, either acute or chronic HBsAb (anti-HBs) (Option B) Immunity to HBV (recovery and subsequent immunity to past infection or vaccination) - last to appear HBcAg The most accurate index of active viral replication HBcAb IgM (anti-HBc IgM) Acute HBV infection HBcAb IgG (anti-HBc IgG) (Option C) Past or chronic HBV infection HBeAg (Option D) Active viral replication and high infectivity HBeAb (anti-HBe) Seroconversion, usually in chronic infection, and lower infectivity HbsAg Anti-HBs HBeAg Anti-HBe Anti-HBc HBV DNA Acute HBV High infectivity + - + - IgM +++ Acute HBV Window phase - - - - IgM + Acute HBV Recovery phase - + - + IgG +/- Chronic HBV High infectivity + - + - IgG +++ Chronic HBV Low infectivity + - - + IgG + HBV infection in recent past - + - - IgG - HBV infection in remote past - - - +/- IgG - Immunization - + - - - -

References:

K. Park’s Textbook of Preventive and Social Medicine, Edition 27, Page: 253

↑ *Back to this question in Part A*

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Q5: Which of the following correctly represents the composition of the new reduced osmolarity Oral Rehydration Solution (ORS)? (Q841182)

A. Sodium: 75 mmol/L, Glucose: 75 mmol/L, Potassium: 20 mmol/L, Chloride: 65 mmol/L, Citrate: 10 mmol/L, Total Osmolarity: 245 mOsm/L

B. Sodium: 70 mmol/L, Glucose: 70 mmol/L, Potassium: 25 mmol/L, Chloride: 65 mmol/L, Citrate: 15 mmol/L, Total Osmolarity: 245 mOsm/L

C. Sodium: 75 mmol/L, Glucose: 75 mmol/L, Potassium: 20 mmol/L, Chloride: 60 mmol/L, Citrate: 15 mmol/L, Total Osmolarity: 245 mOsm/L

D. Sodium: 70 mmol/L, Glucose: 70 mmol/L, Potassium: 20 mmol/L, Chloride: 60 mmol/L, Citrate: 10 mmol/L, Total Osmolarity: 230 mOsm/L

Correct Answer: A. Sodium: 75 mmol/L, Glucose: 75 mmol/L, Potassium: 20 mmol/L, Chloride: 65 mmol/L, Citrate: 10 mmol/L, Total Osmolarity: 245 mOsm/L

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Oral Rehydration Solution (ORS) therapy is based on the principle that glucose facilitates salt and water absorption in the intestine, thereby restoring electrolyte and fluid balance. WHO and UNICEF recommend the use of reduced osmolarity ORS due to the following advantages: Lower sodium and glucose concentrations decrease osmolarity, reducing the risk of adverse effects associated with hypertonicity. Trisodium citrate enhances sodium and water absorption, resulting in reduced stool output. Composition of Reduced Osmolarity ORS: Component mmol/L Sodium 75 Chloride 65 Glucose anhydrous 75 Potassium 20 Citrate 10 Total osmolarity 245

References:

K. Park’s Textbook of Preventive and Social Medicine, Edition 27. Page: 266

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following is an additional ion present in ReSoMal? (Q841183)

A. Sodium

B. Calcium

C. Potassium

D. Magnesium

Correct Answer: D. Magnesium

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: ReSoMal (Rehydration Solution for Malnutrition) is specifically designed to rehydrate severely malnourished children suffering from diarrhea-related dehydration. Comparison of ReSoMal vs Standard ORS: Component ReSoMal Standard ORS Sodium 45 90 Potassium 40 20 Chloride 70 80 Citrate 7 10 Magnesium 3 - Zinc 0.3 - Copper 0.045 - Glucose 125 111 Osmolarity 300 311 Severely malnourished children often have imbalanced electrolyte levels. ReSoMal is specifically formulated to address these imbalances, providing lower sodium and higher potassium and magnesium levels compared to standard ORS. The lower sodium content in

ReSoMal minimizes the risk of hypernatremia. Additional nutrients like magnesium, zinc, and copper support overall recovery and immune function.

References:

iris.who.int/bitstream/handle/10665/41999/a57361-eng.pdf?sequence=1

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following statements is false regarding Super ORS? (Q841184)

A. Super ORS instead of mono sugars, is based on complex sugars such as rice or amino acids like glycine or alanine.

B. It provides more calories (180 kcal/L) and is intended to cause weight gain in the malnourished.

C. Super ORS has a long shelf life and can be prepared once a week.

D. It helps reduce stool output, the frequency of stools, and the duration of diarrhea.

Correct Answer: C. Super ORS has a long shelf life and can be prepared once a week.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Super ORS has a short shelf life of less than 10 hours and needs to be freshly prepared 2-3 times a day . Advantages and Disadvantages of Super ORS: Advantages Disadvantages Provides rehydration Short shelf life (< 10 hours) Reduces stool output Needs to be prepared freshly 2-3 times a day Reduces frequency of stools Reduces duration of diarrhea Provides 180 kcal/L, contributing towards weight gain Useful for malnourished children

References:

journals.lww.com/ijph/abstract/1990/34010/super_ors_.5.aspx

pubmed.ncbi.nlm.nih.gov/2101384/

iapdelhi.org/wp-content/uploads/2021/01/IAP-Delhi-ORS-2021.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following statements is incorrect regarding the components of Oral Rehydration Solution (ORS)? (Q841185)

A. The glucose dependent sodium and water absorption is the principle behind replacing glucose and sodium in 1:1 molar ratio in the WHO-ORS.

B. Potassium improves the absorption of sodium and water by enhancing concentration gradient for sodium.

C. Trisodium citrate improves the shelf life of ORS, making it more stable.

D. Trisodium citrate reduces stool output by 25% and enhances sodium and water absorption.

Correct Answer: B. Potassium improves the absorption of sodium and water by enhancing concentration gradient for sodium.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Potassium's primary role is to replace the essential ions lost during diarrhea and vomiting, not to enhance the concentration gradient for sodium absorption. Component Role Glucose (Option A) Allows intestines to absorb sodium, dragging water into intestinal cells and the body for rehydration. Potassium Replaces essential ions lost during diarrhea and vomiting, helping to maintain electrolyte balance. Trisodium Citrate (Option C & D) It improves the shelf life of ORS, making it more stable. Helps reduce stool output by 25%. Enhances absorption of sodium and water. Sodium Chloride It provides the necessary sodium to help absorb water and maintain fluid balance.

References:

OP Ghai Textbook of Pediatrics 9th Edition Page: 289 K. Park's Textbook of Preventive and Social Medicine 27th ed. Page: 266 https://rehydrate.org/ors/ort-how-it-works.htm

↑ *Back to this question in Part A*

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Q9: A 2-year-old child presents with 2-3 episodes of diarrhea and on examination for skin returns quickly when pinched, there is no excessive thirst or refusal to drink fluids and the child accepts fluids or food orally without any difficulty. Which of the following management steps is incorrect for treating the child at home concerning the clinical symptoms? (Q841187)

A. Counsel the mother to give extra fluids and continue feeding.

B. Provide frequent small sips of 50-100 ml of fluid after each loose stool.

C. Mandatory administration of ORS solution every 2 hours to prevent signs and symptoms of dehydration.

D. Give zinc supplementation of 20mg for 14 days.

Correct Answer: C. Mandatory administration of ORS solution every 2 hours to prevent signs and symptoms of dehydration.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: ORS solution is unnecessary if the child suffers from mild diarrhea and there are no signs of dehydration. In mild diarrhea, fluids/ORS should be given according to the child's needs. Plan Criteria Management Steps A Mild diarrhea, no dehydration Counsel the mother to give extra fluids, continue feeding, give zinc supplements, follow up. Fluids: Small sips (50-100 ml after each loose stool for children up to 2 years, 100-200 ml for children over 2 years). Zinc: 20 mg tab for two months to 5 years (dissolve in breast milk or ORS for infants). B Moderate dehydration Administer ORS in a clinical setting: Amount based on weight and age (e.g., 450-800 ml for children 6-10 kg). Reassess hydration status after 4 hours. C Severe dehydration If possible, provide immediate IV fluids; otherwise, start ORS by mouth while setting up the IV. The dosage is 100 ml/kg Ringer's Lactate or normal saline over 1-5 hours, depending on the patient's age. Reassess every 1-2 hours, switch to ORS as the child stabilizes, and continue monitoring and using the appropriate hydration method (IV/NG/ORS).

References:

K. Park's Textbook of Preventive and Social Medicine, Edition 27, Page: 688, 689

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following statements is incorrect regarding cholera? (Q841188)

A. The predominant serotype of cholera in India is the El Tor biotype of Vibrio cholerae O1.

B. Cholera is no longer a notifiable disease locally and nationally, but remains notifiable internationally.

C. The oral cholera vaccine Dukoral includes a recombinant cholera toxin B subunit and is suitable for children under two years.

D. Shanchol and mORCVAX are oral cholera vaccines based on serogroups O1 and O139, used for individuals over 1 year of age.

Correct Answer: C. The oral cholera vaccine Dukoral includes a recombinant cholera toxin B subunit and is suitable for children under two years.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: - Dukoral is an oral inactivated cholera vaccine that contains killed V. cholerae O1 and a recombinant B subunit of cholera toxin . However, Dukoral is not recommended for children under 2 years of age . Hence, the statement is incorrect . Cholera Vaccines and Use Vaccine Contains Age Group Notes Dukoral Killed V. cholerae O1 + recombinant B subunit ≥2 years Requires buffer; provides short-term protection Shanchol Killed V. cholerae O1 and O139 ≥1 year Used in endemic/outbreak settings mORCVAX Killed V. cholerae O1 and O139 ≥1 year Similar to Shanchol

References:

K. Park's Textbook of Preventive and Social Medicine, Edition 27, Page 270-276

↑ *Back to this question in Part A*

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Q11: A 7-year-old child presents with fever, abdominal pain, and a rash. Blood cultures confirm typhoid fever. The pediatrician discusses vaccination for family members for future typhoid prevention. Which of the following statements about typhoid vaccines is incorrect? (Q841190)

A. Ty21a is a live vaccine administered orally and recommended for individuals over 5 years old.

B. The Vi polysaccharide vaccine is a killed vaccine given subcutaneously or intramuscularly, suitable for children over 2 years old.

C. Ty21a requires a single dose shot that is repeated every 3 years.

D. The Vi polysaccharide vaccine does not elicit adequate immune responses in children aged less than 2 years.

Correct Answer: C. Ty21a requires a single dose shot that is repeated every 3 years.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Ty21a is an oral typhoid vaccine and requires a three-dose regimen (1, 3, 5 days) repeated every 3 years, while Vi polysaccharide is a IM/SC vaccine and requires a single dose shot that is repeated every 3 years. Feature Ty21a Vaccine Vi Polysaccharide Vaccine Typhoid conjugate vaccine Type Live-attenuated vaccine Killed (inactivated) vaccine Inactivated (killed) vaccine Route of Administration Oral Subcutaneous/Intramuscular Intramuscular Age Recommendation >5 years >2 years >6 months Dosage Regimen 3-dose regimen (1, 3, 5 days), repeated every 3 years Single dose, repeated every 3 years Single dose Immunity Development Develops after 7 days Develops after 7 days Develops after 7 days and high seroconversion by 4 weeks Effectiveness in Young Children Not recommended for children under 5 years Does not elicit adequate immune response in children <2 years Not recommended for children below 6 months

References:

K. Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 279

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following statements is false regarding typhoid? (Q841191)

A. Typhoid is endemic in India.

B. Man is the only reservoir for typhoid infection.

C. Diagnosis of typhoid includes blood culture in the 1st week, Widal test in the 2nd week, and fecal and urine cultures in the 3rd and 4th weeks.

D. Somatic O Antigen is higher in the post-vaccination phase, and Flagellar H Antigen is higher in the post-infection phase.

Correct Answer: D. Somatic O Antigen is higher in the post-vaccination phase, and Flagellar H Antigen is higher in the post-infection phase.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Somatic O Antigen is higher in the post-infection phase, and the Flagellar H Antigen is higher in the post-vaccination phase. Epidemiological Data Typhoid is endemic in India. The causative agent is Salmonella typhi. (Option A) Reservoir Man is the only reservoir for typhoid infection. (Option B) Sources of Infection Primary: Feces > Urine Secondary: Contaminated water, food, fingers, fomites. Carriers Convalescent carriers: Excrete bacilli for 6-8 weeks. Chronic carriers: Excrete bacilli for >1 year. Mode of Transmission Feco-oral route. Incubation Period 10-14 days. Clinical Features Early phase: Fever, paradoxical bradycardia, pea soup diarrhea. Late phase: Splenomegaly, rose spots. Diagnostic Modalities (Option C) 1st week: Blood culture 2nd week: Widal test 3rd & 4th weeks: Fecal and urine cultures. Treatment Fluoroquinolones, azithromycin, ceftriaxone, cefixime.

References:

K. Park’s Textbook of Preventive and Social Medicine, Edition 27,Page: 276-280

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 020 Dengue Malaria And Rabies

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 020 Dengue Malaria And Rabies — Quick Jump

Q1 (p. 986)	*Q2 (p. 987)*	*Q3 (p. 988)*	*Q4 (p. 989)*	*Q5 (p. 990)*	*Q6 (p. 990)*
Q7 (p. 991)	*Q8 (p. 992)*	*Q9 (p. 993)*	*Q10 (p. 994)*	*Q11 (p. 994)*	*Q12 (p. 995)*
Q13 (p. 996)	*Q14 (p. 997)*	*Q15 (p. 997)*	*Q16 (p. 998)*		

Q1: Which of the following factors is true regarding the spread of dengue infection? (Q841194)

A. Aedes mosquito breeds natural dirty water bodies with a flight range of 100 meters.

B. Aedes survives best between humidity of 40-60% and temperature 19-25 0 C

C. A. aegypti, being a discordant feeder, results in clustering and generation of multiple dengue cases

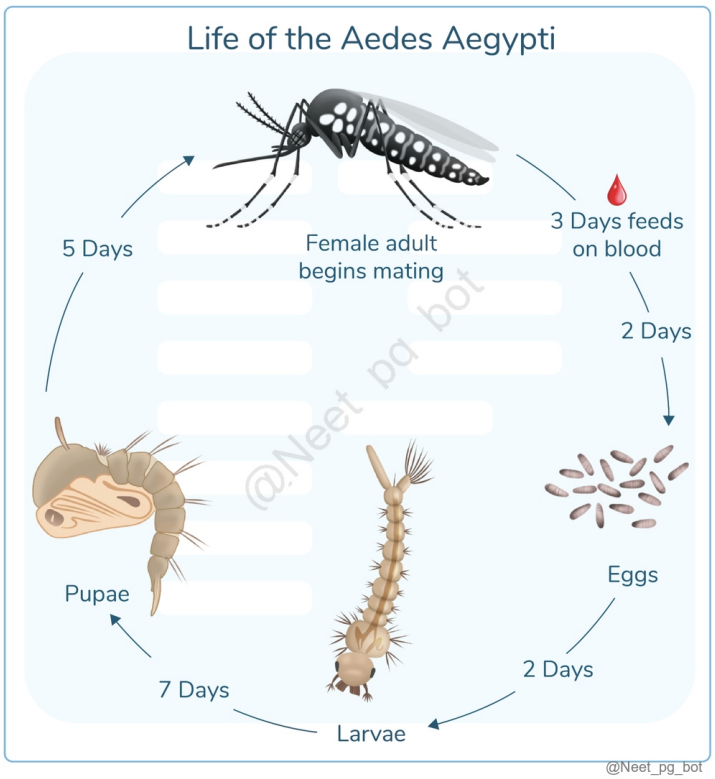
D. Dengue cases among children report a more severe infection than the adult population

Correct Answer: C. A. aegypti, being a discordant feeder, results in clustering and generation of multiple dengue cases

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Epidemiology of Dengue: Agent factors Infection with any one serotype (DENV-1, 2, 3, and 4) confers lifelong immunity to that virus serotype (No cross-immunity) Secondary infection with serotype 2 or multiple infections with different serotypes leads to severe immunological catastrophe. (DHF/DSS) Vector 1. Aedes aegypti: Less aggressive Nervous feeder, discordant feeder (needs >1 feed): clustering of dengue cases (Option C) Striped body appearance Breed: Stagnant artificial water collections like tires, pots, buckets, etc .(Option A) Flight range: Short range-100 meters. Eggs: single and cigar-shaped Larvae: siphon tube 2. Aedes albopictus: More aggressive Concordant feeder (1 feed is enough) Disease transmission Infective stage: Reservoir: Man: day before symptom onset to 5th day Mosquito: remain infective lifetime (transovarial transmission) Transmission cycle: Man-mosquito-man Incubation period: 3 to 10 days Host Factors Children have a milder disease than adults .(Option D) High risk: infants, elderly, obese, pregnant, peptic ulcer disease, menstrual disease, congenital disease, hemolytic diseases, NSAIDs. Environmental Factors Temperature - 16 to 30 0 C (Option B) Endophagic and endophilic mosquitoes are influenced by a 2°C temperature rise, which shortens their extrinsic incubation period. Rural spread is linked to water projects, better transport, and water scarcity.



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg 290, 291

↑ *Back to this question in Part A*

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Q2: A 23-year-old woman presents with 3 days of high fever, headache, and joint pain. Examination reveals a maculopapular rash and a positive tourniquet test. Labs show leukopenia, thrombocytopenia, and mildly elevated liver enzymes. What is the most appropriate next step for diagnosis? (Q841195)

A. Rapid antigen detection test

B. Blood culture

C. PCR for parasites

D. IgM ELISA

Correct Answer: A. Rapid antigen detection test

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A rapid antigen detection test (NS1) is used to diagnose dengue fever within 5 days of onset of fever. Dengue presents with high fever, severe headache, joint pain (breakbone fever), rash, and a positive tourniquet test. Laboratory findings often show leukopenia, thrombocytopenia, and elevated liver enzymes. Blood culture (Option B) is not used to diagnose dengue fever, as it is a viral infection, not bacterial. PCR for malaria (Option C) parasites is used to diagnose malaria. The patient presents with a shorter-duration fever and hepatosplenomegaly, not with a positive tourniquet test. IgM ELISA (Option D) is used to diagnose dengue after >5 days of symptoms.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 291-294

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: All of the following are true about larval surveillance? (Q841196)

A. House or its premises searched for water-holding containers: Sampling unit

B. Number of containers positive/ number of containers checked: Container index

C. Number of containers positive for larvae / number of houses checked: Breteau index

D. All the above

Correct Answer: D. All the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Larval Surveillance (density of larvae in the area) Sampling unit: Houses or premises searched for water-holding containers . House index : Number of houses positive for aedes larvae/number of houses searched. Container index: Number of containers positive/ number of containers checked. Breteau index : The number of positive containers, and the number of houses checked. Most sensitive to assess endemicity Aedes Aegypti Index: Percentage of houses and their premises showing actual breeding of A. aegypti larvae. Should not be >1% Airports and seaports in endemic areas should be kept at least 400m around their premises free from the breeding of Aedes aegypti.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 288-299

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A 40-year-old male presents with a history of a dog bite he sustained 3 weeks ago and reports tingling at the site of the bite and difficulty swallowing. On examination, he appears anxious and is hypersensitive to stimuli. Which of the following is true regarding this condition? (Q841197)

A. Natural infection is caused by a fixed subtype of bullet-shaped DNA virus

B. Aerosol mode transmission is not reported in India

C. Licks on abraded skin are not considered a route of transmission

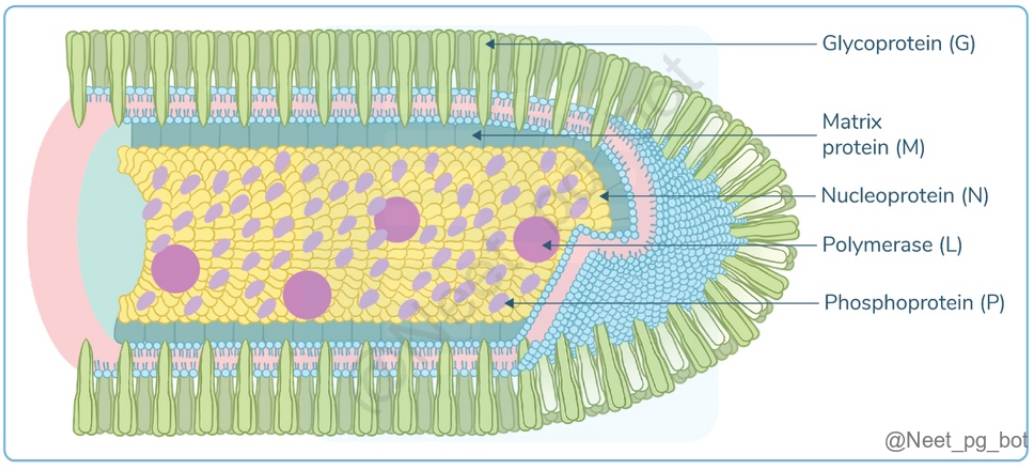
D. The highest rabies fatality in India is reported in the Andaman and Nicobar Islands.

Correct Answer: B. Aerosol mode transmission is not reported in India

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The clinical vignette suggests rabies infection and the correct statement regarding this condition is that aerosol transmission is not reported in India. Rabies virus: Epidemiological Determinants of Rabies: Agent factor Zoonotic disease with a 100% fatality rate Lyssavirus type 1 Bullet-shaped RNA virus (Rhabdoviridae family). (Option A) Two Types of Viruses: Street virus: Cause natural infection (Rabies) Variable incubation period (7 days-months) Fixed virus: Fixed incubation period (5-7 days) For vaccine production. It does not demonstrate Negri bodies. Host factors Occupation Dog handlers Forest workers Veterinarians. Transmission Incubation period: 2-8 weeks Animal bite: Dog, Cat, Monkey, Bat or Wild animal (all need vaccination) Licks on abraded skin are considered as the route of transmission. (Option C) Rodent bites don't require vaccination. In India: Urban Rabies is very common. Rabies is not found around water-bounded areas (Lakshadweep and Andaman and Nicobar Islands) (Option D)



References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 322-323

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: A 30-year-old male was scratched by a cat during a hiking trip. The patient reports mild pain with a healthy wound that appears clean. The cat ran away immediately. What is the most appropriate initial management strategy for this patient? (Q841198)

A. Clean the wound, prescribe antibiotics and tetanus toxoid.

B. Clean the wound, followed by a full course of anti-rabies vaccination

C. Clean the wound followed by anti-rabies vaccination and rabies immunoglobulin

D. Clean the wound with soap and water, followed by surgical debridement

Correct Answer: B. Clean the wound, followed by a full course of anti-rabies vaccination

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This patient's cat bite and slight skin abrasion should be treated as a category-2 bite with local wound care and an emergency anti-rabies vaccination. Management of rabies wound: Category Exposure Management Class I (OPTION A) Licks and touch on intact skin (skin integrity not broken) Local wound management: soap, running water, iodine tincture for 15-20 min. Class II (OPTION B) Abrasion, laceration (skin integrity broken) Local wound management Immediate full course Rabies vaccination Class III (OPTION C) Bleeding, licks on mucosa/ broken skin, deep tissue injury, all wild animal or bat bite Wound management (avoid suturing) Full course Rabies vaccination Rabies immunoglobulin Immediate surgical debridement, Suturing the wound, is not needed unless there is severe tissue damage or infection that requires surgical intervention. (Option D)

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 324-327

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A 10-year-old boy was bitten on the forearm by a stray dog. The bite wound is superficial with mild bleeding. Based on the Indian rabies management guidelines, which of the following is not recommended for this patient? (Q841199)

A. Intramuscular 0.1 ml vaccination on days 0, 3, 7 and 28 is preferred.

B. 70% of rabies immunoglobulin should be administered around the wound.

C. Deltoid is the recommended site for this patient.

D. Intradermal regimen consists of two doses administered at each of four sessions.

Correct Answer: A. Intramuscular 0.1 ml vaccination on days 0, 3, 7 and 28 is preferred.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Rabies Post-Exposure Prophylaxis Regimens: THAI Red Cross Regimen (Updated) Essen Regimen (IM regimen) Intradermal (ID) regimen: Dose: 0.1ml, 8 doses (2 at every visit) (Option D) 4 visits schedule on days: 0, 3, 7, 28 Administered on two sites simultaneously (2-2-2-2) Day 0 is the first dose of vaccination (not the first day of a dog bite) The National Rabies Control Program prefers ID over IM regimen. Intramuscular (IM) regimen: Administered as ID on Days: 0, 3, 7, and 28; and IM on Day 14 (2-2-2-0-2) Dose: 0.5ml (one complete vial used) 5 visits scheduled on days: 0, 3, 7, 14, 28 (Option A) Administered on one side only (1-1-1-1-1) For adults: deltoid (not on the gluteal region) (Option C) For children: anterolateral aspect of the thigh. This regimen is not cost-effective Rabies Immunoglobulins (RIG): Given: category-III and high-risk category-II bite (HIV, immunocompromised) Administered once in a lifetime. Equine RIG Human RIG Not preferred Dose: 40 IU/kg Preferred Dose: 20 IU/kg IM 70% given around the wound/bite, and the rest given to distant areas (Option B) Must be given on day 0 of vaccination and can be given up to 7 days after the bite.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 324-327

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A 30-year-old man presents after being bitten by a dog. He completed a full rabies vaccination series 5 months ago following a previous bite. What is the appropriate post-exposure prophylaxis? (Q841200)

A. Administer a full course of rabies vaccine again (4 doses).

B. Administer two doses of rabies vaccine on days 0 and 3.

C. No rabies vaccine is needed due to recent vaccination.

D. Administer rabies immunoglobulin (RIG) and a full course of rabies vaccine (4 doses).

Correct Answer: B. Administer two doses of rabies vaccine on days 0 and 3.

■ *Listen to Audio 1*

Explanation: The management of re-exposure depends on the timing and nature of previous vaccinations. 1. Re-Exposure Prophylaxis within 3 Months: If a patient who has been bitten by an animal suspected to be rabid has completed a full rabies vaccination series within the last three months. No Further Vaccination Required: The immune response from the initial series is still strong, providing sufficient protection. If necessary, only the wound should be cleaned thoroughly, and tetanus prophylaxis should be considered. 2. Re-Exposure Prophylaxis After 3 Months: Wound Care on day 0 Administration of Two Booster Doses of the rabies vaccine. Day 0: first dose. Day 3: Second dose. This booster regimen helps to reinforce the patient's immunity, ensuring continued protection against the rabies virus. Rabies Immunoglobulin (RIG): RIG is not required for patients who have previously completed a rabies vaccination series. RIG is typically reserved for those who have never been vaccinated or have incomplete vaccination histories.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page.325

Guidelines-for-Rabies-Prophylaxis.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following statements about the rabies vaccine are correct? Rabies vaccine is absolutely contraindicated in pregnant women. Immunocompromised individuals may require a full vaccination series even if previously vaccinated. The rabies vaccine should be administered intramuscularly in the deltoid region for adults. Rabies immunoglobulin (RIG) is required for all re-exposures, regardless of previous vaccination status. When a bite is from a vaccinated pet dog, post-exposure prophylaxis is not required. (Q841201)

A. Statements 1 and 4 are correct

B. Statements 2 and 5 are correct

C. Statements 3 and 5 are correct

D. Statements 2 and 3 are correct

Correct Answer: D. Statements 2 and 3 are correct

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Contraindications: No contraindication to post-exposure prophylaxis as it is considered 100% fatal. Rabies vaccine can be given in pregnancy, HIV, to Immunocompromised, infants, and children. Pregnancy:

Generally contraindicated unless the risk of rabies exposure is high so no absolute contraindication. (Statement 1) Immunocompromised individuals: May require a full vaccination series due to potential inadequate immune response. (Statement 2) Administration: Typically given intramuscularly, the deltoid region is appropriate for adults. The IM route is preferred as the ID route reduces the vaccine response. (Statement 3) Animal bites even if from a vaccinated animal, PEP should be considered. (Statement 5) Re-exposure: Rabies immunoglobulin (RIG) is not mandatory for all re-exposures, administered if no history of previous vaccination status with immunoglobulin. (Statement 4)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 324-326

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: All are true regarding rabies vaccine except? (Q841202)

A. Can be given both pre-exposure and post-exposure.

B. Contains live attenuated virus.

C. Typically administered as a series of doses for complete protection.

D. Provide long term immunity after the initial series is completed.

Correct Answer: B. Contains live attenuated virus.

■ *Listen to Audio 1*

Explanation: The rabies vaccine contains an inactivated (killed) virus . This ensures the vaccine is safe and cannot cause the disease. Rabies Vaccine Type Human Diploid Cell Vaccine (HDCV) from inactivated (killed) virus Dosage Intramuscular (IM): 0.5 mL Intradermal (ID): 0.1 mL Administration Site IM: Deltoid muscle (upper arm) for adults and older children. Anterolateral thigh for infants and younger children. ID: (Shoulders) Over the deltoid. Regimen Given both pre-exposure and post-exposure in multiple doses. Post-exposure: Essen (IM): Days 0, 3, 7, 14, and 28. In 5 visits, given on 1 site. Thai Red Cross (ID): Days 0, 3, 7, and 28 In 4 visits, the vaccine is given on 2 sites (Shoulders) simultaneously Duration After completing a full pre-exposure vaccination series, immunity against rabies can last many years. May need re-exposure prophylaxis after 3 months. Side effects: Pain at the injection site, headache, dizziness, muscle aches, gastrointestinal symptoms. Severe (rare): Allergic reactions, neurological complications

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 324-326

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: In an urban area with many rabies cases, which measures are most appropriate to control the disease and transmission? (Q841203)

A. Mass vaccination of domestic dogs and cats

B. Culling of stray dogs and cats

C. Quarantine of all suspected rabid animals

D. Public awareness campaigns about avoiding animal bites

Correct Answer: A. Mass vaccination of domestic dogs and cats

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The most effective step to control the disease and prevent its transmission is Mass vaccination of domestic dogs and cats. Prevents Transmission at the Source: Many of these animals can be vaccinated, achieving herd immunity. This means that even if an occasional rabid animal enters the community, it will be less likely to transmit the disease. Cost-Effective and Sustainable Ethical Considerations: Culling of stray animals is considered to be unethical (Option B). Quarantine (Option C) can be impractical and resource-intensive for managing suspected rabid animals. In the case of exotic animals quarantine period are implemented. Public awareness campaigns (Option D) are important but are secondary to controlling the disease at its source through vaccination.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 326-327

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: A 35-year-old man returns from a Chennai trip and presents with fever, chills, and sweating. His blood smear shows ring forms in red blood cells. What is the most likely vector for this infection? (Q841204)

A. Anopheles culicifaciens

B. Anopheles stephensi

C. Anopheles fluviatilis

D. Anopheles minimus

Correct Answer: B. Anopheles stephensi

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The clinical vignette of a patient returning from a trip from an urban area (Chennai) and presenting with fever, chills, sweating, and ring forms in red blood cells suggests malaria infection. Anopheles stephensi is a significant malaria vector in urban areas of the Indian subcontinent. Vector Distribution Anopheles culicifaciens Rural and Peri-urban areas Anopheles stephensi Urban and Industrial areas Anopheles fluvitilis Hilly areas (Foothills) Anopheles minimus Northeastern states

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.896

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: All of the following are true regarding the epidemiology of malaria, except? (Q841205)

A. Anopheles mosquitoes are primarily nocturnal feeders.

B. Incidence is highest in tropical and subtropical regions

C. Quartan malaria is caused by Plasmodium malariae; fever cycles every 48 hours.

D. Can also be transmitted through blood transfusions and organ transplants.

Correct Answer: C. Quartan malaria is caused by Plasmodium malariae; fever cycles every 48 hours.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Quartan malaria is caused by Plasmodium malariae, which typically results in fever cycles every 72 hours. Malaria Agent Plasmodium species Species Type Fever Cycle P.falciparum Malignant Tertian Malaria Every 48 hours P.vivax Benign Tertian Malaria Every 48 hours P.malariae Quartan Malaria Every 72 hours P.ovale Ovale Malaria Every 48 hours P. knowlesi Quotidian Malaria Every 24 hours (daily) Incubation Period: 7-30 days, depending on Plasmodium species Vector Female Anopheles mosquitoes Behavior: Nocturnal feeders;(Option A) prefer to bite between dusk and dawn Breeding Sites: Stagnant water bodies such as ponds, marshes, swamps, and artificial containers Transmission Bites of infected female Anopheles mosquitoes Can be transmitted through blood transfusions and organ transplants.(Option D) Host Humans (Primary Host) Higher risk in pregnant women, infants, and immunocompromised Anopheles mosquitoes (Vector and Intermediate host) Environmental Factors Climate: Warm and Humid environment Seasonality: Rainy seasons Geographical Distribution: Most prevalent in tropical and subtropical regions(Option B) India: Endemic in several states,

particularly in the northeastern states (Assam, Tripura, Meghalaya), Eastern states (Odisha, Jharkhand), and some parts of Maharashtra and Karnataka

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 302-306

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: In a town of 5000 people, approximately 400 people are positive for malaria in a year. What is the annual parasite incidence in this town? (Q841206)

A. 70

B. 80

C. 90

D. 100

Correct Answer: B. 80

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Hence, API = 400*1000/5000 = 80 per 1000 population. Annual parasite incidence is the estimated number of confirmed malaria cases (by smear microscopy) per year in a population. Regions with API >2 per 1000 population have been classified as high-risk zones. Vector control strategies should be undertaken. The NVBDCP uses API to categorize states and union territories (UTs) into four groups for malaria elimination: Category 0: States and UTs with no indigenous cases. Category 1: States and UTs with an API below 1 case per 1,000 people at risk Category 2: States and UTs with an API below 1 case per 1,000 people at risk, but some districts have an API of 1 case or more per 1,000 people at risk Category 3: States and UTs with an API of 1 case or more per 1,000 people at risk

$$\text{Annual parasite incidence} = \frac{\text{Confirmed cases during one year}}{\text{Population under surveillance}} \times 1000$$

@Neet_pg_bot

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 306

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: The local governing body of a population, which consists of 7000 people, decides to prepare smears from 700 infants, among which 140 of them were positive for malaria. What is the infant parasite rate in this population? (Q841207)

A. 10%

B. 15%

C. 20%

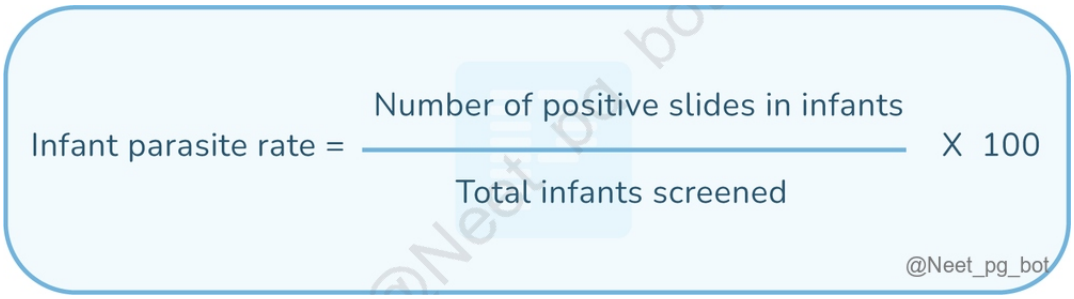
D. 25%

Correct Answer: C. 20%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: {{caption_text}} Hence, IPR = 140*100/700 = 20% The infant parasite rate (IPR) is the most sensitive indicator of recent malaria transmission in a population. If the IPR remains 0 for 3 consecutive years, the population can be considered free from malaria transmission. Note: The vectors responsible for previous malaria transmission in a population will not be included in the IPR results.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 306

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A district has a population of 7,50,000, among which 56,000 smears were prepared last year to detect malaria. What is this population's annual blood

examination rate (ABER) for last year? (Q841208)

A. 7.5%

B. 8.4%

C. 8.8%

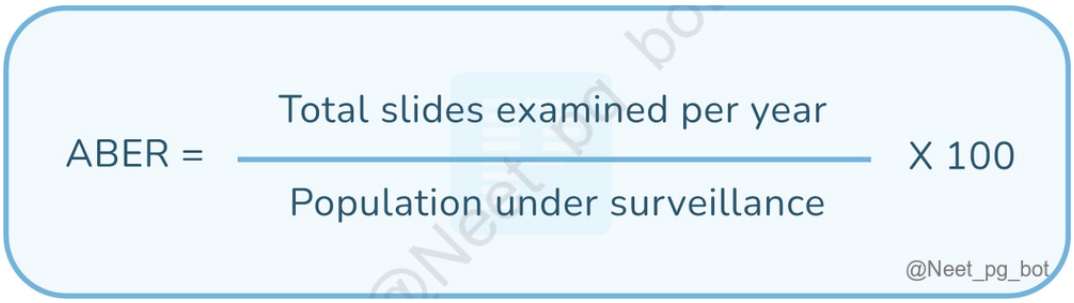
D. 9.5%

Correct Answer: A. 7.5%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Hence, ABER = 56000*100/750000 = 7.5% approximately It is a direct measure of the implementation efficiency of disease screening strategies. ABER (at least 10%) : Ensures adequate operational efficiency.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 306

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: In a town of 4000 people in the last month, malarial smears have been prepared for 600 people who suffered acute febrile illness episodes, among which 85 were found to be positive for vivax, 25 for ovale and 10 for falciparum malaria. What is the updated slide positivity rate in this population? (Q841209)

A. 10%

B. 15%

C. 20%

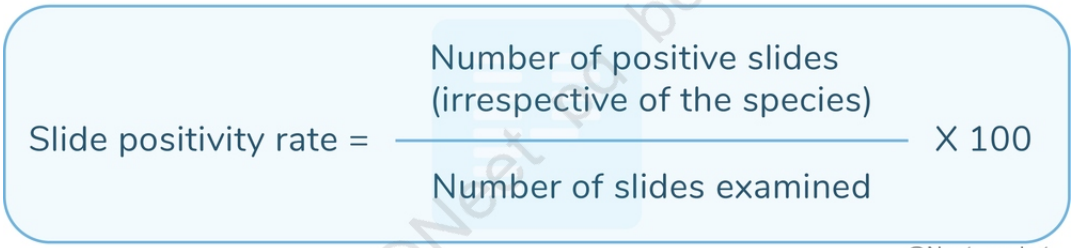
D. 25%

Correct Answer: C. 20%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Here, SPR = 120*100/600 = 20% Slide positivity rate can be considered an index of the malarial incidence in a population. Hence, effective vector control strategies can be devised based on its rise and fall. It can also serve as an effective tool during the malarial outbreaks. Note: Slide falciparum rate has the same purpose mentioned above but is useful only for falciparum malaria.



@Neet_pg_bot

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 307

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 021 Filariasis Leptospirosis Japanese Encephalitis And Helminthic Infections

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 021 Filariasis Leptospirosis Japanese Encephalitis And Helminthic Infections — Quick Jump

Q1 (p. 1000) *Q2 (p. 1001)* *Q3 (p. 1004)* *Q4 (p. 1005)* *Q5 (p. 1005)* *Q6 (p. 1007)*
Q7 (p. 1008) *Q8 (p. 1009)* *Q9 (p. 1010)* *Q10 (p. 1011)* *Q11 (p. 1012)* *Q12 (p. 1013)*
Q13 (p. 1014)

Q1: A 40-year-old man presents with swelling and mild pain in his left leg for several years. Physical examination revealed bulky, stiff skin with inguinal lymphadenopathy in the left lower limb (image). What is the most likely diagnosis based on the clinical findings? (Q840566)

A. Lepromatous leprosy

B. Elephantiasis

C. Cutaneous leishmaniasis

D. African trypanosomiasis



@Neet_pg_bot

Correct Answer: B. Elephantiasis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Elephantiasis is the most likely diagnosis for this patient, who has had swelling and pain in their left leg for several years, coupled with skin findings, lymphadenopathy, and microfilariae of W. bancrofti on microscopic examination. Clinical features: Asymptomatic Amicrofilariae : No symptoms, smear-negative Asymptomatic microfilariae: No symptoms, smear-positive Acute stage (few months) : Fever, lymphadenitis , epididymo-orchitis. Chronic Obstructive stage (>10 years) : Hydrocele, chyluria, elephantiasis Occult stage: Tropical pulmonary eosinophilia (hypersensitivity reaction) with absent microfilariae Lepromatous leprosy (Option A) is characterized by numerous skin lesions (macules, nodules), thickened peripheral nerves (loss of sensation), and other organs. Cutaneous leishmaniasis (Option C) presents as bumps (nodules) that turn into large, raised, indurated ulcers with central crusting over time, which may heal spontaneously. Trypanosomiasis (Option D) , also known as sleeping sickness presents as painless chancre, maculopapular rash, hepatosplenomegaly, and daytime sleepiness.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 315-317

↑ *Back to this question in Part A*

@Neet_pg_bot

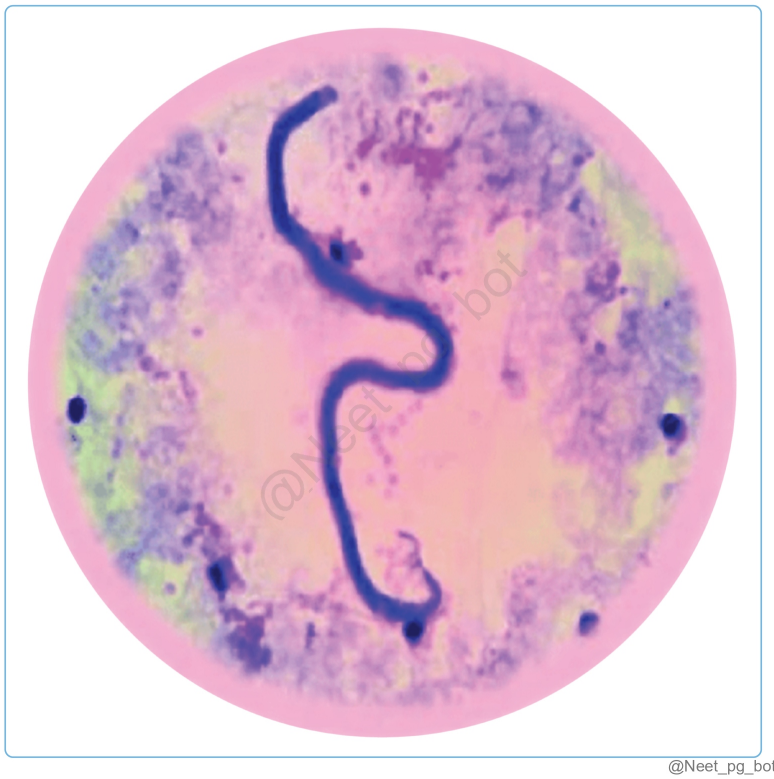
Q2: A 42-year-old man presented to the hospital with swelling and thickening of both legs. A thick blood film revealed the following image. Which of the following statements is correct regarding the diagnosis of this condition? (Q840573)

A. Mass blood surveys with thick blood films are prepared between 10 AM to 2 PM

B. Drug provocation test has the highest specificity

C. Serological tests can differentiate between past and present infections

D. ■■Rapid detection test is used as an investigation of choice for this condition



Correct Answer: B. Drug provocation test has the highest specificity

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Diagnosis of filariasis Thick blood film (Investigation of choice) Nocturnal microfilariae are seen in blood between 10 PM to 2 AM (Option A) Lymphatic filariasis Brugian/Malayan filariasis Large, smooth (graceful) curve with countable nuclei Small, kinked at an acute angle with a long head and uncountable nuclei, 2 nuclei in the tail tip Rapid Detection Test Also called the filarial strip test Used for monitoring, mapping, and evaluation activities (Option D) Membrane filter concentration method Most sensitive methods for detecting low-density microfilaraemia Require specialized equipment. DEC provocation test: A single oral dose of 100mg DEC followed by blood smear after 1 hour Microfilariae can appear in the daytime. Highest specificity (Option B) Serological tests Cannot differentiate between past and present infection (Option C) Mass blood survey Thick

blood films for epidemiological Survey





References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 318-319

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A 42-year-old male presents with leg swelling and hydrocele on his left side. Blood tests reveal the presence of microfilariae of W. bancrofti. Which of the following statements regarding the management of the disease are false? Statements: Mass drug administration once in 2 years with triple-drug therapy reduces transmission. Effective MDA coverage should be >30% for 5-6 years. Integrated vector management includes anti-larval and anti-adult measures for preventing filariasis. Ivermectin 150-200 mcg/Kg as a combination treatment is effective in killing microfilariae (Q840580)

A. 1 and 2

B. 1, 2 and 4

C. 2 and 3

D. 1 and 4

Correct Answer: A. 1 and 2

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Management of Filariasis Treatment Triple Drug therapy Diethylcarbamazine (DEC): 6 mg/kg/day for 12 days + Albendazole stat (400 mg: > 2 years, 200mg: < 2 years) + Ivermectin (150-200 mcg/Kg) Acute dermato-lymphangio adenitis (ADLA): Analgesics: Paracetamol Antibiotics: no anti filarial drug Uncomplicated: Amoxicillin, erythromycin Severe: IV Penicillin Prevention Annual Mass Drug Administration (MDA): Yearly triple drug therapy with DEC, albendazole and ivermectin Coverage: >65% for 5-6 years Lymphatic filariasis elimination strategy: microfilariae rate <1% Conduct a filarial survey in all age groups before starting MDA and a TAS (transmission assessment survey) among the 6-7 years age group after MDA Stop MDA if TAS < 2% followed by post-MDA surveillance with 2 more rounds of TAS DEC Medication Salts: 1- 4 gms of DEC is added per 1kg of salt in Maharashtra and Lakshadweep Islands Vector Control (Integrated vector management): Anti Larval: Larvicidal oil (pyrosene oil, fenthion, temephos) Anti-adult: DDT (6 monthly), lindane, malathion (quarterly) Aquatic plant removal: Water hyacinths, Pistia plants

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 317-321

↑ *Back to this question in Part A*

Q4: A 30-year-old male farmer presents with worsening fever and weight loss for the last 2 months. Physical examination demonstrated significant hepatosplenomegaly. Laboratory tests show pancytopenia and a positive rk39 test. Which of the following is the treatment of choice for this condition? (Q840588)

A. Liposomal amphotericin B

B. Pentamidine

C. Miltefosine

D. Paromomycin

Correct Answer: A. Liposomal amphotericin B

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Treatment with liposomal amphotericin B is recommended for visceral leishmaniasis, which is most likely the cause of this patient's clinical symptoms (fever, hepatosplenomegaly, pancytopenia), and a positive rk39 antigen. Kala-azar/ Black sickness/Dum-dum fever/Sandfly disease/ Visceral Leishmaniasis Organism Protozoan Epidemiology Endemic in Uttar Pradesh, Bihar, Jharkhand, West Bengal Types Visceral (Kala-Azar) : L. donovani Cutaneous : L. tropica (oriental sore/ delhi boil/ Aleppo button) Mucocutaneous : L. braziliensis (espundia) Post-kala-azar dermal (PKLD): Immune response Reservoir Humans (non-zoonotic) Vector Sandfly (Phlebotomus argentipes): has hairy wings. Environmental Peak outbreak: November to April Mechanism of transmission Bite of sandfly Blood transfusion (rare) Incubation period 10 days to 2 years. (1-4 months average) Clinical features Visceral: Fever, Weight loss, Hepatosplenomegaly, Anemia. Cutaneous: Painful skin ulcers Mucocutaneous: Rapid mucosal destruction of nose and oropharynx PKDL: Skin nodules filled with micro-organisms Diagnosis Rapid diagnostic kits: rk39-dipstick test . Used for field surveys. Biopsy (Gold standard) : Leishmania Donovan bodies Sandfly control measures DDT: 1-2gm/m 2 . BHC (benzene hexachloride) Treatment DOC: Single dose Liposomal amphotericin-B (LAMB)10 mg/kg Alternatives: Miltefosine + Paramomycin (Options B and D) Pentamidine (Option C)

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 351-356

↑ *Back to this question in Part A*

Q5: A 45-year-old male who works in flooded rice fields presents with a 5-day history of high fever, headache, and yellowing of the eyes. Physical examination demonstrated conjunctival redness and calf tenderness. Laboratory tests reveal elevated liver enzymes. Which of the following is the most likely diagnosis? (Q840592)

A. Dengue hemorrhagic fever

B. Malaria

C. Leptospirosis

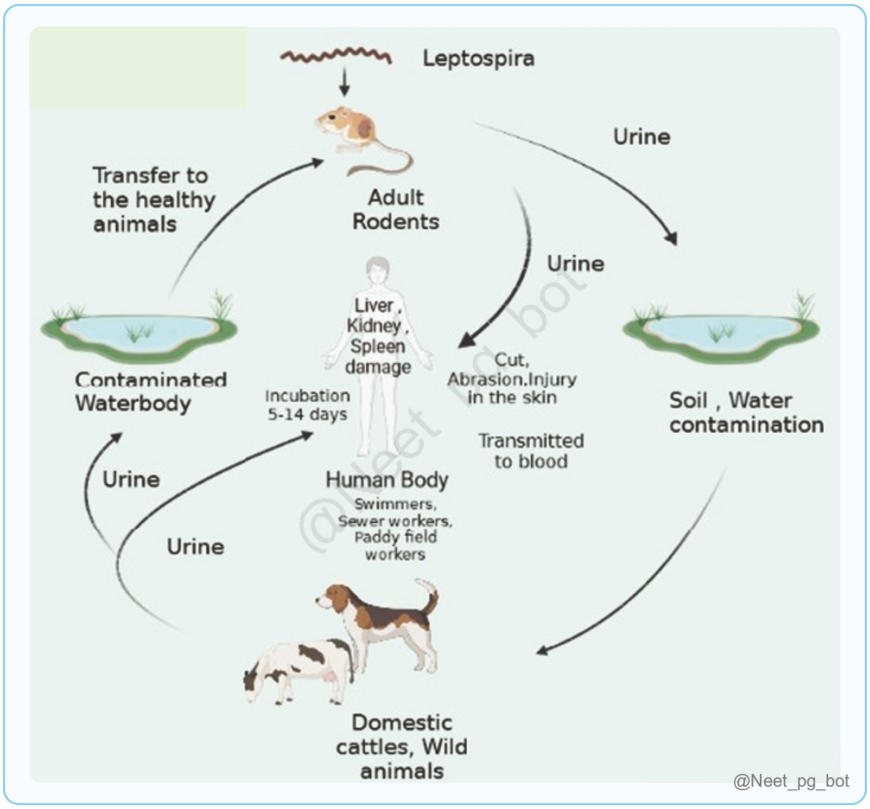
D. Hepatitis A

Correct Answer: C. Leptospirosis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Leptospirosis is the most likely diagnosis in this patient with high fever, severe headache, muscle pain, calf tenderness, conjunctival suffusion, jaundice, and a history of exposure to flooded rice paddies. Leptospirosis Agent Leptospira interrogans (zoonotic bacteria) Reservoir Rodents (Ratus norvegicus, Mus musculus) and domestic animals Source Direct contact or contamination with excreta, urine of infected animals. At risk individuals Males 20-45 years (most common) Urine-contaminated mud(Soil) or water Sports: rafting, fishing and swimming Rice field workers, sewer workers, animal handlers Mode of transmission Direct contact: Urine through skin abrasion Indirect contact: Contact of broken skin with soil, water, vegetation Droplet infection: Inhalation while milking cows. Incubation 4-20 days Diagnosis Clinical features Darkfield examination: Thin and motile spirochete . IgM ELISA : High sensitivity Labs: Elevated liver enzymes, increased bilirubin , thrombocytopenia Dengue (Option A) typically presents with high fever, severe headache, retro-orbital pain, rash, and bleeding tendencies with laboratory tests showing thrombocytopenia. Malaria (Option B) presents with periodic fevers, jaundice, headache, and muscle pain. A blood smear shows intraerythrocytic plasmodium parasites. Hepatitis A (Option D) causes jaundice and elevated liver enzymes but it is transmitted through contaminated food and water and is less associated with working in flooded paddies.



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 338-339

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following antibiotics is not recommended for the treatment of leptospirosis? (Q840603)

A. Doxycycline

B. Penicillin

C. Amoxicillin

D. Ciprofloxacin

Correct Answer: D. Ciprofloxacin

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Ciprofloxacin, a bacterial DNA gyrase inhibitor, is ineffective for treating leptospirosis. Management of Leptospirosis Treatment DOC: Penicillin 6 million units daily. (Option B) Alternate drugs: Doxycycline (Option A) Amoxicillin (Option C) Ampicillin Ceftriaxone Prevention Avoid contaminated water and use protective clothing Livestock vaccination, proper waste disposal Rodent control measures: Zinc phosphide

References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 338-339

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following statements about the epidemiological features of Japanese Encephalitis is incorrect? (Q840608)

A. The virus belongs to the Flaviviridae family

B. Humans are the primary reservoir hosts for the Japanese Encephalitis irus

C. Primary vectors for Japanese Encephalitis are Culex mosquitoes.

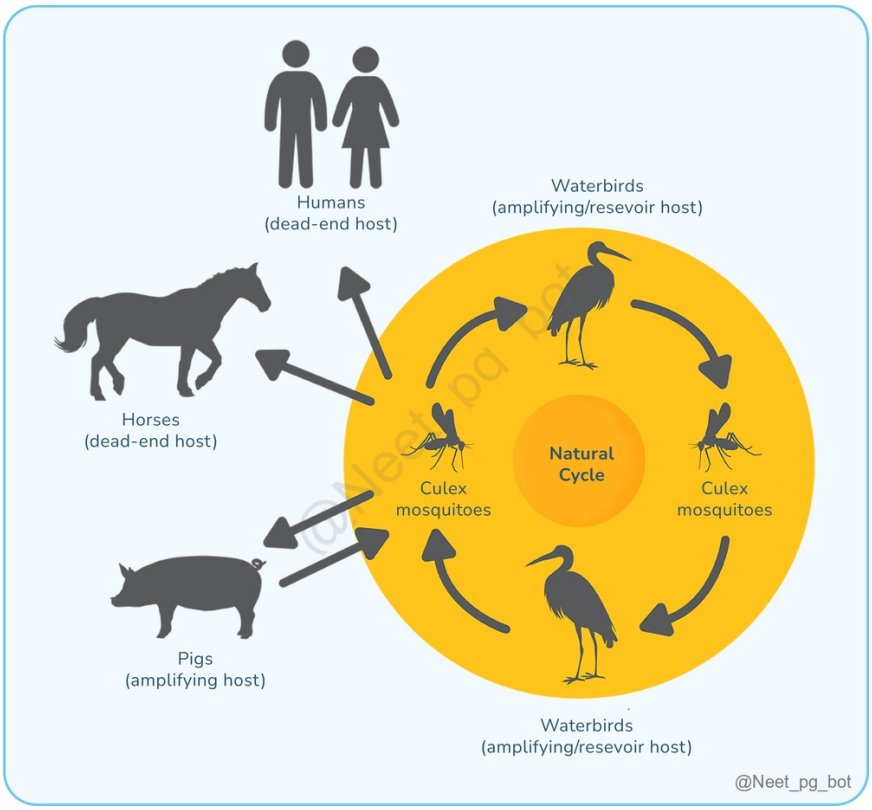
D. Horses can show clinical manifestations

Correct Answer: B. Humans are the primary reservoir hosts for the Japanese Encephalitis irus

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Humans are not the primary reservoir hosts for the Japanese Encephalitis Virus. The primary reservoirs are pigs and wading birds and humans are incidental hosts, meaning they can be infected but do not play a significant role in the transmission cycle because they do not produce enough virus in their blood to infect mosquitoes. Epidemiological features of Japanese encephalitis Agent Japanese Encephalitis Virus (JEV), Group B Arbovirus Virus Family: Flaviviridae (Option A) Transmission Vector Culex mosquitoes (Culex tritaeniorhynchus and Culex vishnui) (Option C) Hosts Pigs (Amplifier Host) Ardeid Birds: Pond herons, Ducks, Poultry (Maintenance Host) Man: (Accidental or dead-end host) Do not develop high enough viremia to infect mosquitoes. Primarily children (below 15 years), but all ages susceptible No man-to-man transmission. Horses: Only animals that can manifest symptoms (Option D). Environmental Factors Geographic Distribution: Southeast Asia, East Asia, and the Western Pacific regions. India Endemic: To 21 states but mainly includes Jharkhand, Bihar, West Bengal, Uttar Pradesh, Assam and Haryana Seasonal Distribution: Monsoon and post-monsoon period (varies by region)



References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.332 IAPSM textbook of Community medicine (2nd edition) Page.400

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A 10-year-old boy from rural Uttar Pradesh presents with high fever, severe headache, vomiting, altered mental status, neck stiffness, and positive Brudzinski's sign. He is unvaccinated and lives near rice fields and pig farms during the monsoon season. What is the most likely diagnosis and the investigation of choice for confirmation? (Q840615)

A. Bacterial meningitis; Blood culture

B. Herpes Simplex Encephalitis; PCR

C. Japanese Encephalitis; IgM ELISA

D. Dengue fever; NS1 antigen test

Correct Answer: C. Japanese Encephalitis; IgM ELISA

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Given the patient's symptoms and lack of vaccination, Japanese encephalitis is the most likely diagnosis. The investigation of choice for confirming JE is the IgM ELISA test for the JE virus, which detects specific antibodies in the patient's serum or cerebrospinal fluid. Japanese encephalitis Incubation Period 5-15 days Symptoms Mild: fever and headache Severe: high fever, headache, neck stiffness, seizures, coma Case Fatality Rate 20-30% in severe cases Long-term Sequelae Neurological and psychiatric sequelae in 30-50% of survivors Diagnosis Serological tests (IgM ELISA), PCR Bacterial meningitis (Option A) can cause similar symptoms (fever, headache, neck stiffness), and the specific epidemiological context (rice fields and pig farms) and season (monsoon) strongly suggest Japanese encephalitis. Blood cultures are also less specific for CNS infections than CSF analysis and PCR. HSV encephalitis (Option B) can present with similar symptoms, but given the epidemiological context (rice fields and pig farms during monsoon season), it is less likely. The symptoms are more indicative of Japanese encephalitis. Dengue fever (Option D) commonly presents with high fever, severe headache, retro-orbital pain, myalgia, arthralgia, and sometimes a rash. However, it does not typically cause neck stiffness or altered mental status indicative of central nervous system involvement. Additionally, while dengue is prevalent in monsoon seasons, the specific history of living near rice fields and pig farms is more indicative of Japanese encephalitis.

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.332 IAPSM textbook of Community medicine (2nd edition) Page.400,401

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: All of the following are true about the Live-attenuated JE vaccine except? (Q840619)

A. Included in the national immunisation schedule in endemic districts

B. Administered via the subcutaneous route.

C. Vaccination schedules include a primary series followed by a booster dose.

D. It can be administered to children as young as 6 months old.

Correct Answer: D. It can be administered to children as young as 6 months old.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The JE vaccine is recommended for children and is administered starting at 9 months of age or older. Japanese encephalitis vaccines Types Inactivated vaccine (Nakayama) Live attenuated vaccine (SA-14-14-2), the mostly preferred Diluent: Phosphate buffer since the J■ vaccine is in powdered form. The vaccine used to be included in the National Immunization Schedule(NIS) targeting high-risk regions. 3. The killed vaccine in India is JENVAC - Kolar strain which is given IM injection. It has been added to the National Immunization Schedule (NIS). Dosage Administered 2 Doses 1st: 9 months 2nd: 6 to 24 months Min Gap between 2 doses → 3 months, 0.5 ml (left arm) Route: Subcutaneous In case of non-immunized children : Can be given to children < 15 years of age

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page.332,333 IAPSM textbook of Community medicine, 2nd edition, Page.401,402
https://iapindia.org/pdf/vaccine-information/JAPANESE-ENCEPHALITIS-VACCINES.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A 30-year-old non-immunized traveler returns from a trip to a tropical region and presents with a high fever, chills, severe headache, muscle pain, nausea, vomiting, and jaundice. Which of the following parameters is unsuitable for transmitting the suspected disease? (Q840626)

A. Humidity in environment >60%

B. Temperature of climate ranging 18-24°C

C. Aedes mosquito in the area

D. Presence of monkeys in the area

Correct Answer: B. Temperature of climate ranging 18-24°C

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Yellow fever transmission is less likely in cooler temperatures. Aedes mosquitoes thrive in warmer climates, typically between 24-36°C. Therefore, a climate with temperatures ranging from 18-24°C is unsuitable for transmitting yellow fever. Yellow fever Agent and Vector Flavivirus transmitted primarily by mosquitoes Aedes Mosquito (in urban settings) Haemagogus (in jungle or forested areas) Hosts Primarily monkeys (Reservoir hosts) Humans are (Incidental hosts) and can develop severe disease. Environmental Features Found in tropical and subtropical areas of Africa and South America, where mosquito vectors are prevalent. Transmission occurs primarily in forested or jungle areas. Typical Conditions: Temperature: 24-36’C Humidity: >60% Clinical Presentation Initial symptoms (acute phase, 3-6 days post-infection): fever, chills, headache, backache, muscle aches, loss of appetite. Severe cases (toxic phase): jaundice, bleeding, organ dysfunction (liver, kidney). Diagnosis

Based on clinical signs Travel history to endemic areas Confirmed by detection of YFV RNA or specific antibodies (IgM and IgG) in blood samples. High humidity levels (>60%) (Option A) create favourable conditions for the breeding and activity of mosquitoes, including the Aedes species responsible for yellow fever transmission. Aedes mosquitoes (Option C) , transmit the virus through their bites, making this parameter crucial for the transmission of yellow fever. Monkeys (Option D) serve as natural hosts for the yellow fever virus in sylvatic (jungle) cycles. Their presence indicates the potential for the virus to circulate in the environment, with mosquitoes acting as vectors to transmit it to humans.

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page. 328 IAPSM textbook of Community medicine (2nd edition) Page. 392,393

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following statements about the yellow fever vaccine are correct? Intradermal administration The recommended age for administration is 7 months or older. A booster dose is required every 10 years for continued immunity. The vaccine contains a live-attenuated virus. A yellow card is issued for travel. (Q840633)

A. 1 and 3

B. 2 and 4

C. 1 and 5

D. 4 and 5

Correct Answer: D. 4 and 5

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Yellow fever vaccine Types Live-attenuated vaccine (17D strain) Diluent: lyophilized (freeze-dried) powder with saline solution. Administration Route: Subcutaneous Dose: A single dose, 0.5 mL Site: Deltoid muscle Age for Administration: Recommended for individuals completed 9 months. 6 months (outbreak situations) Efficacy Onset of Immunity: Within 30 days Duration of Immunity: A single dose provides lifelong immunity. Indications Individuals traveling to endemic areas, including parts of Africa and South America. Contraindications Allergies to any component of the vaccine, especially egg proteins. Immunocompromised Infants under 6 months Pregnancy: Generally avoided unless the risk is high. Additional Proof of vaccination (Yellow card) is required for entry into certain countries.

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page. 328,329 IAPSM textbook of Community medicine (2nd edition) Page. 393,394

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following are the intermediate hosts of dracunculiasis? (Q840642)

A. Sandflies

B. Hard ticks

C. Soft ticks

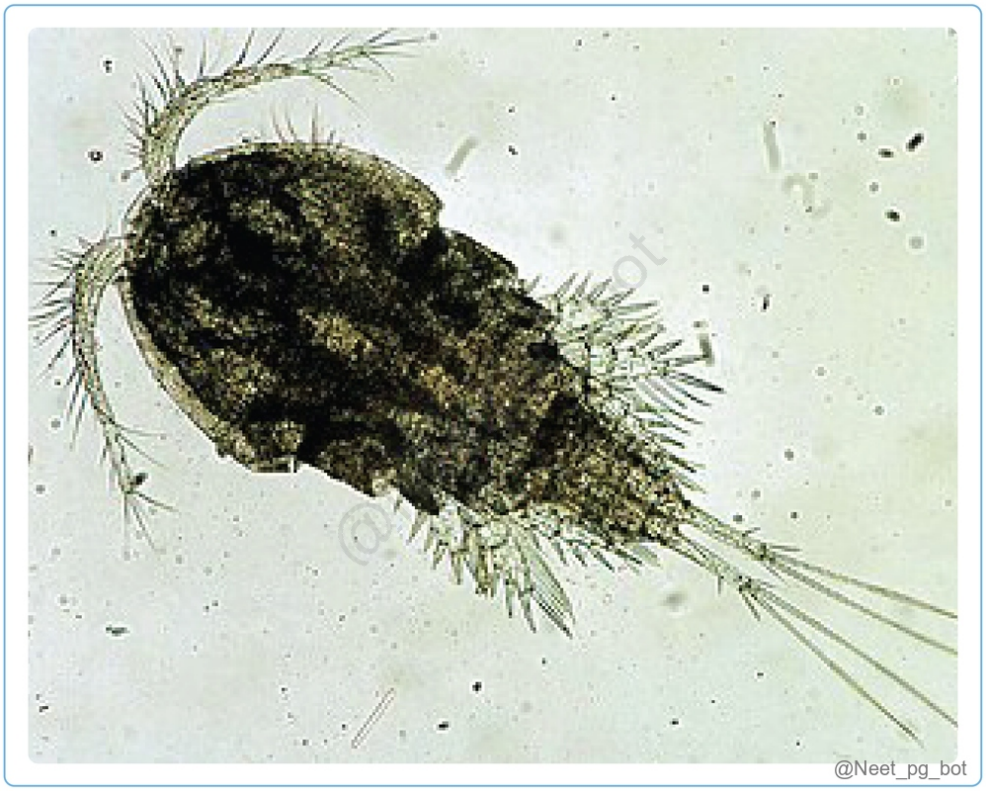
D. Cyclops

Correct Answer: D. Cyclops

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Cyclops are intermediate hosts of dracunculiasis (guinea-worm disease). Cyclops Synonym Water flea Habitat Freshwater Morphology Not more than 1 mm in length Pear-shaped semi-transparent body Forked tail 2 pairs of antennae Health Importance Intermediate host of dracunculiasis [guinea-worm disease] Transmit fish tapeworms [Diphyllobothrium latum] Control measures Straining and boiling water Chemicals like chlorine, lime, and abate Using barbel-gambusia fishes Avoiding step wells Sandfly (Option A) transmits leishmaniasis which is a protozoan disease most commonly seen in Europe, Asia, Africa, and Latin America. Hard ticks (Option B) are vectors of many parasitic and bacterial infections like tick typhus, viral encephalitis, viral fevers, tularaemia, and tick paralysis. Soft ticks (Option C) transmit Q-fever, relapsing fever, and KFD.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 908
https://www.ncbi.nlm.nih.gov/books/NBK531456/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: A 35-year-old farmer from a tropical region presented with chronic fatigue and pallor. There is a history of barefoot farming practices and frequent contact with soil contaminated by human feces. Laboratory tests revealed severe iron deficiency anemia. What number of eggs per gram of stool of this farmer makes this disease a major public health problem? (Q840650)

A. >100

B. >150

C. >250

D. >300

Correct Answer: D. >300

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The farmer's symptoms of chronic fatigue, pallor, and severe iron deficiency anaemia, combined with the history of barefoot farming in contaminated soil, suggest hookworm infection. A Chandler’s index of >300 indicates it is a major public health problem. Chandler’s index is an indicator for assessing the severity of ancylostomiasis based on the average number of hookworm eggs per gram of stools. Average no. of eggs/g of stools Significance <200 Not of much importance 200-250 Indicates potential danger 250-300 Indicates minor public health problem >300 Major public health problem

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pages 285-286. AH Suryakantha Community Medicine with Recent Advances (2014), 3rd edition, page 413.

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 022 Plague Tetanus Hiv Aids Rickettsial Disease Ebola Nipah And Zika Virus

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 022 Plague Tetanus Hiv Aids Rickettsial Disease Ebola Nipah And Zika Virus — Quick Jump

Q1 (p. 1016)	*Q2 (p. 1017)*	*Q3 (p. 1018)*	*Q4 (p. 1019)*	*Q5 (p. 1019)*	*Q6 (p. 1020)*
Q7 (p. 1021)	*Q8 (p. 1022)*	*Q9 (p. 1023)*	*Q10 (p. 1023)*	*Q11 (p. 1024)*	*Q12 (p. 1027)*
Q13 (p. 1028)	*Q14 (p. 1029)*	*Q15 (p. 1030)*	*Q16 (p. 1031)*		

Q1: Which of the following is the primary vector for transmitting the plague to humans? (Q841097)

A. Anopheles spp.

B. Ixodes spp.

C. Xenopsylla cheopis

D. Pediculus humanus

Correct Answer: C. Xenopsylla cheopis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Fleas are the primary vectors responsible for transmitting plague to humans. The most important vector is Xenopsylla cheopis (Oriental rat flea). These fleas typically live on rodents, especially rats, which serve as the main reservoir for the plague bacterium Yersinia pestis . The flea ingests up to 0.5 cubic millimetres of blood containing up to 5,000 plague bacilli, which multiply in its gut and can block the proventriculus, preventing food intake. Such blocked fleas starve due to the inability to feed, repeatedly regurgitating bacilli into bite wounds while attempting to feed, thus efficiently spreading the plague. Partially blocked fleas, living longer than fully blocked ones, pose a greater danger. Xenopsylla cheopis Anopheles spp (Option A): Disease: Malaria . Only female Anopheles mosquitoes transmit the Plasmodium parasite to humans. These are primarily active at night and breed in clean, stagnant water. They are easily recognized because they rest at a 45-degree angle to the surface they land on, unlike other mosquitoes that sit flat. Ixodes spp (Option B): Hard Tick Diseases: Lyme Disease , Babesiosis, Anaplasmosis, and Ehrlichiosis. Ixodes scapularis (the black-legged tick or deer tick) is the main vector. They are common in wooded or grassy areas and must be attached for 36–48 hours to transmit the bacteria. A bite often results in Erythema Migrans , a characteristic "bullseye" rash. Pediculus humanus (Option D): Human Louse Diseases: Pediculosis, Epidemic Typhus , Relapsing Fever, and Trench Fever. Specifically, Pediculus humanus corporis (the body louse) transmits these diseases, usually in overcrowded conditions with poor hygiene (like refugee camps or trenches). It is distinct from the head louse, which does not typically spread disease.

Epidemic Typhus is known as "jail fever" or "war fever" because it thrives in crowded, unsanitary conditions where people cannot change or wash their clothes.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 339

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which flea indices are considered the most significant for predicting plague outbreaks? (Q841099)

A. Total flea index

B. Specific flea index

C. Cheopis index

D. Burrow index

Correct Answer: C. Cheopis index

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The "Cheopis index" refers to the average number of Xenopsylla cheopis fleas found per rat in a given area. Significance: The Cheopis index serves as a valuable metric for assessing flea density and evaluating the efficacy of spraying programs. Threshold: A Cheopis index of 1 or higher is the threshold for potential plague transmission to humans. The total flea index (Option A) measures the total density of all flea species present in an area. The Specific flea index (Option B) measures the density of a particular flea species, such as Xenopsylla cheopis. The burrow index (Option D) measures the density of fleas found in burrows, which is particularly relevant for certain flea species that reside there.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 341

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is considered the most effective method to break the transmission cycle of plague? (Q841100)

A. Mass vaccination

B. Widespread use of antibiotics

C. Vector control

D. Quarantine of infected individuals

Correct Answer: C. Vector control

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Vector control through effective insecticide use is considered the most effective method to break the transmission cycle of plague. Targets the primary vector: Insecticides such as DDT, BHC, and 5% malathion directly target fleas, the main vectors of plague. Interrupts transmission cycle: Reducing flea populations breaks the link between rodents and humans. Preventive approach: It's a proactive measure that can prevent outbreaks before they occur. Control of Plague: Early diagnosis and prompt notification of cases are crucial. Isolation of patients, especially those with pneumonic plague, is recommended. (Option D) Treatment should start immediately with streptomycin (30 mg/Kg IM in 2 divided doses x 7 days) or tetracycline (30 mg/Kg PO) as primary options. (Option B) Vector control through effective insecticide use is the most important method to break transmission. (Option C) Rodent control and improved sanitation are essential long-term preventive measures. Vaccination can be a valuable preventive measure, given in two doses at least a week before potential exposure. (Option A) Chemoprophylaxis with tetracycline (500mg Q6H x 5 days) or sulfonamides (2-3gm/day x 5-7 days) is recommended for contacts and high-risk individuals. Disinfection of patient's belongings and proper handling of

dead bodies are important precautions.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 343

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A 28-year-old pregnant woman at 20 weeks of gestation visits a PHC for her antenatal check-up. Her last tetanus vaccination was 12 years ago. According to the National Immunization Schedule of India, what is the most appropriate tetanus vaccination recommendation for this patient ? (Q841101)

A. No vaccination is required as she received a TT dose 12 years ago

B. Administer one dose of Td vaccine immediately

C. Administer two doses of Td vaccine, 4 weeks apart

D. Administer three doses of TT vaccine at 0, 1, and 6 months

Correct Answer: C. Administer two doses of Td vaccine, 4 weeks apart

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: According to the National Immunization Schedule of India and current recommendations: For pregnant women with no tetanus toxoid-containing vaccine in the past 10 years: Two doses of Td vaccine. The two doses should be given at least 4 weeks apart, ideally starting early in pregnancy. Td (Tetanus and adult Diphtheria) is preferred over TT (Tetanus Toxoid) to protect against both diseases. Vaccine When to give Dose Route Site Td-1 Early in pregnancy 0.5 ml Intramuscular Upper Arm Td-2 4 weeks after Td-1 0.5 ml Intramuscular Upper Arm Td- Booster If received 2 Td doses in a pregnancy within the last 3 yrs 0.5 ml Intramuscular Upper Arm Give Td-2 or Booster doses preferably before 36 weeks of pregnancy. If a woman is in labor, give Td if she has not previously received it.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 358

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: What is the most effective and efficient measure for preventing neonatal tetanus during delivery? (Q841102)

A. Administering tetanus toxoid vaccine to the mother during pregnancy

B. Ensuring clean delivery practices, including the use of sterile instruments

C. Providing antibiotics to the newborn immediately after birth

D. Applying an antiseptic solution to the umbilical cord stump

Correct Answer: B. Ensuring clean delivery practices, including the use of sterile instruments

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The most effective and efficient measure of preventing neonatal tetanus during delivery is ensuring clean delivery practices. This includes using sterile instruments, maintaining hand hygiene, and ensuring a clean delivery surface. Prevention of Neonatal Tetanus: Clean delivery practices: Effective in controlling neonatal tetanus in industrialized countries Including training traditional birth attendants, providing home delivery kits, and educating them about the "five cleans." It can reduce neonatal tetanus deaths by 90% when birth attendants are properly trained. The importance of sterilised instruments. National Immunization Schedule: Recommends doses between 16-36 weeks of pregnancy 1-2 month interval between doses Infants born to mothers lacking two doses of tetanus toxoid can be protected with 750 IU of heterologous serum within 6 hours of birth to prevent neonatal tetanus.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 361

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A 35-year-old construction worker sustained a deep puncture wound on his foot while working at a site. He stepped on a rusty nail. He was immediately taken to the nearest clinic. He does not recall his last tetanus vaccination. Which of the following is the most appropriate immediate action to prevent tetanus in this patient ? (Q841104)

A. Clean the wound with soap and water and administer the tetanus toxoid (TT) vaccine.

B. Clean the wound thoroughly, administer tetanus immunoglobulin (TIG), and give a tetanus toxoid (TT) booster.

C. Administer a course of antibiotics and advise him to keep the wound clean.

D. Clean the wound thoroughly, provide a tetanus toxoid (TT) booster

Correct Answer: B. Clean the wound thoroughly, administer tetanus immunoglobulin (TIG), and give a tetanus toxoid (TT) booster.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: For a high-risk wound in a person with an uncertain or incomplete immunization history (Category D) , thorough wound cleaning, administration of tetanus immunoglobulin (TIG), and a tetanus toxoid booster are recommended to provide both immediate and long-term protection against tetanus. Tetanus Management Protocol: Category Clean wound Unclean wound Category A Has had a complete course of toxoid or a booster dose (full immunization) within the past 5 years. Only wound care. Only wound care. (Option C) Category B Full immunization > 5 years ago < 10 years. Wound Care + TT single dose. Wound Care + TT single dose. (Option A) Category C Full Immunization > 10 years ago. Wound Care + TT single dose. Wound Care + TT single dose + Human Tetanus Immunoglobulin. Category D Unknown, not known, never taken immunization. Wound Care + TT complete course. Wound Care + TT complete course + Human Tetanus Immunoglobulin. TT complete course: 0, 1, 6 months 0.5 ml IM. Clean wound : Wounds under 6 hours old, clean, non-penetrating and with negligible tissue damage. Unclean wounds: All other wounds that don't fulfil the above criteria.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page: 361

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A 30-year-old woman visits the health clinic for a routine check-up. During the consultation, she mentioned her concern about HIV infection, as she recently learned that a close friend was diagnosed with HIV. She wants to understand the most efficient and most common routes of HIV transmission to protect herself better. Which of the following methods is the most efficient route of HIV transmission? (Q841111)

A. Sexual route

B. Blood transfusion

C. Transplacental

D. Needle prick injury

Correct Answer: B. Blood transfusion

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The most efficient transmission route is blood transfusion (Maximum risk of transmission). The most common route of transmission of HIV/ AIDS is the Sexual route (Heterosexual route). Different routes of transmission of HIV: Route of Transmission Prevalence Efficiency of the Route Sexual route 87 - 90% of the cases 0.01 - 1% Blood Transfusion <1% of the cases >95% Sharing needles and syringes 1% of the total cases 5-10% Needle prick injury <1% cases 0.3% Mother-to-child transmission 5% of the total cases 25 -30% 30% for developing countries

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page: 396

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following diseases cannot be prevented by both active and passive immunization? (Q841105)

A. Rabies

B. Diphtheria

C. Tetanus

D. Plague

Correct Answer: D. Plague

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Plague is primarily prevented through public health measures, antibiotics, and, in some cases, vaccines. Passive immunization is not commonly used for plague prevention. Plague is a Zoonotic disease with epidemic potential. Prevention : An effective method to break the transmission of plague is to control rat fleas by spraying insecticides. The most recommended is 5% malathion. Vaccination : Effective usually if carried out in 1 week before anticipated plague outbreak. Vaccine stain: Sokhey modified haffkine vaccine. Dosage Day 0: 0.5ml, SC. Day 14: 1ml SC (days 7 to 14). In case of an outbreak, a primary dose of 3 ml for adults is given. Immunity Development: Immunity develops 5 to 7 days after vaccination and lasts 6 months. Booster Dose: Recommended for high-risk individuals at 6-month intervals. Recommendation: Mainly recommended for travellers and health professionals. Rabies (Option A): Both active immunization (rabies vaccine) and passive immunization (rabies immunoglobulin) are available and used in combination, especially post-exposure. Diphtheria (Option B): Both active immunization (diphtheria toxoid vaccine) and passive immunization (diphtheria antitoxin) are available. Tetanus (Option C): Both active immunization (tetanus toxoid vaccine) and passive immunization (tetanus immunoglobulin) are used, especially for wound management.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page: 342

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following is not considered a high-risk group for HIV infection? (Q841113)

A. Pregnant female

B. Men who have sex with men (MSM)

C. Injection drug users (IDUs)

D. Multiple transfusion recipients

Correct Answer: A. Pregnant female

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Pregnant females are taken as proxy indicators to find the prevalence of HIV in general population. High-Risk Groups: Male homosexuals and bisexuals. (Option B) People with multiple heterosexual partners, including prostitutes. Intravenous drug users. (Option C) Transfusion recipients of blood. (Option D) STD patients Patients with Hemophilia. Bridge population: Long-distance truck drivers Single male migrates Clients of sex workers STD (Sexually Transmitted Disease) patients

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 396

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A 28-year-old man presents to the clinic with a fever, sore throat, rash, and generalised lymphadenopathy. He mentions that he has multiple sexual partners, and he uses condoms inconsistently. Based on the scenario, in which clinical stage of HIV infection is this patient most likely? (Q841114)

A. Asymptomatic carrier state

B. Acute infection

C. AIDS-related complex

D. AIDS

Correct Answer: B. Acute infection

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Stage Features Initial Infection Occurs after initial infection with HIV. Mild symptoms: fever, sore throat, rash, and generalized lymphadenopathy (infectious mononucleosis-like illness) ; May remain asymptomatic. Antibodies appear within 2-12 weeks of infection. Asymptomatic carrier state No obvious signs of illness except for persistent generalized lymphadenopathy.(Option A) AIDS-Related Complex (ARC) Symptoms: prolonged diarrhea, fatigue, significant weight loss (>10% body weight). Mild opportunistic infections like oral thrush can occur. The number of T-helper lymphocytes decreases but does not meet the criteria for AIDS. (Option C) Acquired immunodeficiency syndrome (AIDS) Advanced stage of HIV infection - severe immune deficiency Opportunistic infections can occur(AIDS defining illnesses can occur) (Option D) Tuberculosis Kaposi's sarcoma Fungal infections (e.g. Candida, Cryptococcus, Pneumocystis pneumonia) Parasitic infections (e.g. Toxoplasma encephalitis) They can also develop wasting syndrome, chronic diarrhea, and AIDS dementia.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 397

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Match the following rickettsial diseases with their vector Rickettsial disease Vector 1. Scrub typhus a. Rat flea 2. Epidemic typhus b. Trombiculid mite 3. Endemic typhus c. Tick 4. Rocky Mountain spotted fever d. Louse (Q841115)

A. 1-c, 2-a, 3-b, 4-d

B. 1-b, 2-d, 3-a, 4-c

C. 1-b, 2-a, 3-d, 4-c

D. 1-c, 2-d, 3-a, 4-b

Correct Answer: B. 1-b, 2-d, 3-a, 4-c

■ *Listen (English)*

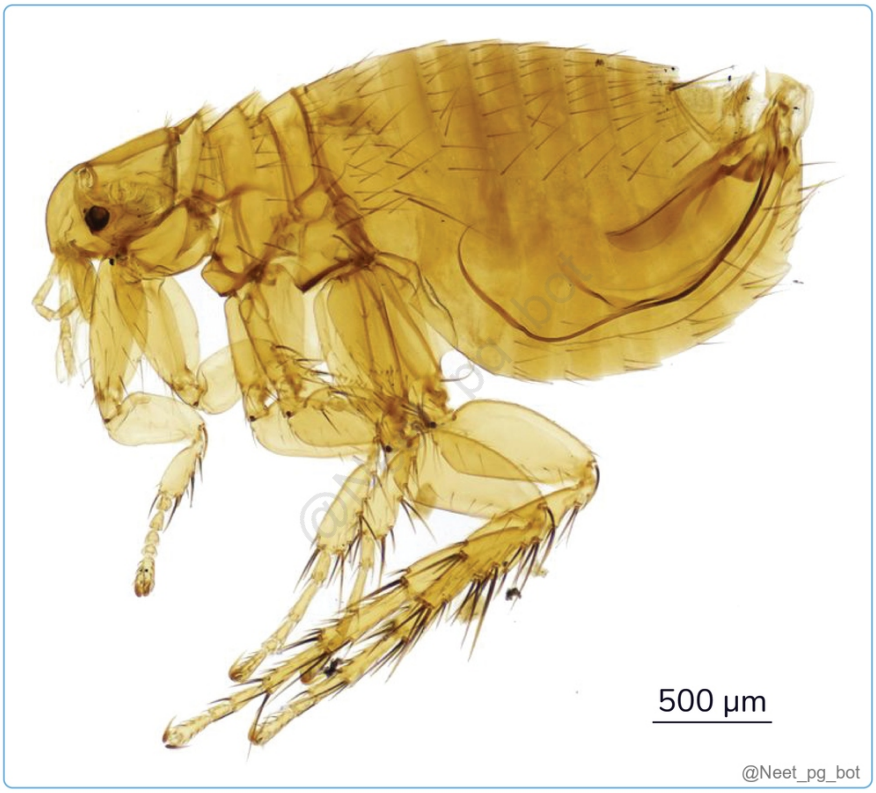
■ *Listen (Hindi)*

Explanation: Rickettsial disease Vector Mode of transmission the bite of an infected vector Inoculation of feces/crushed tissue of vector Inhalation of dried infective feces Scrub typhus Vector - Trombiculid mite

(Leptotrombidium delinese) ✔ Larval stages (chigger) only ✘ ✘ Epidemic typhus Vector - Louse (Pediculus corporis and P capitis) ✘ ✔ ✔ Endemic typhus Vector - Rat flea (X. cheopis) ✘ ✔ ✔ Rocky Mountain spotted fever Vector - Ticks (Rhipicephalus, Ixodes, Boophilus, Haemaphysalis) ✔ ✔ ✘









References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page: 347-348

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: A public health team is investigating an outbreak of a viral hemorrhagic fever in a remote village. Several villagers are experiencing severe symptoms, including fever, vomiting, diarrhoea, and unexplained bleeding. The investigation reveals that the initial patients had contact with wild animals in the nearby forest. What is the primary natural reservoir for this virus in this scenario? (Q841116)

A. Monkey

B. Cattle

C. Bats

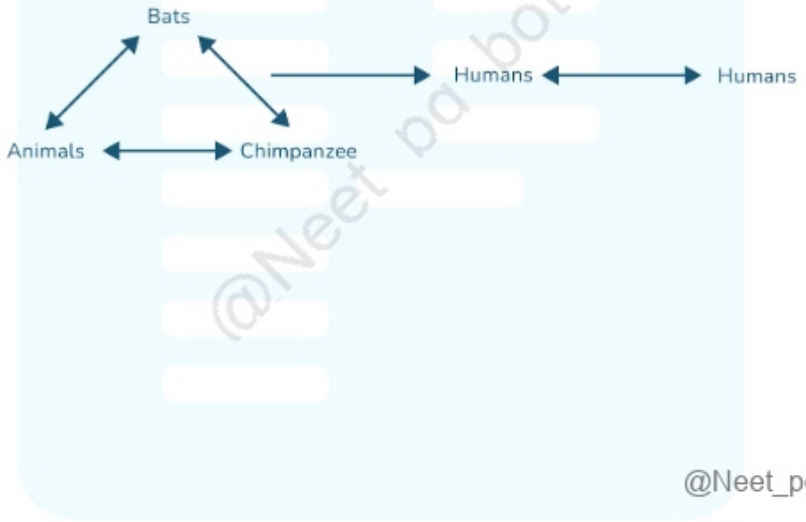
D. Pigs

Correct Answer: C. Bats

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The clinical presentation suggests an Ebola virus infection. Infected Bats are the natural reservoir of Ebola and Nipah virus infection. Ebola virus Nipah virus Natural reservoir Bats Bats Bats → Pigs → Humans Modes of transmission Bat bites Body secretion (blood, urine, faeces, seminal fluid) Sexual route Direct contact with infected animals Body secretion (blood, urine, faeces, seminal fluid) Consumption of contaminated food products (palm sap or fruits) Incubation period 2 to 21 days 4-14 days Clinical features Fever, chills, myalgia, diarrhea, bleeding, and multi-organ failure (case fatality rate- 50 to 90%) Fever, chills, headache Encephalitis, acute respiratory distress syndrome Multiorgan failure, GIT hemorrhage (case fatality rate- 40-70%) Ebola virus: Monkeys (Option A) can contract the Ebola virus through contact with infected animals or humans. However, they are not the primary natural reservoir. Cattle (Option B) can become infected with the Ebola virus if they come into contact with contaminated materials or are exposed to infected bodily fluids. However, they are not natural reservoirs. Pigs (Option D) can also become infected with the Ebola virus through contact with infected materials, including fruit or other food contaminated with bat saliva or droppings. However, they are not natural reservoirs.



References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pg 407 Ebola Virus Disease - StatPearls - NCBI Bookshelf Nipah Virus - StatPearls - NCBI Bookshelf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: All of the following pathogens are category A bioterrorism agents, except? (Q841117)

A. Ebola virus

B. Bacillus anthracis

C. Nipah virus

D. Francisella tularensis

Correct Answer: C. Nipah virus

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Nipah virus belongs to Category C. Category A Category B Category C Priority High-priority agents posing a risk to national security Second highest priority Third highest priority with emerging pathogens The reason they are classified into the respective categories: Easily spread, high mortality, causes public panic, and needs special public health measures. Moderately spreadable, causes moderate illness, needs enhanced surveillance. Can be engineered for mass spread; poses high mortality and morbidity risk. Examples: Bacillus anthracis - Anthrax (Option B) Francisella tularensis - Tularemia (Option D) Clostridium botulinum - Botulism Yersinia pestis - Bubonic plague Ebola virus - Ebola hemorrhagic fever (Option A) Clostridium perfringens - epsilon toxin Cryptosporidium parvum Escherichia coli (O157:H7) Shigella dysenteriae Salmonella Vibrio cholera Hantavirus MDR-tuberculosis Nipah Virus Yellow fever Tick-borne encephalitis /hemorrhagic fever

References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC4921253/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A 35-year-old man from a rural area in Kerala visits the clinic with symptoms of fever, headache, dizziness, and respiratory problems. He mentions that he has also been experiencing muscle pain and nausea for the past few days. On examination, the patient exhibits signs of encephalitis. Based on the scenario, what is the likely incubation period for this viral infection? (Q841119)

A. 2 to 7 days

B. 2 to 21 days

C. 10 to 12 days

D. 4 to 14 days

Correct Answer: D. 4 to 14 days

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The symptoms described, such as fever, headache, dizziness, respiratory issues, muscle pain, nausea, and encephalitis, are characteristic of Nipah virus infection . The incubation period for Nipah virus is typically 4-14 days. Clinical manifestations: Human Nipah virus infection ranges from asymptomatic cases to severe respiratory infections and fatal encephalitis. Initial symptoms include fever, headache, myalgia, vomiting, sore throat These symptoms can progress to dizziness, drowsiness, altered consciousness, neurological signs indicative of acute encephalitis Some individuals may develop atypical pneumonia and severe respiratory issues, including acute respiratory distress. In severe cases, encephalitis and seizures can lead to coma within 24 to 48 hours. Disease Incubation Period Ebola virus 2-21 days (Option B) Zika virus 2-7 days (Option A) Nipah 4-14 days (Option D) Scrub Typhus 10-12 days (Option C)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page: 334

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A public health officer is investigating an outbreak of a viral illness in a tropical region. The affected individuals present with symptoms such as fever, maculopapular skin rash, conjunctivitis, and joint pain. The officer needs to identify the primary vector responsible for the transmission of the virus to implement effective control measures. Which vector is primarily responsible for transmitting the virus? (Q841120)

A. Anopheles mosquito

B. Culex mosquito

C. Aedes aegypti mosquito

D. Ixodes tick

Correct Answer: C. Aedes aegypti mosquito

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Zika virus disease should be considered in patients with acute onset of fever, maculopapular rash, and arthralgia, particularly if they have travelled to areas with ongoing transmission in the two weeks before symptom onset. Zika virus is transmitted by the Aedes aegypti mosquito. Zika virus disease: Agent: Zika virus is a Flavivirus transmitted via mosquito bite; hence, it is called an arbovirus. Mode of Transmission: Transmitted by the bite of an infected Aedes aegypti mosquito, which tends to bite during the morning and late afternoon. It is also increasingly recognized that an infected pregnant woman can pass the virus to her baby during pregnancy or near the time of birth. Clinical Symptoms: Fever, skin rash, conjunctivitis, joint pain, headache. Symptoms are usually mild and last 2-7 days. Pregnant women are at increased risk for developing both fetal and maternal complications. Prevention: Prevention and control depend on reducing mosquitoes by removing and modifying breeding sites. Anopheles mosquito (Option A): Primarily known for transmitting malaria. Culex mosquito (Option B): Primarily known for transmitting West Nile virus and other arboviruses. Ixodes tick (Option D): Known for transmitting Lyme disease and other tick-borne illnesses unrelated to mosquito-borne diseases.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page: 321

↑ *Back to this question in Part A*

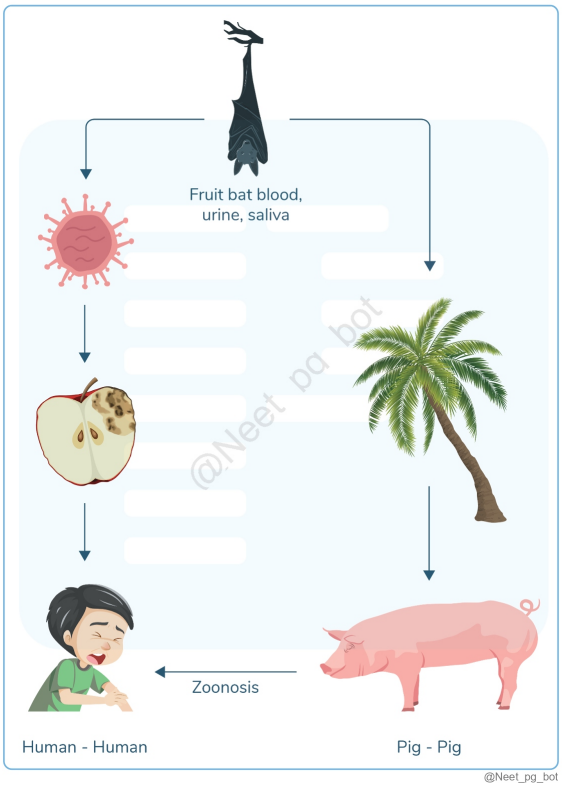
Q16: The diagram illustrates characteristics of which viral disease? (Q844348)

A. Ebola virus

B. Zika virus

C. Rickettsial

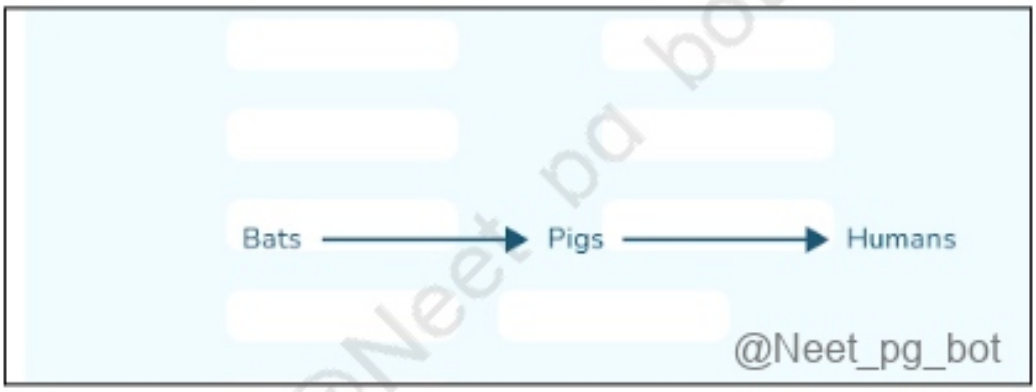
D. Nipah virus

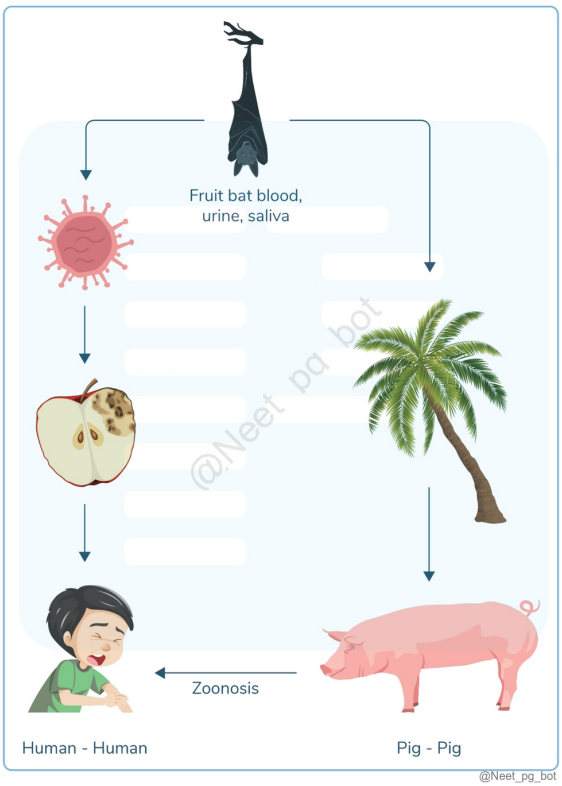


Correct Answer: D. Nipah virus

Explanation: Nipah virus Zoonotic virus, where fruit bats (specifically Pteropus species) are natural reservoirs. The incubation period for Nipah virus is typically 4-14 days . The virus can spread from bats to other animals, such as pigs , which can then transmit the virus to humans. This transmission can also occur directly from bats to humans or from human to human. Fever, headache, dizziness, and muscle pain and progresses to encephalitis (brain inflammation) High mortality rate, ranging from 40% to 75% The diagram's depiction of this zoonotic transmission through bats, pigs, and humans accurately represents the Nipah virus cycle. Ebola virus (Option A) Zika virus (Option B) Rickettsial (Option C) Primarily transmitted to humans from wild animals like fruit bats, chimpanzees, or other primates, but it does not typically involve pigs as an intermediate host. Incubation period is of 2-21days. Fever, chills, myalgia, diarrhea, bleeding, and multi-organ failure. Human-to-human transmission

occurs through direct contact with blood, secretions, organs, or other bodily fluids of infected people. Primarily transmitted to humans through the bite of an infected Aedes mosquito. While it can also be transmitted from mother to fetus, sexually, and through blood transfusions, the virus does not involve bats or pigs in its transmission cycle. Caused by bacteria Rickettsia prowazekii, are typically spread by arthropod vectors such as ticks, lice, fleas, and mites. They do not involve bats or pigs and are not viruses but bacteria.





References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page: 334,321. Ebola Virus Disease - StatPearls - NCBI Bookshelf Nipah image

↑ *Back to this question in Part A*

@Neet_pg_bot

• [05_Communicable and Non-communicable Diseases] 023 Previous Year Questions

« Back to Folder Directory

[05_Communicable and Non-communicable Diseases] 023 Previous Year Questions — Quick Jump

Q1 (p. 1034)	*Q2 (p. 1035)*	*Q3 (p. 1036)*	*Q4 (p. 1036)*	*Q5 (p. 1037)*	*Q6 (p. 1038)*
Q7 (p. 1040)	*Q8 (p. 1041)*	*Q9 (p. 1042)*	*Q10 (p. 1043)*	*Q11 (p. 1043)*	*Q12 (p. 1044)*
Q13 (p. 1045)	*Q14 (p. 1046)*	*Q15 (p. 1047)*	*Q16 (p. 1048)*	*Q17 (p. 1049)*	*Q18 (p. 1050)*
Q19 (p. 1051)	*Q20 (p. 1051)*	*Q21 (p. 1052)*	*Q22 (p. 1053)*	*Q23 (p. 1053)*	*Q24 (p. 1054)*
Q25 (p. 1055)	*Q26 (p. 1055)*	*Q27 (p. 1056)*	*Q28 (p. 1057)*	*Q29 (p. 1058)*	*Q30 (p. 1059)*
Q31 (p. 1059)	*Q32 (p. 1060)*	*Q33 (p. 1061)*	*Q34 (p. 1062)*	*Q35 (p. 1063)*	*Q36 (p. 1064)*
Q37 (p. 1065)	*Q38 (p. 1065)*	*Q39 (p. 1066)*	*Q40 (p. 1067)*	*Q41 (p. 1067)*	*Q42 (p. 1068)*
Q43 (p. 1069)	*Q44 (p. 1070)*	*Q45 (p. 1071)*	*Q46 (p. 1072)*	*Q47 (p. 1072)*	*Q48 (p. 1073)*
Q49 (p. 1073)	*Q50 (p. 1074)*	*Q51 (p. 1075)*	*Q52 (p. 1075)*	*Q53 (p. 1076)*	*Q54 (p. 1077)*
Q55 (p. 1078)	*Q56 (p. 1079)*	*Q57 (p. 1079)*	*Q58 (p. 1080)*	*Q59 (p. 1081)*	*Q60 (p. 1081)*
Q61 (p. 1082)	*Q62 (p. 1083)*	*Q63 (p. 1084)*	*Q64 (p. 1085)*	*Q65 (p. 1086)*	*Q66 (p. 1087)*
Q67 (p. 1088)	*Q68 (p. 1088)*	*Q69 (p. 1089)*	*Q70 (p. 1090)*	*Q71 (p. 1091)*	*Q72 (p. 1092)*
Q73 (p. 1093)	*Q74 (p. 1094)*	*Q75 (p. 1094)*	*Q76 (p. 1095)*	*Q77 (p. 1096)*	*Q78 (p. 1096)*
Q79 (p. 1097)	*Q80 (p. 1098)*	*Q81 (p. 1099)*	*Q82 (p. 1100)*	*Q83 (p. 1100)*	*Q84 (p. 1101)*
Q85 (p. 1102)	*Q86 (p. 1103)*	*Q87 (p. 1103)*	*Q88 (p. 1104)*	*Q89 (p. 1105)*	*Q90 (p. 1106)*
Q91 (p. 1107)	*Q92 (p. 1108)*	*Q93 (p. 1109)*	*Q94 (p. 1109)*	*Q95 (p. 1110)*	*Q96 (p. 1111)*
Q97 (p. 1112)	*Q98 (p. 1113)*	*Q99 (p. 1113)*	*Q100 (p. 1114)*		

Q1: Zika virus is transmitted by: (Q859950)

A. Aedes aegypti

B. Culex

C. Anopheles

D. Phlebotomus papatasii

Correct Answer: A. Aedes aegypti

Explanation: Zika virus disease should be considered in patients with acute onset of fever, maculopapular rash, and arthralgia, particularly if they have travelled to areas with ongoing transmission in the two weeks before symptom

onset. Zica virus is transmitted by the Aedes aegypti mosquito. Zika virus disease: Agent: Zika virus is a Flavivirus transmitted via mosquito bite; hence, it is called an arbovirus. Mode of Transmission: Transmitted by the bite of an infected Aedes aegypti mosquito, which tends to bite during the morning and late afternoon. It is also increasingly recognized that an infected pregnant woman can pass the virus to her baby during pregnancy or near the time of birth. Clinical Symptoms: Fever, skin rash, conjunctivitis, joint pain, headache. Symptoms are usually mild and last 2-7 days. Prevention: Prevention and control depend on reducing mosquitoes through the removal and modification of breeding sites. Culex mosquito (Option B): Primarily known for transmitting West Nile virus and other arboviruses. Anopheles mosquito (Option C): Primarily known for transmitting malaria. Phlebotomus (Option D): It is a sandfly known for transmitting Kala-azar.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 321, 351-52

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following is the schedule of the OPV vaccine? (Q852607)

A. 6th week, 10th week and 14th week

B. 6th week, 10th week & 9th month

C. 6th week, 14th week & 9th month

D. 6 to 12 weeks

Correct Answer: A. 6th week, 10th week and 14th week

Explanation: Oral Polio Vaccine (OPV) is administered as part of the routine immunisation schedule at 6, 10, and 14 weeks along with DPT and other vaccines. Additionally, a booster dose is given at 16–24 months. Differences between IPV and OPV: Characteristic IPV (salk type) OPV (sabin type) Type of vaccine Killed formalised virus Live attenuated virus Mode of administration S/C or IM (0.5 mL) Oral (2 drops) Type of immunity Only humoral Humoral and intestinal Prevention of Paralysis Paralysis + Intestinal re-infection Control of epidemics Not useful Effective Storage & transport Less stringent conditions Requires sub-zero temperatures Shelf life Longer Short VAPP (Vaccine Associated Paralytic Polio) Zero incidences 1 per 1 million vaccines Schedule of OPV: 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years; 2 oral drops Schedule of fIPV (fractional IPV): 6 and 14 weeks; 0.1 ml ID Right upper arm. fIPV: 1/5th of the full dose. From 1 January 2023, the third dose of IPV is introduced into the NIS, which is administered at 9 completed months of age: 0.1 ml ID Left upper arm (as the MR vaccine is administered in the right upper arm).

References:

Park, 27th Edition, Page 240

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is the fIPV dose schedule under the National Immunization Schedule? (Q852673)

A. 6 weeks, 10 weeks, 14 weeks

B. At birth, 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years

C. 6 weeks, 14 weeks, 9 months

D. 6 weeks, 10 weeks, 12 weeks

Correct Answer: C. 6 weeks, 14 weeks, 9 months

Explanation: Fractional Inactivated Polio Vaccine (fIPV) is administered intradermally at 6 weeks and 14 weeks as part of the routine immunisation schedule. Additionally, a booster dose is given at 9 months. Differences between IPV and OPV: Characteristic IPV (salk type) OPV (sabin type) Type of vaccine Killed formalised virus Live attenuated virus Mode of administration S/C or IM (0.5 mL) Oral (2 drops) Type of immunity Only humoral Humoral and intestinal Prevention of Paralysis Paralysis + Intestinal re-infection Control of epidemics Not useful Effective Storage & transport Less stringent conditions Requires sub-zero temperatures Shelf life Longer Short VAPP (Vaccine Associated Paralytic Polio) Zero incidences 1 per 1 million vaccines Schedule of OPV: 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years; 2 oral drops Schedule of fIPV (fractional IPV): 6 and 14 weeks; 0.1 ml ID Right upper arm. fIPV: 1/5th of the full dose. From 1 January 2023, the third dose of IPV is introduced into the NIS, which is administered at 9 completed months of age: 0.1 ml ID Left upper arm (as the MR vaccine is administered in the right upper arm). 6 weeks, 10 weeks, 14 weeks (Option A) is incorrect because fIPV is given at 6 and 14 weeks , not at 10 weeks. At birth, 6 weeks, 10 weeks, 14 weeks, 16-24 months, 5 years (Option B) is incorrect because this schedule includes OPV doses and does not match the fIPV schedule, which is 6 weeks, 14 weeks, and a booster at 9 months . 6 weeks, 10 weeks, 12 weeks (Option D) is incorrect because fIPV is not given at 10 and 12 weeks. The correct schedule is 6 weeks and 14 weeks , with a booster at 9 months .

References:

Park, 27th Edition, Page 240

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: All are live vaccines except: (Q852858)

A. Rota virus

B. Hepatitis B

C. Measles

D. Varicella

Correct Answer: B. Hepatitis B

Explanation: Hepatitis B vaccine is a recombinant subunit vaccine , not a live vaccine. Live vaccines contain attenuated (weakened) pathogens that induce a strong immune response. Rotavirus, Measles, and Varicella vaccines are all live attenuated vaccines. Hepatitis B vaccine contains HBsAg (Hepatitis B surface antigen) and is inactivated. Live vs. Inactivated Vaccines Vaccines can be classified into live attenuated vaccines and inactivated vaccines based on their mechanism of inducing immunity. Live Attenuated Vaccines (LAVs) Contain weakened versions of the pathogen. Provide strong, long-lasting immunity with fewer doses. Not given to immunocompromised individuals due to risk of reactivation. Examples of Live Vaccines: Vaccine Disease Prevented Rotavirus Rotavirus gastroenteritis Measles, Mumps, Rubella (MMR) Measles, Mumps, Rubella Varicella Chickenpox Oral Polio Vaccine (OPV) Poliomyelitis Yellow Fever Yellow Fever BCG Tuberculosis Inactivated Vaccines Contain killed or non-infectious components of the pathogen. Require booster doses for sustained immunity. Safer for immunocompromised patients. Examples of Inactivated Vaccines: Vaccine Disease Prevented Type Hepatitis B Hepatitis B Recombinant subunit Polio (IPV) Poliomyelitis Inactivated Rabies Rabies Inactivated Influenza (Injectable) Influenza Inactivated COVID-19 (Covaxin, Sinopharm) COVID-19 Inactivated Rotavirus (Option A): Incorrect because it is a live oral vaccine used to prevent severe rotavirus diarrhea. Measles (Option C): Incorrect because it is part of the MMR vaccine , which is live attenuated. Varicella (Option D): Incorrect because it is a live attenuated vaccine used to prevent chickenpox .

References:

Park’s Textbook of Preventive and Social Medicine 27th edition. Pg. 111-112

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following vaccines is not recommended after 65 years? (Q852856)

A. Influenza

B. Herpes Zoster

C. Pneumococcal

D. Human papilloma virus

Correct Answer: D. Human papilloma virus

Explanation: HPV vaccine is not routinely recommended after 26 years and is generally not given after 45 years, as older individuals are less likely to benefit. Influenza, Pneumococcal, and Herpes Zoster vaccines are strongly

recommended for adults ≥65 years to prevent severe infections. HPV vaccination is primarily for younger individuals to prevent cervical and other HPV-related cancers. Older adults have likely been exposed to HPV already , reducing vaccine efficacy. Adult Vaccination Recommendations (≥65 Years) Aging individuals face an increased risk of respiratory infections, viral reactivation, and opportunistic infections due to immune decline. Vaccination is a critical preventive strategy. Recommended Vaccines for Adults ≥65 Years Vaccine Purpose Recommended After 65? Influenza Prevents seasonal flu complications Yes, annually Pneumococcal (PCV15/PCV20, PPSV23) Prevents pneumonia, bacteremia, meningitis Yes, once or as per schedule Herpes Zoster (Recombinant Zoster Vaccine - RZV) Prevents shingles and postherpetic neuralgia Yes, 2 doses after 50 years Tetanus, Diphtheria, Pertussis (Tdap/Td) Prevents tetanus and pertussis Yes, booster every 10 years COVID-19 Reduces risk of severe COVID-19 Yes, as per updated recommendations HPV Prevents cervical and other cancers Not recommended after 45 years Why is the HPV Vaccine Not Given After 65? Most individuals are already exposed to HPV by this age. Vaccine efficacy is highest in younger populations (9-26 years). No added benefit in older adults, as HPV-related cancer risk decreases. Influenza (Option A): Incorrect because annual flu vaccination is recommended to prevent severe complications. Herpes Zoster (Option B): Incorrect because shingles risk increases with age, so vaccination is advised after 50 years . Pneumococcal (Option C): Incorrect because pneumococcal vaccine is recommended after 65 years to prevent pneumonia and invasive infections .

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC4928529/

https://pmc.ncbi.nlm.nih.gov/articles/PMC4928530/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following vaccines will you use in the clinic? (Q866471)

A. Use 1 only

B. Use 1 and 2

C. Use 1, 2, and 3

D. Use 4 only



Correct Answer: B. Use 1 and 2

Explanation: Vaccine Vial Monitor (VVM): Purpose: A heat-sensitive label on vaccine vials to ensure vaccine potency during transportation and storage. Function: The VVM contains a heat-sensitive material that changes colour irreversibly when exposed to heat over time. Healthcare providers use this visual indicator to assess if a vaccine has been exposed to inappropriate temperatures. Usage Criteria: The vaccine is usable if the inner square of the VVM is lighter than the outer circle. (Option B) The vaccine should be discarded if the inner square is the same colour as or darker than the outer circle.





References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following vaccines is contraindicated in a child with immunodeficiency? (Q865301)

A. Hepatitis B (Hep B)

B. DPT (Diphtheria, Pertussis, Tetanus)

C. MMR (Measles, Mumps, Rubella)

D. Inactivated Polio Vaccine (IPV)

Correct Answer: C. MMR (Measles, Mumps, Rubella)

Explanation: MMR is a live attenuated vaccine and is generally contraindicated in immunocompromised individuals, whereas Hepatitis B, DPT, and IPV are inactivated vaccines and are considered safe for them.

Category Recommendations HIV+ Individuals Inactivated Vaccines: Most are recommended, but effectiveness may vary based on immune deficiency. Live Vaccines: Generally contraindicated, with exceptions: MMR: Administer if asymptomatic or with mild symptoms (CD4+ ≥ 15%). Varicella: Consider if CD4+ ≥ 15%; MMRV is not recommended. Yellow Fever : Contraindicated for severely immunocompromised under 6; specific precautions for others. Other Vaccines: Pneumococcal: PCV13 and PPSV23 are recommended. Meningococcal: MCV4 is recommended for children ≥ 2 months. Hib: Recommended if not given during infancy. Immunocompromised General Principles: Vaccination varies by condition, severity, risk, and vaccine type. Live Vaccines: Typically contraindicated; exceptions based on condition and vaccine. (Option C) Inactivated Vaccines: Effective but may be reduced based on immune deficiency. (Option A, B, D ruled out) Preterm Infants General Recommendations: Vaccinate based on chronological age, similar to full-term infants. Hepatitis B Vaccine: For ≥ 2 kg and stable: Birth dose within 24 hours. For < 2 kg: Birth dose deferred until 1 month or hospital discharge (if HBsAg-negative mother). All preterm, low-birthweight infants born to HBsAg-positive mothers should receive HBIG and hepatitis B vaccine within 12 hours of birth, with three additional doses starting at 1 month. Vaccination in elderly Influenza (flu): Annual vaccination, especially with high-dose or adjuvanted vaccines, helps protect against flu complications such as pneumonia and organ failure. Pneumococcal vaccine: A one-time vaccine against bacterial infections that can cause severe pneumonia. Shingles: A two-dose series to prevent shingles and its complications, like postherpetic neuralgia. Tdap (Tetanus, Diphtheria, Pertussis): Booster shots every 10 years to maintain immunity. RSV (Respiratory Syncytial Virus): Newly approved for older adults, especially those with heart or lung conditions.

References:

Vaccines in HIV patients -adults,children.

Park’s Textbook of Preventive and Social Medicine, 26th Edition, Page 111, 178.

Nelson Textbook of Paediatrics, 21st Edition, Pages 1359-1360, 1362-1363.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A person has recently moved from Nigeria to the United States. Which of the following vaccines is required for international travel from Nigeria to the USA? (Q866776)

A. Yellow Fever (17D) vaccine

B. Japanese Encephalitis (JE) vaccine

C. Measles vaccine

D. Rabies vaccine

Correct Answer: A. Yellow Fever (17D) vaccine

Explanation: Yellow fever is endemic in several African countries, including Nigeria. The WHO's International Health Regulations require travelers from countries with risk of yellow fever transmission to present a valid yellow fever vaccination certificate when entering certain countries, including the USA. This prevents international spread of the disease. Yellow Fever (17D) vaccine is a live-attenuated viral vaccine. Single subcutaneous dose provides immunity for life Required for travel from yellow fever-endemic areas to prevent spread to countries where the disease is not endemic. Nigeria is a yellow fever endemic zone; hence proof of vaccination is mandatory. Must be given at least 10 days before travel to be valid. Contraindications: Infants <9 months, severe egg allergy, immunocompromised persons, pregnancy (relative). Japanese Encephalitis (JE) vaccine (Option B): Recommended for travelers to rural Asia-Pacific regions, not Nigeria–USA travel. Measles vaccine (Option C): Important for general immunization but not an international travel requirement between Nigeria and USA. Rabies vaccine (Option D): Given for post-exposure prophylaxis or pre-exposure for high-risk groups, not a routine travel requirement for this route.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Out of the MR & Pentavalent vaccine, which can be reused, and which one should be discarded when the vial is opened according to the open vial policy? (Q866771)

A. Discard MR, reuse Pentavalent

B. Discard Pentavalent, reuse MR

C. Discard both MR and Pentavalent

D. Reuse both MR and Pentavalent

Correct Answer: A. Discard MR, reuse Pentavalent

Explanation: Open Vial Policy (WHO guidelines) allows certain multi-dose vials to be reused for up to 28 days after opening if: They have no preservative contamination. They are kept under proper cold chain conditions (2–8 °C). Pentavalent vaccine → liquid formulation with preservative → can be reused until expiry within the 28-day rule. MR (Measles-Rubella) vaccine → lyophilized (freeze-dried) powder without preservative, reconstituted with diluent before use → must be discarded within 4 hours of reconstitution, irrespective of remaining doses. Open Vial Policy: Allows certain vaccines to be used in multiple immunization sessions after opening the vial, if stored and handled properly. If the vaccine is under the open vial policy then VVM will bw on the body (not on cap/neck). Purpose: Reduce vaccine wastage Ensure uninterrupted immunization services Lower programme costs without compromising safety. The vaccine can be kept and used for up to 28 days after opening only if: Vaccine is WHO-prequalified for MDVP use Vaccine vial is kept at recommended storage temperature (+2°C to +8°C) VVM (Vaccine Vial Monitor) has not crossed discard point Expiry date has not passed Aseptic technique used every time vial is opened Reconstituted vaccines (like BCG, Measles, MR, JE) must be discarded within 6 hours or at the end of the session — no exception. Vaccines NOT under Open Vial Policy: BCG Measles / MR COVID 19 (use within 8 hours) Discard Pentavalent, reuse MR (Option B): Wrong - MR cannot be used after 4 hous of reconstitution, so it must be discarded. Discard both MR and Pentavalent (Option C): Wrong - Pentavalent can be reused if stored properly. Reuse both MR and Pentavalent (Option D): Wrong - MR cannot be reused after 4 hours

of reconstitution.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A mother brings her 9-month-old baby, concerned that no BCG scar has appeared, although the baby received the BCG vaccine at birth. What is the next best step? (Q866770)

A. Reassure the mother

B. Give the BCG vaccine immediately

C. Do the Mantoux test & wait for the result

D. Refer the baby for a chest X-ray & further evaluation

Correct Answer: A. Reassure the mother

Explanation: After BCG vaccination, some children may not develop a visible scar, even though they have adequate immunity. No BCG scar is not an indication for revaccination if the child is otherwise healthy. WHO and national immunization guidelines recommend no further action in such cases- simply reassure the caregiver. BCG Vaccine Type : Live attenuated strain of Mycobacterium bovis Schedule : Single dose at birth (or as early as possible till 1 year of age) Dose & route : 0.05 mL (infants <1 yr), 0.1 mL (≥1 yr) — intradermal, left upper arm Purpose : Protection against severe forms of childhood TB (TB meningitis, miliary TB) Contraindications : Symptomatic HIV infection, immunodeficiency, pregnancy, generalized skin disease Storage : Lyophilized form at 2–8 °C ; reconstituted vaccine stable for 3–4 hours only Adverse events : Local ulcer at site, regional lymphadenitis, keloid (rare) Coverage target : Universal Immunization Programme (UIP) Give the BCG vaccine immediately (Option B): Revaccination is not recommended; lack of scar doesn’t mean lack of immunity. Do Mantoux test & wait for the result (Option C): Not required in an asymptomatic, healthy, vaccinated child. Refer for chest X-ray & further evaluation (Option D): Only indicated if there are clinical features suggestive of TB.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: After undergoing full treatment for tuberculosis, a male patient received sputum examination at the end of both the intensive and continuation phases. The results revealed a negative outcome. What can be concluded about the patient's condition? (Q855627)

A. Cured

B. Treatment completed

C. Lost to follow up

D. Treatment failed

Correct Answer: A. Cured

Explanation: ccording to the World Health Organization (WHO) definition, a patient is considered "cured" if: The patient completed treatment for tuberculosis (TB). Sputum smear or culture results were negative at the end of the intensive phase and the continuation phase . Since the sputum results were negative after both phases of treatment, the patient meets the criteria for being cured. Treatment completed (option B): A patient is classified as having "treatment completed" if they finish the treatment regimen but do not have follow-up sputum examinations at the end of therapy to confirm microbiological results. In this case, sputum examinations were performed and showed negative results, so the patient is classified as "cured." Lost to follow-up (option C): A patient is considered "lost to follow-up" if they discontinue treatment for 2 consecutive months or more during the course of therapy. Treatment failed (option D): "Treatment failed" is defined as: Persistence of positive sputum smears or cultures at 5 months or later during treatment. Evidence of clinical deterioration.

References:

Park’s Textbook of Preventive and Social Medicine, 25th edition, Page 188, 191, 193, 201

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Although many animals are implicated in the spread of rabies, dogs are the most common ones. Also, it usually affects children in developing countries. Knowing this, what is the most cost-effective and logical way to reduce the incidence of rabies? (Q855625)

A. Testing all the dogs for rabies

B. Reduce stray dog population and vaccinate all dogs

C. Increase the laboratory facilities

D. Increase capacity of healthcare workers for surveillance

Correct Answer: B. Reduce stray dog population and vaccinate all dogs

Explanation: ogs are the primary source of rabies transmission to humans, particularly in developing countries. Mass dog vaccination has been proven to be the most cost-effective and sustainable strategy for controlling rabies

in both humans and animals. Controlling the stray dog population reduces the number of potential carriers and the risk of transmission to humans, especially children. This approach directly targets the root cause of rabies transmission, significantly reducing the incidence of the disease. Testing all the dogs for rabies (option A) : Testing every dog is not feasible, especially in resource-limited settings. It would be extremely expensive and logistically challenging. Preventive measures like vaccination are more practical and effective. Increase the laboratory facilities (option C) : While improved diagnostic facilities are beneficial, they do not directly reduce the incidence of rabies. Their role is more important for surveillance and post-exposure management rather than prevention. Increase capacity of healthcare workers for surveillance (option D) : Surveillance is important for monitoring rabies trends, but it does not actively prevent cases. It complements preventive measures like dog vaccination and population control, which are more impactful.

References:

Park’s Textbook of Preventive and Social Medicine, 25th edition, Page 302, 303, 307

Harrison’s Principles of Internal Medicine, 21st Edition, Page 1620, 1621

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which among the following regions is free from rabies? (Q859985)

A. Sikkim

B. Kerala

C. Lakshadweep

D. Jammu and Kashmir

Correct Answer: C. Lakshadweep

Explanation: Rabies is usually not found in areas bound on all sides with water. In India, rabies is not found in islands such as Andaman and Nicobar Islands and Lakshadweep. Epidemiological Determinants of Rabies: Agent factor Zoonotic disease with a 100% fatality rate Lyssavirus type 1 Bullet-shaped RNA virus (Rhabdoviridae family). Two Types of Viruses: Street virus: Cause natural infection (Rabies) Variable incubation period (7 days-months) Fixed virus: Fixed incubation period (5-7 days) For vaccine production. It does not demonstrate Negri bodies. Host factors Occupation Dog handlers Forest workers Veterinarians. Transmission Incubation period: 2-8 weeks Animal bite: Dog, Cat, Monkey or Wild animal (all need vaccination) Licks on abraded skin are considered as the route of transmission. Rodent bites don't require vaccination. Human bite is a very dangerous bite (no documented cases yet) In India: Urban Rabies is very common. Rabies is not found around water-bounded areas (Lakshadweep and Andaman and Nicobar Islands) (Option C)

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 322-323

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which of the following vaccine is kept at lowest level in the equipment shown below? (Q844097)

A. OPV

B. DPT

C. Hep B

D. Rota

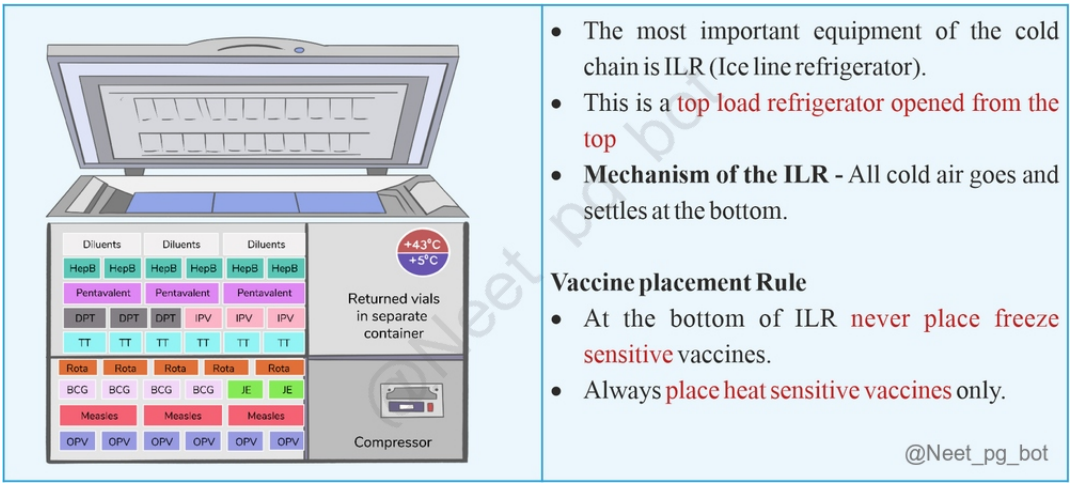


@Neet_pg_bot

Correct Answer: A. OPV

Explanation: Correct Option A - OPV: The OPV (Oral Polio Vaccine) is kept at the lowest level in Intermediate-Level Refrigerators (ILRs) compared to the other vaccines listed. Incorrect Options: Option B - DPT (Diphtheria, Pertussis, Tetanus): DPT is a combination vaccine and is sensitive to temperature changes. It needs to be stored in a controlled environment to maintain its efficacy, typically at a temperature range of 2°C to 8°C in ILRs. Option C - Hep B (Hepatitis B Vaccine): Hepatitis B vaccine is sensitive to temperature and must be kept at a stable temperature of 2°C to 8°C, similar to DPT, but it is more sensitive to freezing. Thus, it requires careful

monitoring to avoid freezing. Option D - Rota (Rotavirus Vaccine): The Rotavirus vaccine is sensitive to temperature fluctuations and is generally stored in ILRs at 2°C to 8°C. However, it is often kept at a higher level in the cold chain to ensure stability.



References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Within what time frame should Cholera, a disease that requires notification, be reported to the World Health Organization? (Q859474)

A. 72 hours

B. 24 hours

C. 12 hours

D. 2 days

Correct Answer: B. 24 hours

Explanation: Cholera, being a notifiable disease, should be reported to the World Health Organization (WHO) within 24 hours. This allows for early detection, investigation, and response to cholera outbreaks, which is essential for minimizing the impact on public health. Notifiable diseases: Notifiable diseases in India include diseases that are contagious, severe, or frequent, and require health providers to report them to public health officials. List of Notifiable diseases in India Note: the list is not comprehensive AIDS Dengue fever Hepatitis B Malaria Whooping cough (Pertussis) Rabies Tetanus Viral encephalitis Anemia Chickenpox Diphtheria Influenza Measles Plague Smallpox Tuberculosis Malnutrition Iodine deficiency Cholera Hepatitis A Leprosy Cerebro

spinal fever Polio Scarlet fever Typhoid fever Vitamin A deficiency

References:

https://www.who.int/docs/default-source/documents/emergencies/who-guidance-for-use-of-annex-2.pdf

https://tnhealth.tn.gov.in/tngovin/dph/dphdbnoti.php

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Komal, a 2-year-old girl is brought to the clinic with a high fever, cough, red eyes, and rash. Parents say that the rash started on the forehead and behind the ears, then subsequently spread to the neck and body. On examination, a confluent maculopapular rash is noted as shown below. Which of the following is false regarding this child's condition? (Q859471)

A. The period of infectivity is 4 days before and 5 days after the appearance of rash

B. The most common complication is subacute sclerosing panencephalitis

C. Warthin-Finkeldey giant cells are associated with the disease

D. Koplik spots are pathognomonic



Correct Answer: B. The most common complication is subacute sclerosing panencephalitis

Explanation: SSPE is a very rare, late-onset complication of measles that appears 6–8 years after the initial infection. It occurs due to persistent defective measles virus in the CNS, leading to progressive neurological deterioration. Since it is rare and delayed, it is not the most common complication seen in clinical practice. In contrast, the most common complication of measles is otitis media, followed by pneumonia and diarrhea. Pneumonia is also the most common cause of death, not SSPE. Other Options: Option A) Period of infectivity: "3 days before and 5 days after rash" → True. This is a standard and correct fact for measles transmission. Option C) Warthin–Finkeldey giant cells → True. These multinucleated giant cells are seen in lymphoid tissues (tonsils, lymph nodes) in measles infections. Option D) Koplik spots are pathognomonic → True. Small bluish-white spots on the buccal mucosa, appearing 1–2 days before the rash.

References:

Preventive and Social medicine, Park, 27th edition, Page no:: 164-166

Warthin–Finkeldey cell - Wikipedia

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: What is the duration after which the polymorphic rash of Varicella is no longer contagious? (Q859466)

A. 4 days after appearance of lesions

B. 7 days after appearance of lesions

C. 14 days after appearance of lesions

D. After crust formation over lesions

Correct Answer: D. After crust formation over lesions

Explanation: The contagious period of varicella extends until the lesions have completely crusted over. Once the crusts have formed and the vesicles are no longer fluid-filled, the risk of transmission decreases significantly. At this stage, the virus is considered less contagious, and the individual is generally considered non-infectious. Epidemiological factors of chicken pox: Agent Varicella-zoster virus (HHV 3- Human Herpes Virus 3) Double-stranded DNA virus. Source of infection Scabs are not infectious, but the vesicular fluid is infectious. (Option D) Airborne- spreads via both droplet infection and droplet nuclei Period of communicability 1-2 days before and 4-5 days after the onset of the rash (crust formation) Secondary attack rate- 85% Host factors Age: <10 years Very common in school-going children One attack gives lifelong immunity Reactivation can occur as Varicella zoster infection in later age Environmental factors More common in winter and early spring The virus can survive outside the body for 24-48 hours. Disinfectants easily kill the virus. Incubation period 14-16 days

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pages 161, 162

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which influenza virus caused the pandemic that took place in 2009? (Q858446)

A. H1N1

B. H5N1

C. H5N7

D. H3N2

Correct Answer: A. H1N1

Explanation: Correct Option A - H1N1 The pandemic that occurred in 2009 was due to H1N1 influenza virus. The pandemic, commonly known as the "swine flu" pandemic, was caused by a novel strain of the influenza A virus subtype H1N1. It was first identified in Mexico in April 2009 and quickly spread worldwide, leading to a declaration of a global pandemic by the World Health Organization (WHO) in June 2009. The H1N1 virus strain was a combination of swine, avian, and human influenza viruses, and it caused significant illness and mortality

globally during that time. Incorrect Options: Option B, C & D are incorrect

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition Pg 860

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: What is the association of Project MONICA? (Q858440)

A. Cardiovascular diseases

B. Cervical Cancer

C. Breast Cancer

D. Road Traffic Accidents

Correct Answer: A. Cardiovascular diseases

Explanation: Correct Option A - Cardiovascular diseases: Project MONICA (Multinational Monitoring of trends and determinants in Cardiovascular disease) is an international collaborative study that aimed to monitor trends and investigate determinants of cardiovascular diseases. It involved multiple countries and regions and collected data on various aspects related to cardiovascular health, such as incidence, mortality, risk factors, and preventive measures. Incorrect Options: Option B, C & D are incorrect

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition Pg 40

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: The patient presents with a clean-cut injury that is not torn. He mentions receiving a tetanus vaccination approximately 10 years ago. What is the appropriate course of action? (Q854840)

A. Full course of tetanus vaccination

B. Single dose tetanus toxoid

C. Tetanus toxoid + immunoglobulin

D. Non vaccination needed

Correct Answer: B. Single dose tetanus toxoid

Explanation: Correct Option: B) Single dose tetanus toxoid According to the standard guidelines for tetanus prophylaxis, if a patient has received a complete primary vaccination series (usually consists of three doses) and has had a booster dose within the past 10 years, a single booster dose of tetanus toxoid is recommended for clean, minor wounds or injuries. Incorrect Options: Full course of tetanus vaccination & Tetanus toxoid + immunoglobulin (Option A and C): Since the patient's injury is clean-cut and not lacerated, a full course of tetanus vaccination or tetanus toxoid with immunoglobulin is not necessary. Non vaccination needed (Option D): Non-vaccination is also not recommended as the patient's last dose was received 10 years ago, and a booster dose is required in this situation.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 40

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: According to NCEP-ATP III guidelines, which of the following does not meet the criteria for metabolic syndrome? (Q854839)

A. Hypertriglyceridemia

B. High LDL

C. Central obesity

D. Hypertension

Correct Answer: B. High LDL

Explanation: Correct Option: B) High LDL According to the National Cholesterol Education Program Adult Treatment Panel III (NCEP-ATP III) criteria, the criterion that is not included in the definition of metabolic syndrome is: High LDL (Low-density lipoprotein) NCEP-ATP III criteria include: Central obesity (Option C) Hypertriglyceridemia (Option A) Hypertension (Option D) Impaired fasting glucose or type 2 diabetes

References:

Textbook of Preventive and Social Medicine, 27th Edition Pg 40

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: What is the next course of action in managing a 28-month-old child weighing 11 kg who was presented to the pediatric OPD with a respiratory rate of 38/min and chest indrawing observed during examination? (Q854828)

A. Oral amoxicillin for five days

B. Urgent referral to the tertiary care centre immediately

C. Administer IV antibiotics and ask the patient to be brought after 24 hours

D. Start antipyretics urgently

Correct Answer: A. Oral amoxicillin for five days

Explanation: Correct Option: A) Oral amoxicillin for five days A clinical scenario of a 28-month-old child having a respiratory rate of 38/min and chest indrawing is suggestive of pneumonia. The management for pneumonia recommended is oral antibiotics for five days (Amoxicillin/ cotrimoxazole syrup) and home care advice. WHO Classification of Pneumonia (IMNCI Guidelines) Clinical Signs Classification Treatment / Action No fast breathing, no chest indrawing, no danger No pneumonia Home care, fluids, continued feeding, follow-up Fast breathing and/or chest indrawing Pneumonia Oral amoxicillin, home care, follow-up Any general danger sign* or stridor in calm child Severe pneumonia Injectable antibiotics, urgent referral to hospital *General danger signs: Not able to drink/breastfeed, persistent vomiting, convulsions, lethargy/unconsciousness, stridor in calm child, severe malnutrition. Revised WHO classification (and updated IMNCI guidelines) now include only two categories for pneumonia in children 2–59 months: Pneumonia: Fast breathing and/or chest indrawing, without general danger signs- managed with oral amoxicillin at home. Severe pneumonia: Any general danger sign or stridor in a calm child- managed with injectable antibiotics and urgent referral. Oral amoxicillin has replaced cotrimoxazole as the first-line antibiotic for pneumonia. Chest indrawing without danger signs is no longer classified as severe pneumonia; it is managed at home with oral antibiotics Urgent referral to the tertiary care centre immediately (Option B): Is recommended in case of severe pneumonia. Administer IV antibiotics and ask the patient to be brought after 24 hours (Option C): Is not a considerable option in case of pneumonia. Start antipyretics urgently (Option D): Is not recommended in case of any pneumonia.

References:

https://www.ncbi.nlm.nih.gov/books/NBK264162/ https://www.ncbi.nlm.nih.gov/books/NBK264164/ https://apps.who.int/iris/bitstream/handle/10665/137332/WHO_FWC_MCA_14.9_eng.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: Which one of the following methods does not effectively prevent the transmission of COVID-19? (Q856457)

A. Face mask

B. 1% glutaraldehyde

C. 70% alcohol

D. Hand washing

Correct Answer: B. 1% glutaraldehyde

Explanation: 1% glutaraldehyde : 1% glutaraldehyde is a chemical used for disinfecting medical instruments, but it is not recommended for general hand hygiene or preventing the transmission of COVID-19. Alcohol-based hand sanitizers or soap and water are far more effective for personal hygiene. Face mask (Option A) : Wearing a face mask is an effective measure for preventing the transmission of COVID-19, especially when combined with other protective actions, as it helps reduce the spread of respiratory droplets that may contain the virus. 70% alcohol (Option C) : Alcohol-based hand sanitizers containing 70% alcohol are highly effective in killing the coronavirus on the hands, reducing the risk of transmission. Hand washing (Option D) : Regular hand washing with soap and water is one of the most effective ways to prevent the spread of COVID-19, as it helps remove the virus from the skin.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC10607620/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: Match the following: Vector/agent Diseases caused 1. Louse a. Rocky Mounted Spotted Fever (RMSF) 2. Tick b. Scrub typhus 3. Mite c. Epidemic typhus 4. Poxvirus d. Molluscum contagiosum (Q865291)

A. 1-C, 2-B, 3-A, 4-D

B. 1-C, 2-A, 3-B, 4-D

C. 1-A, 2-C, 3-B, 4-D

D. 1-D, 2-B, 3-C, 4-A

Correct Answer: B. 1-C, 2-A, 3-B, 4-D

Explanation: Louse → Epidemic typhus (Rickettsia prowazekii) Tick → Rocky Mountain Spotted Fever (Rickettsia rickettsii) Mite → Scrub typhus (Orientia tsutsugamushi) Poxvirus → Molluscum contagiosum

References:

Essentials of Medical Microbiology- Apurba S Sastry and Sandhya Bhat, 3rd Edition, Page 311.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: What is the recommended treatment for a resident doctor who experiences a needlestick injury while attending to an HIV positive patient? (Q856442)

A. Zidovudine + Lamivudine

B. Zidovudine + Lamivudine + Nevirapine

C. Zidovudine + Lamivudine + Indinavir

D. Zidovudine + Nevirapine

Correct Answer: C. Zidovudine + Lamivudine + Indinavir

Explanation: For a healthcare worker exposed to HIV, such as through a needlestick injury, the recommended treatment is Post-Exposure Prophylaxis (PEP) . PEP involves a combination of antiretroviral drugs to reduce the likelihood of HIV transmission. Current Recommendations: Preferred PEP regimen typically includes a combination of two nucleoside reverse transcriptase inhibitors (NRTIs) like Zidovudine + Lamivudine and a third drug, which is a protease inhibitor (PI) such as Indinavir or an integrase strand transfer inhibitor (INSTI) like Dolutegravir or Raltegravir . The regimen must be started as soon as possible, ideally within 2 hours , and continued for 28 days Zidovudine + Lamivudine (Option A) : This is a 2-drug regimen, which is suboptimal for PEP, as it lacks a third drug, typically an INSTI like Dolutegravir , which is recommended for improved efficacy. Zidovudine + Lamivudine + Nevirapine (Option B) : Nevirapine is an older non-nucleoside reverse transcriptase inhibitor (NNRTI) that is associated with more adverse effects and drug resistance, making it less preferable for PEP in modern guidelines. Zidovudine + Nevirapine (Option D) : This is also a 2-drug regimen and lacks a third drug (an INSTI like Dolutegravir), which is essential for optimal PEP.

References:

Harrison’s Principles of Internal Medicine, Edition 21, Page 1594, 1595

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: A 7-year-old child is bitten on the hand by a neighbor’s dog whose vaccination status is unknown. On examination, there are two small puncture wounds with slight bleeding. Which of the following statements is/are correct? The wound is classified as Category III exposure. The wound should be washed with soap and running water for

at least 15–20 minutes. The wound should be cleaned thoroughly with spirit. Rabies immunoglobulin (RIG) should be infiltrated into and around the wound as much as anatomically possible. The intradermal anti-rabies vaccine schedule is given on days 0, 3, 7, and 28. (Q855133)

A. 1, 2, 4, 5

B. 1, 2, 3, 5

C. 2, 3, 4, 5

D. 1, 3, 4, 5

Correct Answer: A. 1, 2, 4, 5

Explanation: The statements 1, 2, 4, and 5 are correct. Category Description I Touching or feeding animals, licks on intact skin II Nibbling of uncovered skin, minor scratches or abrasions without bleeding III Single or multiple transdermal bites or scratches, licks on broken skin, contamination of mucosa with saliva, exposure to bats (Statement 1) Wound washing: Immediate and thorough washing of the wound with soap and running water for at least 15–20 minutes is essential and recommended to reduce viral load and prevent infection.■ (Statement 2) Cleaning with spirit: Use of spirit (alcohol) is generally not recommended because it can cause tissue damage and delay healing. Povidone-iodine or simple washing is preferred. Hence, this statement is incorrect.■ (Statement 3 ruled out) Rabies immunoglobulin infiltration: Rabies immunoglobulin (RIG) should be infiltrated into and around the wound as much as anatomically possible in Category III exposure if the patient is not previously vaccinated.■ (Statement 4) Intradermal vaccine schedule: The WHO-recommended schedule of days 0, 3, 7, and 28 is recommended for PEP following Category III exposures. (Statement 5)

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC5790559/

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 324-327

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: Dr. Sarah made a presentation on Infectious diseases. She spoke about prevention and treatment of Zika virus. Which of the following is true with respect to the prevention of Zika virus? (Q852855)

A. Symptomatic treatment with NSAIDs

B. Purified, inactivated FDA approved vaccine is found to be helpful in prevention

C. Sexual abstinence, using condoms, delaying pregnancy is helpful in controlling the disease

D. Immunoglobulin and plasmapheresis is used in the treatment of Zika

Correct Answer: C. Sexual abstinence, using condoms, delaying pregnancy is helpful in controlling the disease

Explanation: Zika virus spreads primarily through Aedes mosquito bites and sexual transmission. Sexual transmission is well-documented, hence abstinence, condom use, and delaying pregnancy help prevent spread. No FDA-approved vaccine is available for Zika virus prevention. Symptomatic treatment is given, but NSAIDs are avoided initially due to the risk of hemorrhagic complications in dengue co-infection. Immunoglobulin and plasmapheresis are not standard treatments for Zika virus. Zika Virus – Epidemiology, Prevention, and Control Overview of Zika Virus Zika virus is a Flavivirus transmitted by Aedes mosquitoes (A. aegypti and A. albopictus). It causes mild flu-like illness , but severe complications include congenital Zika syndrome (microcephaly) and Guillain-Barré syndrome . Modes of Transmission Mosquito bites – Primary mode of spread. Sexual transmission – Virus persists in semen, vaginal fluids. Maternal-fetal transmission – Can cause congenital defects. Blood transfusion – Rare but possible. Prevention Strategies for Zika Virus Prevention Method Effectiveness Mechanism Mosquito control Highly effective Elimination of breeding sites, insecticide use Personal protection Effective Wearing long sleeves, using insect repellents Sexual abstinence/condoms Effective Prevents sexual transmission of the virus Delaying pregnancy Advised in endemic areas Reduces risk of congenital Zika syndrome Vaccination Not available No FDA-approved vaccine exists yet NSAIDs for treatment Initially avoided Risk of bleeding if dengue co-infection is present Immunoglobulin & plasmapheresis Not standard treatment No proven benefit in Zika virus management Why No Vaccine Yet? Zika virus is structurally similar to dengue virus , leading to concerns about antibody-dependent enhancement (ADE) . Several vaccines are under development, but no FDA-approved vaccine exists . Symptomatic treatment with NSAIDs (Option A): Incorrect because NSAIDs are avoided initially due to the risk of bleeding in possible dengue co-infection. Purified, inactivated FDA-approved vaccine (Option B): Incorrect because no FDA-approved vaccine exists for Zika virus prevention . Immunoglobulin and plasmapheresis (Option D): Incorrect because they are not used in routine Zika virus treatment .

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 321

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: Open vial policy is accepted for? (Q855881)

A. BCG

B. Measles

C. Live JE

D. IPV

Correct Answer: D. IPV

Explanation: : The BCG (Bacillus Calmette-Guérin) vaccine does not typically follow the open vial policy. Once opened, the vaccine should be used within a short period, usually within the same day, due to its potential instability and risk of contamination. Measles (option B): The measles vaccine does not follow the open vial policy in the same manner as IPV. Once opened, it must be used within 6 hours . Live JE (option C): The Japanese encephalitis (JE) vaccine does not follow the open vial policy either. Similar to BCG, the JE vaccine requires strict guidelines for handling and storage, and open vials should be discarded after a specific time. VACCINES THAT DO NOT FOLLOW OPEN VIAL POLICY VACCINES THAT FOLLOW OPEN VIAL POLICY Reconstituted vaccines/freeze-dried vaccines/ lyophilised vaccines E.g.: BCG Measles/MR JE (live) YF Used upto 4 weeks E.g.: All t series vaccines: Hepatitis B, DPT, Tt, Td, Pentavalent, Rotavac PCV IPV OPV JE (killed) JEEV, JENVAC (Kolar strain)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 121

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: Vaccine protocol followed after Disaster? (Q854861)

A. Everyone is given diphtheria

B. Everyone is given tetanus toxoid

C. Everyone is given cholera vaccine

D. Only the health worker given cholera, typhoid, tetanus toxoid

Correct Answer: D. Only the health worker given cholera, typhoid, tetanus toxoid

Explanation: Correct Option: D) Only the health worker given cholera, typhoid, tetanus toxoid Health workers receive additional protection in disaster situations Cholera, typhoid, and tetanus toxoid vaccinations provided to minimize infection risk Ensures safety while providing medical care Vaccination protocol post- disaster : All vaccines except for measles are contraindicated post-disaster. Multidose vaccines, such as typhoid and cholera vaccines, have poor compliance and have not yet proven to be effective as a large-scale public health measure. The most common post-disaster outbreak is measles. For this reason, measles vaccines can be given within three days of exposure since the time taken for antibodies to form is less than the natural incubation period of the disease. Tetanus vaccine is given based on previous vaccinations and severity of injury. Vaccines for healthcare workers: Cholera, Typhoid, Tetanus, Hep B. Everyone is given diphtheria (Option A) : Diphtheria vaccination likely already part of routine immunization schedules Everyone is given tetanus toxoid (Option B) : Tetanus toxoid crucial in disaster scenarios, especially for those with injuries Everyone is given cholera vaccine (Option C) : Cholera vaccination not typically administered to everyone in general disaster response

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 111

↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: Which of the options listed below indicates the degree of heat resistance exhibited by vaccines? (Q856467)

A. VMV

B. VVM

C. MVV

D. VMM

Correct Answer: B. VVM

Explanation: The Vaccine Vial Monitor (VVM) is used to indicate the degree of heat resistance and the extent to which a vaccine has been exposed to heat. It is a color-changing indicator attached to vaccine vials to help assess whether a vaccine has been stored or transported at the correct temperature. This helps in determining if a vaccine remains safe and effective for use. VMV (Option A) : There is no known vaccine-related term called VMV. MVV (Option C) : This is not a recognized term related to vaccine heat resistance. VMM (Option D) : This also is not related to heat resistance in vaccines.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 24, Page 118

↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: There is an outbreak of acute encephalitis in the community and a vaccination drive is launched. Which of the following is true about the vaccine given in this condition? (Q856088)

A. Killed and intramuscular

B. Live and subcutaneous

C. Live and intramuscular

D. Killed and subcutaneous

Correct Answer: A. Killed and intramuscular

Explanation: Japanese Encephalitis (JE) is the most common cause of viral encephalitis outbreaks in endemic regions. The Japanese Encephalitis vaccine (JE vaccine) is available in two types: inactivated (killed) and live attenuated. The inactivated (killed) vaccine is commonly given intramuscularly (IM) as part of mass vaccination programs in outbreak settings. Live attenuated vaccines (like SA 14-14-2) are administered subcutaneously (SC), but they are generally used for routine immunization rather than in acute outbreak settings. Types of Japanese Encephalitis Vaccines Vaccine Type Examples Route of Administration Usage Inactivated (Killed) JEEV, IXIARO Intramuscular (IM) Used in outbreaks & travelers Live Attenuated SA 14-14-2 Subcutaneous (SC) Routine immunization Live and subcutaneous (Option B) : Incorrect. Although there is a live attenuated JE vaccine (e.g., SA 14-14-2), it is usually administered subcutaneously, not intramuscularly. However, this option does not align with standard killed vaccines used in most vaccination drives. Live and intramuscular (Option C) : Incorrect. Live attenuated vaccines for JE are administered subcutaneously, not intramuscularly. Killed and subcutaneous (Option D) : Incorrect. Killed vaccines are administered intramuscularly, not subcutaneously.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 332, 333

↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: Considering the immune status of a girl child who has been experiencing repeated yeast infections and respiratory virus infections since the age of 3 months, which vaccine should be avoided? (Q856082)

A. Killed IPV

B. Measles/MMR

C. DPT

D. TT/Td

Correct Answer: B. Measles/MMR

Explanation: Measles/MMR should be avoided due to the live virus components, which can be risky for immunocompromised children. A child who has a history of repeated yeast infections and respiratory viral infections may have an underlying immune deficiency or immunodeficiency disorder . Immunocompromised children, particularly those with T-cell deficiency (such as in conditions like DiGeorge syndrome or severe combined immunodeficiency (SCID)), should avoid live vaccines due to the risk of severe infection. The Measles,

Mumps, and Rubella (MMR) vaccine contains live attenuated viruses for measles, mumps, and rubella. In immunocompromised children, live vaccines pose a risk of causing active infections or serious complications due to their weakened immune system. National Immunization Schedule (India) Vaccine Age Route Site Type of Vaccine BCG At birth (up to 1 year) Intradermal Left upper arm Live attenuated Hepatitis B (Birth Dose) At birth (within 24 hrs) Intramuscular Anterolateral thigh Inactivated OPV (Zero Dose) At birth (within 15 days) Oral - Live attenuated Pentavalent (DPT + Hib + Hep B) 6, 10, 14 weeks Intramuscular Anterolateral thigh DPT (toxoid), Hib & Hep B (inactivated) OPV 6, 10, 14 weeks Oral - Live attenuated Rotavirus 6, 10, 14 weeks Oral - Live attenuated IPV (Fractional) 6 & 14 weeks Intradermal Right upper arm Inactivated PCV (Pneumococcal Conjugate Vaccine) 6, 14 weeks, and 9 months Intramuscular Anterolateral thigh Conjugate Measles & Rubella (MR) 9-12 months & 16-24 months Subcutaneous Right upper arm Live attenuated JE (Japanese Encephalitis) 9-12 months & 16-24 months Subcutaneous Left upper arm Live attenuated DPT Booster-1 16-24 months Intramuscular Anterolateral thigh Toxoid OPV Booster 16-24 months Oral - Live attenuated PCV Booster 9-12 months Intramuscular Anterolateral thigh Conjugate Measles/MR Booster 16-24 months Subcutaneous Right upper arm Live attenuated DPT Booster-2 5-6 years Intramuscular Deltoid Toxoid TT (Tetanus Toxoid) 10 years & 16 years Intramuscular Deltoid Toxoid Cervical Cancer (HPV) 9-14 years (girls) Intramuscular Deltoid Recombinant Killed IPV (Option A) : The Inactivated Polio Vaccine (IPV) contains inactivated (killed) virus, which is safe for immunocompromised children because it cannot cause infection. DPT (Diphtheria, Pertussis, Tetanus) (Option C) : The DPT vaccine is an inactivated vaccine and is safe for immunocompromised children. TT/Td (Tetanus Toxoid) (Option D) : This is a toxoid vaccine and is also safe for immunocompromised children, as it does not contain live bacteria.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 112, 162

https://www.pmc.gov.in/en/NIS-for-Infants-Children-and-Pregnant-Women

https://mohfw.gov.in/sites/default/files/4101639587148966752.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q33: Which vaccine is administered as part of the immunization program for a 10-year-old student in school? (Q856039)

A. BCG

B. MMR

C. TT/ Td

D. DPT

Correct Answer: C. TT/ Td

Explanation: According to the National Immunization Schedule (NIS) of India, children at the age of 10 years receive the Td vaccine (Tetanus and Diphtheria, previously TT). This booster dose maintains immunity provided by earlier doses given during infancy and early childhood. Vaccine Age Route Site Type of Vaccine BCG (Option A ruled out) At birth (up to 1 year) Intradermal Left upper arm Live attenuated Hepatitis B (Birth Dose) At birth (within 24 hrs) Intramuscular Anterolateral thigh Inactivated OPV (Zero Dose) At birth (within 15 days) Oral - Live attenuated Pentavalent (DPT + Hib + Hep B) 6, 10, 14 weeks Intramuscular Anterolateral thigh DPT (toxoid), Hib & Hep B (inactivated) OPV 6, 10, 14 weeks Oral - Live attenuated Rotavirus 6, 10, 14 weeks Oral - Live attenuated IPV (Fractional) 6 & 14 weeks Intradermal Right upper arm Inactivated PCV (Pneumococcal Conjugate Vaccine) 6, 14 weeks, and 9 months Intramuscular Anterolateral thigh Conjugate Measles & Rubella (MR) (Option B ruled out) 9-12 months & 16-24 months Subcutaneous Right upper arm Live attenuated JE (Japanese Encephalitis) 9-12 months & 16-24 months Subcutaneous Left upper arm Live attenuated DPT Booster-1 16-24 months Intramuscular Anterolateral thigh Toxoid OPV Booster 16-24 months Oral - Live attenuated PCV Booster 9-12 months Intramuscular Anterolateral thigh Conjugate Measles/MR Booster 16-24 months Subcutaneous Right upper arm Live attenuated DPT Booster-2 5-6 years Intramuscular Deltoid Toxoid TT (Tetanus Toxoid) 10 years & 16 years Intramuscular Deltoid Toxoid Cervical Cancer (HPV) 9-14 years (girls) Intramuscular Deltoid Recombinant National Immunization Schedule (India) DPT (Option D): Used for children below 7 years. Beyond this age, the Td vaccine replaces DPT to minimize side effects from higher diphtheria toxoid content.

References:

https://www.pmc.gov.in/en/NIS-for-Infants-Children-and-Pregnant-Women

https://mohfw.gov.in/sites/default/files/4101639587148966752.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

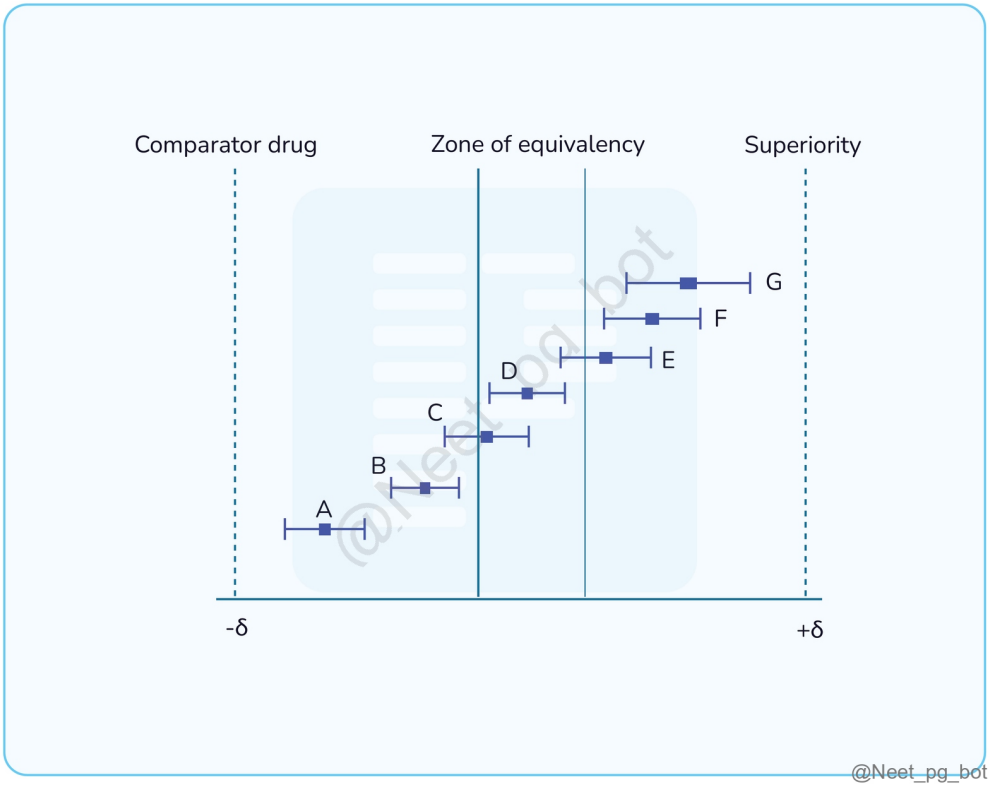
Q34: In the market, there are several new vaccines being researched, and their effectiveness is being evaluated and displayed in the image provided. Which of the recently developed vaccines demonstrate comparable efficacy to the previous vaccine? (Q858172)

A. D only

B. D and E

C. C, D and E

D. A, B, C and D



Correct Answer: C. C, D and E

Explanation: Option C is correct because vaccines C, D, and E show comparable efficacy to the previous vaccine. Conclusion based on forest plot, comparing efficacies. Confidence intervals overlap, indicating similar efficacy. D only (Option A): Only includes plot D, neglecting C and E. D and E (Option B): Only includes plots D and E, neglecting C. A, B, C and D (Option D): Includes plots A and B, which differ significantly from efficacy zone, unlike C, D, and E.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 116

↑ *Back to this question in Part A*

@Neet_pg_bot

Q35: Which vaccine among the options exhibits a seroconversion rate that is quicker than the incubation period of the corresponding disease? (Q857698)

A. Coronavirus

B. Measles

C. Polio

D. Mumps

Correct Answer: B. Measles

Explanation: mongst the above options, measles vaccine has a faster seroconversion rate as compared to the incubation period of the disease and this is why measles vaccine is given when a disaster or an epidemic occurs. Seroconversion: is the transition from the point of viral infection to when antibodies of the virus become present in the blood. Seroconversion rates are one of the methods used for determining the efficacy of a vaccine. The higher the rate of seroconversion, the more protective the vaccine for a greater proportion of the population. Seroconversion does not inherently confer immunity or resistance to infection. Only some antibodies, such as anti-spike antibodies for COVID-19, confer protection. Coronavirus (Option A): The coronavirus vaccine has almost the same seroconversion rate as compared to the incubation period of the disease. Polio (Option C): The seroconversion rate of the polio vaccine is slower than its incubation period. Mumps (Option D): The mumps vaccine has a slower seroconversion rate than its incubation period.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC7519951/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q36: Which of the following is the initial step when an immunization survey is being conducted? (Q857697)

A. Cluster identification

B. Conducting the survey

C. Completing the cluster and summary forms

D. Calculating the total fertility rate of the area

Correct Answer: A. Cluster identification

Explanation: luster identification. The major steps of an immunization survey are as follows: Planning the survey by finding the clusters and deciding how many interviewers are required. To conduct the survey in which the interviewers visit houses and get information on the immunization status of the clusters (Option B) To tabulate the data by completing the cluster and the summary forms (Option C) To analyse the data which helps in evaluating the immunization status and the reasons for the failure of immunization. To take action on the reports made by evaluating the data. Calculating the total fertility rate of the area (Option D): This is not typically part of an immunization survey; it is more relevant to demographic studies.

References:

https://iris.who.int/bitstream/handle/10665/69087/WHO_IVB_04.23.pdf;jsessionid=D82166D631381385A04DE4AE37EF648E?sequence=1

↑ *Back to this question in Part A*

@Neet_pg_bot

Q37: Which of these vaccines do not follow open vial policy? (Q857086)

A. OPV

B. DPT

C. TT

D. Measles

Correct Answer: D. Measles

Explanation: g : Hepatitis B , DPT, Pentavalent, OPV, IPV, PCV, Td. Reconstituted vaccines such as MMR, BCG, JE, Yellow fever vaccine along with Rotavirus vaccine do not follow open vial policy

References:

Park’s Textbook of Preventive and Social Medicine 26th edition page 120

↑ *Back to this question in Part A*

@Neet_pg_bot

Q38: What type of vaccine is the Diphtheria vaccine? (Q856447)

A. Polysaccharide vaccine

B. Toxoid

C. Killed vaccine

D. Live attenuated vaccine

Correct Answer: B. Toxoid

Explanation: The Diphtheria vaccine is a toxoid vaccine . Toxoid vaccines are made from inactivated toxins produced by bacteria. These toxins are treated to remove their harmful effects while still stimulating the immune system to recognize and fight the toxin if exposed in the future. For diphtheria , the causative agent

Corynebacterium diphtheriae produces a potent toxin that causes the disease. The vaccine contains an inactivated form of this toxin (diphtheria toxoid), which prompts the body to develop immunity without causing the disease. Polysaccharide vaccine (Option A) : Polysaccharide vaccines use sugar molecules from the surface of bacteria to stimulate immunity. Diphtheria is not a polysaccharide vaccine. Killed vaccine (Option C) : Killed vaccines use whole pathogens (bacteria or viruses) that are killed or inactivated, but diphtheria is a toxoid vaccine, not a killed bacteria vaccine. Live attenuated vaccine (Option D) : Live attenuated vaccines use a weakened form of the pathogen, but diphtheria vaccines do not contain live bacteria.

References:

Park's Textbook of Preventive and Social Medicine, Edition 25, Page 111

↑ *Back to this question in Part A*

@Neet_pg_bot

Q39: Which of the following regarding the vaccine vial monitor (VVM) is true? 1. It is used for monitoring heat exposure of the vaccine by healthcare workers in primary healthcare. 2. It shows cumulative exposure of the vaccine to the heat. 3. It can be used to assess the potential efficacy of the vaccine 4. Calculation of the expiry date can be done using VVM. 5. The expiry date of the vaccine can be relaxed if VVM is an acceptable range. 6. If the square and the circle are the same in color, then the vaccine can be safely used. (Q855309)

A. 3, 4

B. 1, 2

C. 1, 2, 3, 4, 5

D. 5, 6

Correct Answer: B. 1, 2

Explanation: 1. It is used for monitoring heat exposure of the vaccine by healthcare workers in primary healthcare. This is true. VVM is a tool used in primary healthcare to monitor the exposure of vaccines to heat during transportation and storage. It is particularly useful in areas with unreliable cold chain systems. 2. It shows cumulative exposure of the vaccine to the heat. This is also true. The VVM works by showing the cumulative amount of heat the vaccine has been exposed to, indicating whether the vaccine has been subjected to conditions that might reduce its efficacy. 3. It can be used to assess the potential efficacy of the vaccine. This is false. The VVM does not directly assess the efficacy of the vaccine. It only shows whether the vaccine has been exposed to heat beyond its acceptable limit, which might affect its effectiveness. 4. Calculation of the expiry date can be done using VVM. This is false. The VVM does not calculate the expiry date of the vaccine. It is used to monitor heat exposure, not to predict or calculate the expiry date. 5. The expiry date of the vaccine can be relaxed if VVM is in an acceptable range. This is false. The VVM cannot be used to relax the expiry date of a vaccine. If the vaccine has

been exposed to temperatures beyond the recommended limit, its efficacy may be compromised regardless of its expiration date. 6. If the square and the circle are the same in color, then the vaccine can be safely used. This is false. When the square and circle on the VVM are the same color, it indicates that the vaccine has been exposed to heat for too long and should not be used, as it may have lost its potency.

References:

Park's Textbook of Preventive and Social Medicine, 26th Edition, Page 121, 122

↑ *Back to this question in Part A*

@Neet_pg_bot

Q40: Which of the following statements is false regarding rabies immunoglobulin? (Q855277)

A. It is exclusively given only in the deltoid

B. The dose is 20 IU/kg

C. Administer it immediately after exposure

D. If human RIG is unavailable, equine is preferred

Correct Answer: A. It is exclusively given only in the deltoid

Explanation: RIG is not exclusively given in the deltoid . It is administered by infiltrating as much of the dose as possible around and into the wound site, with the remaining dose injected intramuscularly (usually in the gluteal region). It should not be given in the deltoid or gluteal region alone without infiltrating the wound. The dose is 20 IU/kg (Option B) is true for human rabies immunoglobulin (HRIG). For equine RIG (ERIG), the dose is 40 IU/kg. Administer it immediately after exposure (Option C) is true . RIG should be given as soon as possible after exposure, especially in Category III wounds, to neutralise the virus at the site of entry. If human RIG is unavailable, equine is preferred (Option D) is true . ERIG is used when HRIG is unavailable, and it is equally effective when administered correctly.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 324-327

↑ *Back to this question in Part A*

@Neet_pg_bot

Q41: What would be the most appropriate approach to managing a young male patient who has presented at the hospital with a clean-cut wound that is not bleeding,

and who received a complete tetanus vaccination 10 years ago? (Q855529)

A. Human tetanus immunoglobulin and full course of vaccine

B. Human tetanus immunoglobulin

C. Single-dose tetanus toxoid

D. Full course tetanus toxoid

Correct Answer: C. Single-dose tetanus toxoid

Explanation: Single-dose tetanus toxoid needed for clean cut wound with previous booster within 10 years Thorough wound cleaning advised, removal of foreign bodies Tetanus Management Protocol: Category Clean wound Unclean wound Category A Has had a complete course of toxoid or a booster dose (full immunisation) within the past 5 years. Only wound care. Only wound care. Category B Full immunization > 5 years ago < 10 years. Wound Care + TT single dose. Wound Care + TT single dose. Category C Full Immunization > 10 years ago. Wound Care + TT single dose. Wound Care + TT single dose + Human Tetanus Immunoglobulin. Category D Unknown, not known, never taken immunisation. Wound Care + TT complete course. Wound Care + TT complete course + Human Tetanus Immunoglobulin.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 361

↑ *Back to this question in Part A*

@Neet_pg_bot

Q42: In a 10-year-old school child, which of the following vaccines is given as a part of the school immunization program? (Q855456)

A. Measles vaccine

B. Rotavirus vaccine

C. Td vaccine

D. Hepatitis B vaccine

Correct Answer: C. Td vaccine

Explanation: TT/Td vaccine given at 10 years in school program Pentavalent vaccine given at 6, 10, 14 weeks with boosters TT boosters at 10, 16 years Prevents Tetanus from Clostridium tetani Tetanospasmin is dangerous exotoxin Soil is source Herd immunity ineffective National Immunization Schedule: Vaccine Due age Dose Route Site BCG At birth < 1 month - 0.05 ml > 1 month - 0.1 ml Intradermal Left upper arm Hepatitis B (Option D) At

birth 0.5 ml Intramuscular Anterolateral aspect of left mid thigh OPV -0 At birth 2 drops Oral Oral OPV 1,2,3 6, 10,14 weeks 2 drops Oral Oral Pentavalent 1,2,3 6,10,14 weeks 0.5 ml Intramuscular Anterolateral aspect of left mid thigh IPV 6,14 weeks 0.1 ml Intradermal Right upper arm Rotavirus (Option B) 6,10,14 weeks 5 drops Oral Oral Pneumococcal vaccine 6,14 weeks At 9 completed months 0.5 ml Intramuscular Anterolateral aspect of right mid thigh 1st dose Measles/ Rubella (Option A) At 9 completed months - 12 months 0.5 ml Subcutaneous Right upper arm 1st dose JE At 9 completed months - 12 months 0.5 ml Subcutaneous Left upper arm 1st dose Vitamin A At 9 completed months 1 ml Oral Oral DPT- booster 1 16-24 months 0.5 ml Intramuscular Anterolateral aspect of left mid thigh 2nd dose Measles/ Rubella (Option A) 16-24 months 0.5 ml Subcutaneous Right upper arm OPV booster 16-24 months 2 drops Oral Oral 2nd dose JE 16-24 months 0.5 ml Subcutaneous Left upper arm 2nd-9th dose Vit A At 16, then one dose every 6 months 2 ml Oral Oral DPT- booster 2 5-6 years 0.5 ml Intramuscular Upper arm TT 10 years and 16 years 0.5 ml Intramuscular Upper arm For Pregnant women TT-1 Early pregnancy 0.5 ml Intramuscular Upper arm TT-2 4 weeks following TT1 0.5 ml Intramuscular Upper arm TT booster If mother has taken TT disease in pregnancy within the last 3 years 0.5 ml Intramuscular Upper arm

References:

Park textbook of preventive and social medicine, 25th edition, Pg. no. 135.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q43: What is the schedule and route of administration of MR vaccine and vitamin A? (Q854773)

A. MR vaccine administered subcutaneously along with oral vitamin A at 8 months

B. MR vaccine administered intramuscularly along oral vitamin A at 8 months

C. MR vaccine administered subcutaneously along with oral vitamin A at 9 months

D. MR vaccine administered intramuscularly along with oral vitamin A at 9 months

Correct Answer: C. MR vaccine administered subcutaneously along with oral vitamin A at 9 months

Explanation: National Immunization Schedule: Time Vaccines At birth BCG, OPV0 (OPV birth dose), Hep B (birth dose) 6 weeks OPV1, Penta1, RVV1, fIPV1, PCV1 10 weeks OPV2, Penta2, RVV2 14 weeks OPV3, Penta3, RVV3, fIPV2, PCV2 9 completed months MR1, JE1, PCV booster, fIPV3, vitamin A 16-24 months MR2, JE2, OPV booster, DPT booster 1 5-6 years DPT booster 2 10 years Td 16 years Td Age Vitamin A Dosage(Oral route) <6 months 50,000 IU 6 - 12 months 100,000 IU 9 months 100,000 IU 1-5 years (every 6 months) 200,000 IU Route Vaccine Dose Site Oral OPV 2 drops Oral Rotavirus 5 drops Oral Intradermal BCG 0.1 ml (0.05 ml until 1 month) Left upper arm fIPV 0.1 ml Right upper arm Intramuscular Pentavalent (DPT, Hep B, Hib) 0.5 ml Antero-lateral side of mid-thigh PCV 0.5 ml Antero-lateral side of mid-thigh Td 0.5 ml Upper arm Subcutaneous MR 0.5 ml Right upper arm JE 0.5 ml Left upper arm Live vaccine via S.C Killed vaccine via I.M Intranasal Influenza 0.2 mL (0.1 mL each nostril) Nasopharynx

References:

Park’s Textbook of Preventive and Social Medicine 27 edition, pg no 115, 136, 459

https://main.mohfw.gov.in/sites/default/files/24545352106148966387 3.pdf

https://nhm.gov.in/New_Updates_2018/NHM_Components/Immunization/report/National_%20Immunization_Schedule.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q44: A 10-week-old infant comes for routine vaccination. The baby had a history of inconsolable crying following vaccination at 6 weeks. What should be the next step regarding vaccination? (Q857357)

A. Don't give DT

B. Give DPT

C. Don't give DPT

D. Defer for 1 month

Correct Answer: B. Give DPT

Explanation: Assess if symptoms were directly related to vaccine Contraindications to pertussis vaccine: anaphylaxis, encephalopathy, family history of CNS disorders, concurrent febrile illness Baby's symptoms are likely vaccine-related; no contraindications present Proceeding with DPT vaccination is recommended Update: inconsolable crying following DPT/Pentavalent vaccine → no longer an absolute contraindication to subsequent doses

Conditions	Contraindications
Pregnancy	All live vaccines are contraindicated except yellow fever vaccine
Symptomatic HIV	Adult- all live vaccines are C/I except measles, measles-rubella, Influenza, MMR, and varicella vaccines. Newborn- all live vaccines are C/I except measles, OPV, BCG
Progressive neurological disease	DPT (pertussis component)
Corticosteroids	All live vaccines
Egg Allergy	Yellow fever vaccine

@Neet_pg_bot

References:

DTP in progressive neurological disorder

Egg allergy- Yellow fever vaccine

Vaccines in HIV patients -adults,children.

Park’s Textbook of Preventive and Social Medicine 26th edition Pg 111, 178

↑ *Back to this question in Part A*

@Neet_pg_bot

Q45: Which of the following statements about the rotavirus vaccine is incorrect? (Q839888)

A. Given orally

B. Cannot be given after 6 months of age

C. Live vaccine

D. It has monovalent and pentavalent form

Correct Answer: B. Cannot be given after 6 months of age

Explanation: Option B - Cannot be given after 6 months of age: Incorrect : This statement is not accurate. The rotavirus vaccine is typically given in multiple doses, starting at around 2 months of age. The series is usually completed by 8 months of age. While the first dose should not be given after 15 weeks of age, the series can and should be completed by 8 months. The recommendation is to complete the vaccination series by 8 months of age. Incorrect Options: Correct Option A - Given orally : True : The rotavirus vaccine is administered orally. It is designed to immunize the gastrointestinal tract directly, which is the site of rotavirus infection. Option C - Live vaccine: True : The rotavirus vaccine is a live attenuated vaccine. It contains a weakened form of the virus that stimulates the immune system without causing disease in healthy individuals. Option D - It has monovalent and pentavalent form: True : There are two types of rotavirus vaccines available: the monovalent vaccine (Rotarix) and the pentavalent vaccine (RotaTeq). Rotarix contains one strain of the rotavirus, while RotaTeq contains five different strains.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q46: Which of the following is not a polysaccharide vaccine? (Q839877)

A. Hep B

B. Pneumococcal

C. Meningococcal

D. Hib

Correct Answer: A. Hep B

Explanation: Correct Option A - Hep B: Hepatitis B vaccine is a recombinant protein vaccine, not a polysaccharide vaccine. It contains HBsAg (Hepatitis B surface antigen) produced through recombinant DNA technology. Incorrect Options: Options B, C, and D: They are examples of polysaccharide vaccines.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q47: A 10 year old child is brought to the clinic for his regular immunization. What vaccine is given as a part of the national immunization schedule? (Q860600)

A. TT/Td

B. BCG

C. MMR

D. DPT

Correct Answer: A. TT/Td

Explanation: TT/Td (Tetanus Toxoid/Tetanus-diphtheria) vaccine is given as a part of the immunization program for a 10-year-old school child. TT/Td (Tetanus Toxoid/Tetanus-diphtheria) vaccine: The TT/Td vaccine is given to provide protection against tetanus and diphtheria. It is often administered as a booster dose every 10 years to maintain immunity. At the age of 10, a child may receive a TT/Td vaccine as a part of their routine immunization schedule. National Immunization Schedule: Time Vaccines At birth BCG, OPV0 (OPV birth dose), Hep B (birth dose) 6 weeks OPV1, Penta1, RVV1, fIPV1, PCV1 10 weeks OPV2, Penta2, RVV2 14 weeks OPV3, Penta3, RVV3, fIPV2, PCV2 9 completed months MR1, JE1, PCV booster, fIPV3, vitamin A 16-24 months MR2, JE2, OPV booster, DPT booster 1 5-6 years DPT booster 2 10 years Td 16 years Td Incorrect Options: BCG (Option

B): The BCG vaccine is typically given at birth or during infancy to protect against tuberculosis. It is not part of the immunization program for a 10-year-old child. MMR (Option C): The MMR vaccine is usually administered around 12-15 months of age and a second dose at 4-6 years of age. It protects against measles, mumps, and rubella. By the age of 10, most children would have already received the recommended doses of the MMR vaccine. DTP (Option D): The DPT vaccine is typically given during infancy and early childhood to protect against diphtheria, pertussis (whooping cough), and tetanus. By the age of 10, children would have already completed the recommended doses of the DPT vaccine series.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no:136
https://main.mohfw.gov.in/sites/default/files/24545352106148966387 3.pdf https://nhm.gov.in/New_Updates_2018/NHM_Components/Immunization/report/National_%20Immunization_Schedule.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q48: When are the three doses of fIPV ideally given as per the National Immunization Schedule? (Q860575)

A. 3 doses at 6 weeks, 14 weeks, and 9 completed months

B. At 10 weeks, 14 weeks, and 9 completed months

C. At 6 weeks, 10 weeks, and 18 completed months

D. 3 doses at 6 weeks, 14 weeks, and 18 completed months

Correct Answer: A. 3 doses at 6 weeks, 14 weeks, and 9 completed months

Explanation: IPV (Inactivated Polio vaccine) is administered by intramuscular or fractional dose by intradermal injection Schedule of fIPV (fractional IPV): 6 and 14 weeks; 0.1 ml ID Right upper arm. fIPV: 1/5th of the full dose. From 1 January 2023, the third dose of IPV is introduced into the NIS, which is administered at 9 completed months of age: 0.1 ml ID Left upper arm (as the MR vaccine is administered in the right upper arm). Incorrect Options: Options B, C, and D are incorrect

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 240

↑ *Back to this question in Part A*

@Neet_pg_bot

Q49: Shanchol vaccine consists of? (Q844099)

A. Monovalent 2 doses

B. Monovalent 1 dose

C. Bivalent 2 doses

D. Bivalent 1 dose

Correct Answer: C. Bivalent 2 doses

Explanation: Correct Option C - Bivalent 2 doses: This refers to a vaccine that targets two different strains of Vibrio cholerae and requires two doses for complete immunization. The Shanchol vaccine is a bivalent vaccine, meaning it covers two different strains of Vibrio cholerae (O1 and O139) and typically requires two doses for full protection. Incorrect Options: Option A, B, and D are incorrect.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q50: A 32 year old male presented to emergency department with crush injury to the hand. He had a TT injection when he was 25 years old. The wound has been cleaned. What is the recommended next step of management? (Q820614)

A. TT only

B. Td only

C. TT with Ig

D. Td with Ig

Correct Answer: A. TT only

Explanation: Option A. TT only: Tetanus toxoid (TT) is typically used for routine immunization. It is the optimal choice for post-exposure prophylaxis in wounds, especially when the patient has taken vaccination <10 years ago. In this scenario, where the patient has a crush injury to the hand and a wound of uncertain cleanliness, the recommended next step is a TT only. Incorrect options: Option B. Td only: Td (tetanus and diphtheria toxoid) is the appropriate choice in this case. Td provides protection against both tetanus and diphtheria. Given the patient's age (32 years) and he took the TT vaccine 7 years back only TT is required. Td should be administered every 10 years as a booster dose, especially after injuries. Option C. TT with Ig: Tetanus toxoid with immunoglobulin is

used in cases where someone has not received their primary tetanus vaccination series or if their immunization status is uncertain and they have a dirty or significant wound. In this case, since the patient received a TT injection at 25, adding immunoglobulin is not necessary. Option D. Td with Ig: Adding immunoglobulin (Ig) is not necessary in this case since the patient's last tetanus vaccine was not too long ago (at 25 years old). Td alone is the recommended next step.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q51: What is the serum level of tetanus antitoxin required for clinical protection? (Q856875)

A. >0.1 IU/ml

B. >0. 01 IU/ml

C. >0.001 IU/ml

D. >0.0001 IU/ml

Correct Answer: B. >0. 01 IU/ml

Explanation: protective level of tetanus antitoxin is defined as ≥0.01 IU/ml , according to the World Health Organization (WHO). This level is sufficient to neutralize the tetanus toxin and provide clinical protection.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 340

↑ *Back to this question in Part A*

@Neet_pg_bot

Q52: Match the following diseases with their respective incubation period: 1. Measles a. 15-50 days 2. Mumps b. 2-3 weeks 3. Chickenpox c. 10-12 days 4. Syphilis d. 14-16 days 5. Hepatitis A e. 9-90 days (Q854772)

A. 1-d, 2-b, 3-c, 4-■, 5-■

B. 1-c, 2-b, 3-d, 4-e, 5-a

C. 1-b, 2-d, 3-c, 4-e, 5-a

D. 1-d, 2-b, 3-c, 4-0, 5-■

Correct Answer: B. 1-c, 2-b, 3-d, 4-e, 5-a

Explanation: Infectious Diseases – WHO Format Disease Causative Agent Mode of Transmission Incubation Period Remarks Measles Measles virus Droplet & droplet nuclei 10–14 days Rash appears ~14 days; endemic with periodic epidemics Mumps Mumps virus Droplet & direct contact 14–21 days (avg 16–18 days) Iceberg phenomenon; endemic Rubella Rubella virus Droplet & droplet nuclei 14–21 days (avg ~18 days) Epidemics occur every 5–7 years Chickenpox (Varicella) Varicella-zoster virus Airborne, droplet, direct contact 10–21 days (avg 14–16 days) Highly contagious Pertussis (Whooping Cough) Bordetella pertussis Droplet & direct contact 7–14 days (may extend to 3 weeks) Endemic; catarrhal stage follows incubation Diphtheria Corynebacterium diphtheriae Droplet, contact with infected secretions 2–5 days (range up to 10 days) Requires antitoxin + antibiotics Influenza Influenza virus Droplet, direct contact 1–4 days (avg ~2 days) Rapid onset; seasonal epidemics COVID-19 SARS-CoV-2 Droplet, aerosol, contact 2–14 days (avg 5–6 days) Incubation varies by variant Syphilis Treponema pallidum Sexual, transplacental 10–90 days (avg ~21 days) Chancre appears ~3 weeks post-exposure Hepatitis A HAV Feco-oral 15–50 days (avg ~28 days) Waterborne outbreaks possible Hepatitis B HBV Parenteral, sexual, perinatal 30–180 days (avg ~75 days) Asymptomatic during incubation Tetanus Clostridium tetani Contaminated wounds 3–21 days (avg ~8 days) Severity ↑ with shorter incubation Rabies Rabies virus Animal bites (saliva) 1–3 months (can range 1 week–1 year) Depends on bite site & viral load Typhoid Fever Salmonella typhi Feco-oral 7–14 days Gradual onset of fever Cholera Vibrio cholerae Feco-oral (contaminated water) 2 hours–5 days (avg 1–2 days) Sudden explosive outbreaks Dengue Dengue virus Mosquito-borne (Aedes aegypti) 4–7 days After bite of infected mosquito Leptospirosis Leptospira interrogans Contact with animal urine-contaminated water 2–30 days (avg 7–12 days) Occupational risk; biphasic illness Hand-Foot-Mouth Disease Coxsackie A virus Feco-oral, respiratory secretions 3–6 days Common in young children Polio Poliovirus Feco-oral, oral-oral 7–14 days May be asymptomatic or paralytic HIV/AIDS (Acute Phase) HIV Sexual, blood, perinatal 2–6 weeks Acute retroviral syndrome during seroconversion Malaria Plasmodium spp. Mosquito-borne (Anopheles) 7–30 days P. falciparum: shorter incubation Tuberculosis Mycobacterium tuberculosis Airborne Weeks to months Latent TB has undefined incubation period Bacillus cereus food poisoning Bacillus cereus Ingestion of contaminated food 1–6 hours Associated with reheated rice Staphylococcal food poisoning Staph. aureus Ingestion of preformed toxin 1–8 hours Common in cream/pastry-based food Botulism Clostridium botulinum Ingestion of toxin 18–36 hours Neuroparalysis; emergency

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 159-207, 240-282

↑ *Back to this question in Part A*

@Neet_pg_bot

Q53: Which vaccines should healthcare workers receive? (Q830723)

A. Cholera

B. HPV

C. Hepatitis

D. Rabies

Correct Answer: C. Hepatitis

Explanation: Healthcare workers are at increased risk of exposure to bloodborne pathogens , including Hepatitis B , which can be transmitted via needle-stick injuries or contact with blood. Vaccines recommended for healthcare workers (CDC & WHO): Vaccine Reason Hepatitis B Bloodborne transmission risk from patients Influenza Seasonal spread in hospital settings MMR Protection against measles, mumps, rubella Tdap For pertussis, tetanus, diphtheria protection Varicella For non-immune HCWs, to prevent chickenpox COVID-19 For pandemic and endemic control Rabies Only for specific risk groups like lab workers or veterinarians Cholera (Option A): Not routinely recommended unless deployed to cholera-endemic outbreak areas. HPV (Option B): Given for cancer prevention in general population; not specific to HCWs. Rabies (Option D): Only for HCWs working in labs handling the virus or in high-risk zoonotic exposure jobs.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC4381171/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q54: A 30-year-old patient presenting with hypopigmented patches, loss of cold sensation followed by hot, touch and pain along with a palpable ulnar nerve. What is the likely diagnosis? (Q820713)

A. TB

B. Leprosy

C. HIV

D. Candida

Correct Answer: B. Leprosy

Explanation: Correct Option B - Leprosy: Leprosy, also known as Hansen's disease, is caused by the bacteria Mycobacterium leprae. It affects the skin and peripheral nerves, leading to various sensory and motor impairments. The patient's presentation of hypopigmented patches (pale or light-colored skin areas), followed by loss of cold sensation, then hot sensation, as well as touch and pain sensations, along with a palpable ulnar nerve, is characteristic of leprosy. Leprosy can cause nerve damage and sensory loss, often leading to these specific

sensory changes. Incorrect Options: Option A - TB (Tuberculosis): Tuberculosis primarily affects the lungs and other parts of the body, causing symptoms such as chronic cough, weight loss, fever, and fatigue. It does not typically manifest with hypopigmented patches, loss of cold sensation followed by hot, touch, and pain sensations, or ulnar nerve involvement as described in the case. Option C - HIV (Human Immunodeficiency Virus): HIV is a virus that attacks the immune system, leading to acquired immunodeficiency syndrome (AIDS). While HIV can cause various symptoms and complications, including skin issues, the presentation described in the case (hypopigmented patches, sensory changes, and ulnar nerve involvement) is not typical of HIV infection. Option D - Candida: Candida refers to a group of yeast-like fungi that can cause infections, often in mucous membranes and moist areas of the skin. Candida infections usually present as red, itchy, and inflamed areas, often with a cottage cheese-like discharge. The symptoms of hypopigmented patches, altered sensation patterns, and ulnar nerve involvement are not consistent with a Candida infection.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q55: A 5-year-old child presenting to a clinic with a history of cough, runny nose, conjunctivitis, fever, and a rash that initially arises behind the ears and then spreads to the chest, back, and abdomen. What is the likely diagnosis? (Q820707)

A. Measles

B. Dengue

C. Rubella

D. Chickengunya

Correct Answer: A. Measles

Explanation: Correct Option A - Measles: Measles is a viral infection caused by the measles virus. It typically presents with symptoms such as cough, runny nose, conjunctivitis (inflammation of the eyes), fever, and a characteristic rash. The rash usually starts behind the ears and then spreads to the face, neck, chest, back, and abdomen. This pattern of rash spreading is known as "cephalocaudal progression." Measles is highly contagious and can lead to complications, especially in young children. Incorrect Options: Option B - Dengue: Dengue is a mosquito-borne viral infection caused by the dengue virus. It usually presents with symptoms such as high fever, severe headache, joint and muscle pain, rash, and mild bleeding. However, the rash in dengue typically appears a few days after the onset of fever and is not characterized by the specific pattern described in the question. Option C - Rubella: Rubella, also known as German measles, is a viral infection caused by the rubella virus. It presents with symptoms similar to measles, including rash, fever, and swollen lymph nodes. However, the rash in rubella usually starts on the face and then spreads to the rest of the body. It does not follow the pattern of starting behind the ears. Option D - Chikungunya: Chikungunya is a viral infection caused by the chikungunya virus and transmitted through mosquito bites. It is characterized by symptoms such as high fever, severe joint pain, muscle pain, headache, and rash. The rash in chikungunya is not specific in its appearance and does not have the distinct pattern of spreading from behind the ears as described in the question.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q56: A 40-year-old male with a known case of HIV infection and a CD4 count less than 50 cells/μL. Which of the following infections is he at risk of developing? (Q820703)

A. Candida

B. Staph. aureus

C. Disseminated MAC Infection

D. Pneumocystis jirovecii

Correct Answer: C. Disseminated MAC Infection

Explanation: In HIV , the type of opportunistic infection depends on the CD4 count : < 200 cells/μL → Pneumocystis jirovecii pneumonia (PCP) < 100 cells/μL → Toxoplasmosis , Cryptococcus neoformans < 50 cells/μL → Disseminated Mycobacterium avium complex (MAC) , CMV In the given case, CD4 < 50 cells/μL → the characteristic infection risk is disseminated MAC . Candida (Option A) infections can occur at higher CD4 counts and are not specific to such severe immunosuppression. Staphylococcus aureus (Option B) infections can happen at any immune status but are not specifically linked to very low CD4 counts. Pneumocystis jirovecii pneumonia (PCP) (Option D) typically occurs in HIV patients with CD4 counts below 200 cells/μL but is not as specifically linked to CD4 <50 as disseminated MAC.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q57: A 35-year-old patient with known HIV infection and presenting with persistent cough, fever, and weight loss, which diagnostic test is considered the investigation of choice for detecting tuberculosis (TB)? (Q820690)

A. Culture

B. Chest x-ray

C. CBNAAT

D. PCR

Correct Answer: C. CBNAAT

Explanation: Correct Option C - CBNAAT (Cartridge-Based Nucleic Acid Amplification Test): CBNAAT is a molecular diagnostic test that detects the genetic material (DNA) of Mycobacterium tuberculosis. It is known for its speed and accuracy in diagnosing both active tuberculosis and drug-resistant tuberculosis. This test can provide results within a few hours, which is especially important for patients with HIV or other immunocompromised conditions who are at higher risk of developing severe TB. It can also simultaneously test for resistance to the antibiotic rifampicin, a marker for multidrug-resistant tuberculosis (MDR-TB). Incorrect Options: Option A - Culture: Culture involves growing the bacteria (Mycobacterium tuberculosis) from a sputum or other clinical sample. While it is a definitive method for diagnosing tuberculosis, it can take several weeks to get results. This may not be suitable for patients who need timely diagnosis and treatment, especially if they are immunocompromised like in the case of HIV infection. Option B - Chest x-ray: A chest x-ray can provide valuable information about the presence of lung abnormalities, such as infiltrates, cavities, or nodules, which might suggest tuberculosis. However, a chest x-ray alone cannot definitively diagnose TB. Additional tests are needed to confirm the diagnosis. Option D - PCR (Polymerase Chain Reaction): PCR is another molecular technique used to amplify and detect the DNA of Mycobacterium tuberculosis. It can be a valuable tool in diagnosing TB, especially in cases where there is a limited amount of clinical sample available. Like CBNAAT, PCR offers rapid results compared to traditional culture-based methods.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q58: A 5-year-old child came to ER presenting with fever, cough, runny nose, and a characteristic red rash.Which of the following statements about measles disease is incorrect? (Q820668)

A. Incubation period of 14 days

B. Strain used is Edmonston Zagreb

C. Period of communicability is 14 days after rash

D. Transmitted primarily through respiratory droplets.

Correct Answer: C. Period of communicability is 14 days after rash

Explanation: Correct Option C - Period of communicability is 14 days after rash: This statement is incorrect. The period of communicability for measles is generally considered to be from 4 days before the rash appears to 4 days after the rash onset. The infected person can transmit the virus to others through respiratory droplets during this period, even before the rash appears. Incorrect Options: Option A - Incubation period of 14 days: The incubation period for measles is typically around 10 to 14 days, during which the infected person does not exhibit any symptoms. Option B - Strain used is Edmonston Zagreb: Edmonston Zagreb is one of the strains of the measles virus that has been used in vaccines. It's a weakened, attenuated strain used to induce immunity. Option D - Transmitted primarily through respiratory droplets: Measles is highly contagious and is primarily transmitted through respiratory droplets when an infected person coughs, sneezes, or talks. These droplets can remain suspended in the air for some time and can be inhaled by individuals who are in close proximity to the infected person.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q59: Which of the following is not included in STEP approach? (Q820643)

A. Blood group

B. Blood pressure

C. Blood sugar

D. Blood lipid

Correct Answer: A. Blood group

Explanation: Correct Option A - Blood group: Not included in the STEP approach. The STEP approach typically refers to a method of evaluating a patient's overall health status. Each letter in "STEP" represents a different aspect that is assessed. The blood group is not usually considered a part of the standard health assessment denoted by the STEP acronym. Incorrect Options: Option B - Blood pressure: Included in the STEP approach. Blood pressure measurement is an important part of assessing a person's cardiovascular health. Option C - Blood sugar: Included in the STEP approach. Blood sugar levels, often measured as blood glucose levels, are a crucial component of evaluating a person's metabolic health, particularly in relation to conditions like diabetes. Option D - Blood lipid: Included in the STEP approach. Blood lipid levels, including cholesterol and triglycerides, are commonly assessed as part of evaluating a person's cardiovascular health and risk of heart disease.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q60: In which category of bioterrorism, does Anthrax belong? (Q820626)

A. CAT A

B. CAT B

C. CAT C

D. CAT D

Correct Answer: A. CAT A

Explanation: Correct Option A - CAT A: Anthrax belongs to Category A (CAT A) in terms of bioterrorism classification. Bioterrorism agents are categorized based on their potential threat to national security and public health. Category A agents are considered the highest priority and pose the greatest risk to both public health and national security. Anthrax is one of the agents classified in this category due to its ability to cause widespread illness, panic, and social disruption if intentionally released. Incorrect Options: Option B - CAT B: CAT B agents are the second-highest priority and are considered moderately easy to disseminate and cause moderate morbidity rates. They may have a significant impact on public health. Option C - CAT C: CAT C agents are the third-highest priority and are considered emerging pathogens that could potentially be engineered for mass dissemination. Option D - CAT D: CAT D is not a recognized category in bioterrorism classification.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q61: A patient has developed hepatitis A for more than 15 days. What is the correct statement ? (Q820618)

A. Early Acute

B. Acute

C. Chronic

D. Severe

Correct Answer: B. Acute

Explanation: Correct Option B - Acute: Hepatitis A is an acute, or short-term, viral infection of the liver. The term "acute" typically refers to an illness that is present for less than six months. Since the patient has had hepatitis A for more than 15 days, they are still within the acute phase of the illness. Incorrect Options: Option A - Early Acute: While the patient is within the acute phase of hepatitis A, the term "early acute" isn't typically used to describe the stage of this disease. Option C - Chronic: Hepatitis A does not progress into a chronic, or long-term, infection. This differs from hepatitis B and C, which can become chronic conditions. Option D - Severe: While hepatitis A can cause severe symptoms in some people, the term "severe" isn't used to describe the stage of the

disease. Severity would be determined by the specific symptoms and their effects on the patient.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q62: The blood pressure of a population was tracked from childhood to adulthood. It was observed that those who had lower BP in childhood had low BP in adulthood, while those who had higher BP in childhood had high BP in adulthood. This can be best described as: (Q855408)

A. Rule of halves

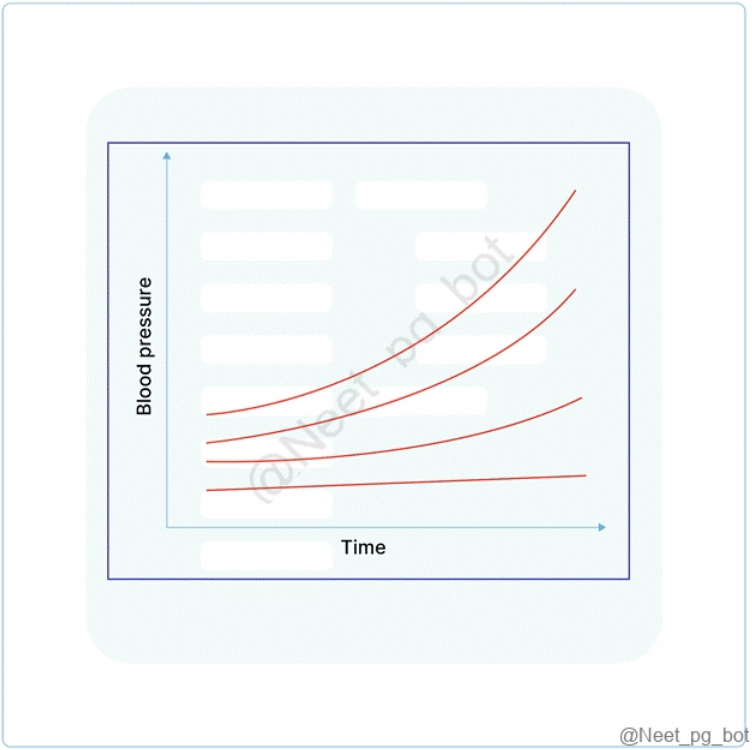
B. Tracking of blood pressure

C. Stepwise approach

D. Primordial approach

Correct Answer: B. Tracking of blood pressure

Explanation: Blood pressure of an individual is tracked from childhood to adulthood in the tracking phenomenon of blood pressure. This is a very useful tool in early diagnosis hypertension even among adolescents/ young adults. If a person is hypotensive in childhood, he remains hypotensive in adulthood. If a person is hypertensive in childhood, he remains hypertensive in adulthood. This phenomenon of persistence of persistence of rank order of bllod pressure has been described as tracking. Tracking of blood pressure {{caption_text}} Rules of Halves (Option A): The concept of the "Rule of Halves" in hypertension management illustrates that: Approximately 50% of individuals with hypertension are aware of their condition. Among those aware, only about 50% receive treatment. Out of those receiving treatment, approximately 50% have their blood pressure adequately controlled. Stepwise approach (Option C): is a systematic, multi-step method designed to collect noncommunicable disease risk factor data at the population level using a questionnaire, physical assessments, and biochemical tests . Primordial approach (Option D): Focuses on preventing the emergence of risk factors in the first place. Targets social, economic, and environmental conditions that contribute to disease. Focuses on preventing risk factors before they develop (e.g., lifestyle interventions in childhood to prevent hypertension in adulthood). This does not describe the observation in the question.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg no: 427.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q63: Match the following diseases with their respective incubation period: a. Chicken pox 1. 10-12 days b. Mumps 2. 14-16 days c. Measles 3. 16-18 days d. Syphilis 4. 2-4 weeks (average 21 days) (Q857360)

A. a-2, b-3, c-1, d-4

B. a-1, b-3, c-2, d-4

C. a-2, b-4, c-1, d-3

D. a-3, b-2, c-4, d-1

Correct Answer: A. a-2, b-3, c-1, d-4

Explanation: Diseases and Their Typical Incubation Periods: Infectious Diseases – WHO Format Disease Causative Agent Mode of Transmission Incubation Period Remarks Measles Measles virus Droplet & droplet nuclei 10–14 days Rash appears ~14 days; endemic with periodic epidemics Mumps Mumps virus Droplet & direct contact 14–21 days (avg 16–18 days) Iceberg phenomenon; endemic Rubella Rubella virus Droplet & droplet nuclei 14–21 days (avg ~18 days) Epidemics occur every 5–7 years Chickenpox (Varicella) Varicella-zoster virus Airborne, droplet, direct contact 10–21 days (avg 14–16 days) Highly contagious Pertussis (Whooping Cough) Bordetella pertussis Droplet & direct contact 7–14 days (may extend to 3 weeks) Endemic; catarrhal stage follows incubation Diphtheria Corynebacterium diphtheriae Droplet, contact with infected secretions 2–5 days (range up to 10 days) Requires antitoxin + antibiotics Influenza Influenza virus Droplet, direct contact 1–4 days (avg ~2 days) Rapid onset; seasonal epidemics COVID-19 SARS-CoV-2 Droplet, aerosol, contact 2–14 days (avg 5–6 days) Incubation varies by variant Syphilis Treponema pallidum Sexual, transplacental 10–90 days (avg ~21 days) Chancre appears ~3 weeks post-exposure Hepatitis A HAV Feco-oral 15–50 days (avg ~28 days) Waterborne outbreaks possible Hepatitis B HBV Parenteral, sexual, perinatal 30–180 days (avg ~75 days) Asymptomatic during incubation Tetanus Clostridium tetani Contaminated wounds 3–21 days (avg ~8 days) Severity ↑ with shorter incubation Rabies Rabies virus Animal bites (saliva) 1–3 months (can range 1 week–1 year) Depends on bite site & viral load Typhoid Fever Salmonella typhi Feco-oral 7–14 days Gradual onset of fever Cholera Vibrio cholerae Feco-oral (contaminated water) 2 hours–5 days (avg 1–2 days) Sudden explosive outbreaks Dengue Dengue virus Mosquito-borne (Aedes aegypti) 4–7 days After bite of infected mosquito Leptospirosis Leptospira interrogans Contact with animal urine-contaminated water 2–30 days (avg 7–12 days) Occupational risk; biphasic illness Hand-Foot-Mouth Disease Coxsackie A virus Feco-oral, respiratory secretions 3–6 days Common in young children Polio Poliovirus Feco-oral, oral-oral 7–14 days May be asymptomatic or paralytic HIV/AIDS (Acute Phase) HIV Sexual, blood, perinatal 2–6 weeks Acute retroviral syndrome during seroconversion Malaria Plasmodium spp. Mosquito-borne (Anopheles) 7–30 days P. falciparum: shorter incubation Tuberculosis Mycobacterium tuberculosis Airborne Weeks to months Latent TB has undefined incubation period Bacillus cereus food poisoning Bacillus cereus Ingestion of contaminated food 1–6 hours Associated with reheated rice Staphylococcal food poisoning Staph. aureus Ingestion of preformed toxin 1–8 hours Common in cream/pastry-based food Botulism Clostridium botulinum Ingestion of toxin 18–36 hours Neuroparalysis; emergency

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 159-207, 240-282

↑ *Back to this question in Part A*

@Neet_pg_bot

Q64: Mark the incorrect statement regarding Nipah virus: (Q860571)

A. It is transmitted through bat urine

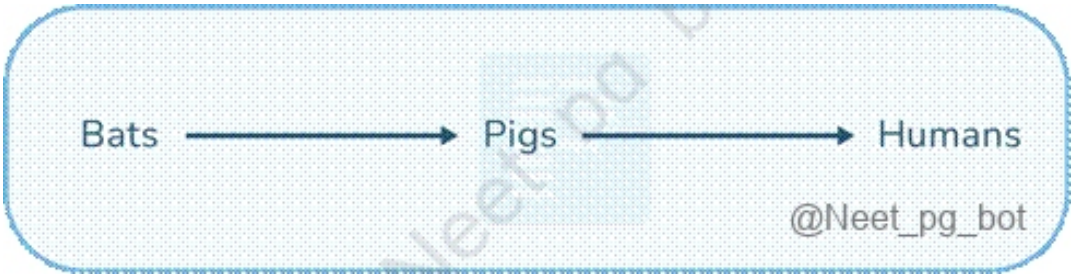
B. It causes hemorrhagic fever

C. It is present in India

D. It is an emerging infection

Correct Answer: B. It causes hemorrhagic fever

Explanation: Nipah virus belongs to the family Paramyxoviridae and genus Henipavirus . Nipah virus does not primarily cause hemorrhagic fever; its main clinical manifestations are encephalitis and respiratory illness. Out of the given options, this is the most incorrect statement. Nipah virus Natural reservoir Bats Modes of transmission Direct contact with infected animals Body secretion (blood, urine, faeces, seminal fluid) (Option A) Consumption of contaminated food products (palm sap or fruits) Incubation period 4-14 days Clinical features Fever, chills, headache Encephalitis (M/C), acute respiratory distress syndrome Multiorgan failure, GIT haemorrhage (case fatality rate- 40-70%) Incorrect Options: It is present in India (Option C): There have been Nipah virus infection outbreaks in Kerala (2018). It is an emerging infection (Option D): The Nipah virus is an emerging infectious agent belonging to paramyxoviridae.



References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 407

https://www.ncbi.nlm.nih.gov/books/NBK570576/

https://www.ecdc.europa.eu/en/infectious-disease-topics/nipah-virus-disease/factsheet-nipah-virus-disease#

↑ *Back to this question in Part A*

@Neet_pg_bot

Q65: A 35-year-old male soldier presents with a painful, erosive lesion near his earlobe that developed after returning from duty in a desert area. He is otherwise clinically stable, and general physical examination is unremarkable. A punch biopsy from the leading edge of the lesion shows epidermal ulceration with dense dermal infiltrate of macrophages containing small intracellular amastigotes. Which of the following is the most likely diagnosis? (Q860568)

A. Sporotrichosis

B. Bacterial abscess

C. Leishmaniasis

D. Tuberculous ulcer

Correct Answer: C. Leishmaniasis

Explanation: This patient presents with complaints of a painful, erosive lesion near his ear lobe since his return from his duty in the desert area, which points towards the diagnosis of Leishmaniasis. Kala-azar/ Black sickness/Dum-dum fever/Sandfly disease/ Visceral Leishmaniasis Organism Protozoan Epidemiology Endemic in Uttar Pradesh, Bihar, Jharkhand, West Bengal Types Visceral (Kala-Azar): L. donovani Cutaneous: L. tropica Mucocutaneous: L. braziliensis Post-kala-azar dermal (PKLD): Immune response Reservoir Humans (non-zoonotic) Vector Sandfly (Phlebotomus argentipes): has hairy wings. Environmental Peak outbreak: November to April Mechanism of transmission Bite of sandfly Blood transfusion (rare) Incubation period 10 days to 2 years. (1-4 months average) Clinical features Visceral: Fever, Weight loss, Hepatosplenomegaly, Anemia. Cutaneous: Painful skin ulcers Mucocutaneous: Rapid mucosal destruction of nose and oropharynx PKDL: Skin nodules filled with micro-organisms Diagnosis Rapid diagnostic kits: rk39-dipstick test. Used for field surveys. Biopsy (Gold standard): Leishmania Donovan bodies (amastigotes) Sandfly control measures DDT: 1-2gm/m 2 . BHC (benzene hexachloride) Treatment DOC: Single dose Liposomal amphotericin-B (LAMB)10 mg/kg Alternatives: Miltefosine + Paramomycin Pentamidine

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 351-356

↑ *Back to this question in Part A*

@Neet_pg_bot

Q66: The period between the entry of an organism into the host and the time when the host becomes maximally infectious is referred to as? (Q844130)

A. Generation time

B. Median incubation period

C. Window period

D. Latent period

Correct Answer: A. Generation time

Explanation: Correct Option A - Generation time: This refers to the time interval between the entry of the organism into the host and the point when the host becomes infectious. It represents the period when the organism multiplies and the host can spread the infection. Incorrect Options: Option B - Median incubation period: This is the time between the entry of the organism into the host and the appearance of symptoms. It does not directly relate to infectivity but to symptom onset. Option C - Window period: This is the time between exposure to an infectious agent and the point when the infection can be detected by diagnostic tests. The person may be infectious during this time, but the infection may not yet be detectable. Option D - Latent period: This is the time from exposure to an infectious agent until the host becomes infectious.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q67: If the incubation period of a disease is 5-14 days, what should be the recommended quarantine period? (Q844126)

A. 5 days

B. 10 days

C. 14 days

D. 20 days

Correct Answer: C. 14 days

Explanation: Correct Option C - 14 days: This is the maximum incubation period, making it the appropriate duration to cover the full range of the incubation period, thus minimizing the risk of spreading the disease. Symptoms may appear as early as 5 days , but can appear as late as 14 days . To prevent transmission, quarantine must last for the full maximum incubation period . Incorrect Options: Options A, B and D are incorrect as given above.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q68: A man occasionally eats outside due to traveling reasons. He presents to a physician with abdominal pain for 4 days, along with a history of fever and bradycardia. Which test is used to confirm the diagnosis? (Q844043)

A. Blood culture

B. Widal test

C. Stool culture

D. Urine culture

Correct Answer: A. Blood culture

Explanation: Correct Option A - Blood culture: Blood culture is the most reliable test to confirm the diagnosis in the early stages of typhoid fever, particularly within the first week of illness. Typhoid fever, caused by Salmonella typhi, is suspected due to the patient's symptoms of abdominal pain, fever, and bradycardia (a feature known as "relative bradycardia"). Blood culture can directly identify the bacteria responsible for the infection. Incorrect Options: Option B - Widal test: The Widal test detects antibodies against Salmonella antigens but is less specific and can yield false positives due to previous vaccination or exposure. It is typically used later in the course of the disease but is not as reliable for an initial diagnosis compared to blood culture. Option C - Stool culture: Stool culture can detect Salmonella in the stool, especially in the later stages of typhoid fever or in carriers, but it is less effective in the early stages of the illness when bacteria are more likely present in the bloodstream. Option D - Urine culture: Urine culture is not typically used to diagnose typhoid fever. While Salmonella can occasionally be excreted in urine, this is not common during the acute phase of the disease.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q69: A fruit farmer presents with fever, respiratory difficulties, and neurological complications. What is the most likely diagnosis? (Q844035)

A. Ebola

B. Meningitis

C. Nipah

D. Zika



Correct Answer: C. Nipah

Explanation: Correct Option C - Nipah: Nipah virus is a zoonotic virus that fruit farmers are particularly at risk of contracting due to its association with fruit bats. It presents with fever, respiratory difficulties, and severe neurological complications, including encephalitis, making it the most likely diagnosis in this case. Incorrect Options: Option A - Ebola: Ebola virus primarily causes hemorrhagic fever with symptoms like severe bleeding, multi-organ failure, and shock. While it can present with fever and some neurological complications, respiratory symptoms are not typical, and there is no specific association with fruit farming. Option B - Meningitis: Meningitis causes inflammation of the meninges surrounding the brain and spinal cord, leading to fever, headache, neck stiffness, and neurological complications. However, respiratory symptoms are uncommon, and the condition is not linked to fruit farming. Option D - Zika: Zika virus primarily causes mild symptoms like fever, rash, and joint pain, and is more famous for its complications during pregnancy, such as microcephaly in newborns. It does not commonly cause severe respiratory or neurological issues, nor is it specifically associated with fruit farming.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q70: Malaria detection on the field is done by which of the following? (Q852852)

A. Thick smear

B. Thin smear

C. HRP2 antigen / Rapid diagnostic test

D. Quantitative Buffy coat

Correct Answer: C. HRP2 antigen / Rapid diagnostic test

Explanation: HRP2 antigen-based Rapid Diagnostic Test (RDT) is the preferred method for malaria detection in field settings due to its quick results (15–20 minutes), ease of use, and minimal technical expertise requirement . RDTs detect Plasmodium falciparum-specific HRP2 antigen or Plasmodium lactate dehydrogenase (pLDH) for all species . Unlike microscopy (thick/thin smear) , RDTs do not require a microscope or trained personnel, making them ideal for remote and resource-limited areas . Malaria Detection Methods Method Principle Best Used In Limitations Thick smear Concentrates parasites for better detection Diagnosis in labs with microscopy Requires staining and expertise Thin smear Used to identify species and parasite morphology Differentiating Plasmodium species Less sensitive in low parasitemia HRP2 antigen / RDT Detects malarial antigens (HRP2 or pLDH) Field settings, rapid diagnosis Cannot detect low parasitemia or HRP2-deleted strains Quantitative Buffy Coat (QBC) Fluorescent staining of parasites in WBC fraction High-sensitivity lab settings Expensive, requires specialized equipment Thick smear (Option A): Incorrect because, while sensitive, it requires staining, microscopy, and expertise , making it impractical for field use. Thin smear (Option B): Incorrect because it is primarily used for species identification, not rapid detection in the field . Quantitative Buffy Coat (Option D): Incorrect because it requires specialized equipment and is not feasible in field settings .

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC124834/

Park's Textbook of Preventive and Social Medicine (27th edition) Page.306

↑ *Back to this question in Part A*

@Neet_pg_bot

Q71: Which of the following groups is not included in the high-risk core population for HIV transmission? (Q852850)

A. IV drug users

B. Female sex workers

C. Men who have sex with men

D. Long distance truck drivers

Correct Answer: D. Long distance truck drivers

Explanation: High-risk core population refers to groups with a direct and sustained role in HIV transmission due to high-risk behaviors. IV drug users (IDUs), female sex workers (FSWs), and men who have sex with men (MSM) are considered core populations because they have higher transmission rates and can spread the virus efficiently

within and beyond their networks. Long-distance truck drivers (LDTD) are part of the bridge population —individuals who connect the core population to the general population but are not themselves a core group. High-Risk Core Populations for HIV Transmission HIV transmission risk groups are classified into core populations (highest risk) and bridge populations (who facilitate wider spread) . Group Category Rationale IV drug users (IDUs) Core High HIV risk due to needle sharing and risky sexual behavior. Female sex workers (FSWs) Core Engage in frequent unprotected sex , increasing exposure. Men who have sex with men (MSM) Core Higher prevalence of unprotected anal sex , a major HIV transmission route. Long-distance truck drivers (LDTD) Bridge They interact with core populations (FSWs, IDUs) and spread HIV to the general population but are not core transmitters themselves. IV drug users (Option A): Incorrect because needle sharing and risky behaviors place them in the core group . Female sex workers (Option B): Incorrect because FSWs have a high number of sexual partners , making them a key core group. Men who have sex with men (Option C): Incorrect because MSM have a high prevalence of HIV due to unprotected sex , placing them in the core group .

References:

https://pubmed.ncbi.nlm.nih.gov/7857571/

https://pmc.ncbi.nlm.nih.gov/articles/PMC5681713/

https://pmc.ncbi.nlm.nih.gov/articles/PMC5098328/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q72: Which mosquito larva has no siphon and rests parallel to the water surface? (Q866443)

A. Anopheles

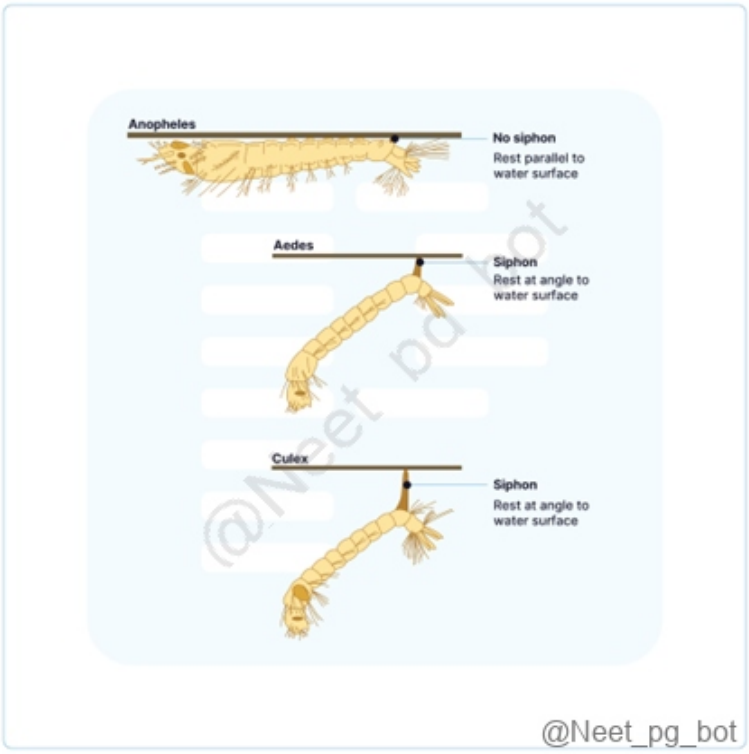
B. Culex

C. Aedes

D. Mansonia

Correct Answer: A. Anopheles

Explanation: Anopheles larvae are unique because they: Lack a respiratory siphon . Breathe through spiracles on the 8th abdominal segment. Rest parallel to the water surface to keep their spiracles exposed to air. This resting position is a key identifying feature when differentiating larval species during vector surveillance. Culex (Option B) and Aedes (Option C) larvae have a siphon and typically rest at an angle or hang from the water surface rather than lying flat. Mansonia larvae (Option D) attach themselves to aquatic plants to obtain air and do not rest parallel to the water surface.



↑ *Back to this question in Part A*

@Neet_pg_bot

Q73: Which of the following infections is most commonly transmitted during the third trimester of pregnancy? (Q865304)

A. Rubella

B. Parvovirus B19

C. Toxoplasmosis

D. Herpes Simplex Virus

Correct Answer: C. Toxoplasmosis

Explanation: Toxoplasmosis is one of the TORCH infections associated with Vertical Transmission during the third trimester of pregnancy. It refers to the transplacental transmission of infectious agents from the mother to the fetus. TORCH infections include toxoplasmosis, rubella, CMV, Herpes and HIV. Trimester Transmitted Diseases 1st trimester Rubella, Chickenpox/varicella (Option A ruled out) 2nd trimester Parvovirus (Option B ruled out) 3rd trimester Toxoplasmosis, CMV, Hepatitis B and Syphilis. (Option C) During delivery HIV and herpes (Option D ruled out) Other agents that are non-living can also be transferred vertically: Thalidomide Diethylstilbestrol

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 105.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q74: A child is brought to a PHC with acute diarrhoea. Based on history, the doctor suspects Shigella infection rather than cholera and starts ciprofloxacin. Apart from bloody stools, which of the following historical features most strongly supports Shigella infection over cholera? (Q857079)

A. Absence of rectal pain

B. Presence of abdominal cramps

C. Presence of vomiting

D. Presence of fever

Correct Answer: D. Presence of fever

Explanation: Shigella is an invasive pathogen that penetrates the intestinal mucosa This invasion triggers a systemic inflammatory response , leading to: High-grade fever Toxic appearance Cholera , caused by Vibrio cholerae , is a non-invasive, toxin-mediated disease : Profuse watery “rice-water” stools Minimal or no fever Absence of rectal pain (Option A): Not a distinguishing feature; Shigella often causes tenesmus , not absence of pain Presence of abdominal cramps (Option B): Present in both Shigella and cholera Presence of vomiting (Option C): More prominent in cholera , so does not favor Shigella

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q75: Which of the following does not require precautions for airborne transmission? (Q856871)

A. Tuberculosis

B. Herpes Zoster

C. Measles

D. Chicken Pox

Correct Answer: B. Herpes Zoster

Explanation: - Herpes Zoster: Herpes Zoster (shingles) typically does not require airborne precautions unless it is disseminated (spreading across multiple dermatomes or in an immunocompromised host). In its localized form, transmission occurs through direct contact with the fluid from the lesions, so standard precautions are sufficient. Airborne precautions are required for diseases transmitted via fine respiratory droplets that remain suspended in the air for long periods. These diseases include: Tuberculosis (Option A) : Airborne transmission; precautions are mandatory. Measles (Option C) : Highly contagious and transmitted through airborne droplets; precautions are necessary. Chickenpox (Varicella) (Option D) : Airborne and contact transmission; precautions are required.

References:

https://pubmed.ncbi.nlm.nih.gov/25578684/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q76: What is the term used to describe the rise in the occurrence of non-communicable diseases observed in recent years? (Q856606)

A. Seasonal

B. Cyclical

C. Periodic

D. Secular

Correct Answer: D. Secular

Explanation: In the context of health and disease patterns, a secular trend typically indicates a gradual and persistent increase or decrease in the incidence or prevalence of a particular condition over many years or decades. In the given scenario, the increase in the incidence of non-communicable diseases over the past few years suggests a long-term and sustained change in the prevalence of these diseases. This pattern is consistent with a secular trend, as it indicates a significant shift in disease burden over an extended period of time. Incorrect Options: Seasonal (Option A): Seasonal trends refer to patterns that occur within a specific season or time of the year. Therefore, this option is not appropriate for the given scenario. Cyclical (Option B): The scenario does not describe a cyclical pattern as the increase in non-communicable diseases is not occurring in a cyclic or predictable manner. Periodic (Option C): The scenario does not suggest that the increase in non-communicable diseases is occurring at regular intervals or in a repeated fashion.

References:

Park’s textbook of preventive medicine, edition: 25, page no: 72-74

↑ *Back to this question in Part A*

@Neet_pg_bot

Q77: Please match the following colors of STI kits with their corresponding use: A. Lower abdominal pain B. Urethral discharge C. Non herpetic genital ulcer D. Vaginal discharge 1. Grey, Kit 1 2. Green, Kit 2 3. White, Kit 3 4. Yellow, Kit 6 (Q856580)

A. A-4, B-3, C-2, D-1

B. A-4, B-1, C-3, D-2

C. A-1, B-4, C-3, D-2

D. A-3, B-2, C-4, D-1

Correct Answer: B. A-4, B-1, C-3, D-2

Explanation: A. Lower abdominal pain 4. Yellow, Kit 6 B. Urethral discharge 1. Grey, Kit 1 C. Non-herpetic genital ulcer 3. White, Kit 3 D. Vaginal discharge 2. Green, Kit 2 Colour-coded STD kits along with medicines: Kit Colour Indication Medicines 1 Grey Urethral discharge Cervicitis Ano-rectal discharge Azithromycin, cefixime 2 Green Vaginitis Secnidazole, fluconazole 3 White Non-herpetic genital ulcers Azithromycin, B. Penicillin 4 Blue Genital ulcers Penicillin allergy + Azithromycin, doxycycline 5 Red Herpetic genital ulcers Acyclovir 6 Yellow Lower abdominal pain Cefixime metronidazole, doxycycline 7 Black Inguinal bubo Azithromycin, doxycycline 8 Brown Anorectal discharge syndrome Cefixime, doxycycline Incorrect Options: Option A, C & D are incorrect

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page no: 159

↑ *Back to this question in Part A*

@Neet_pg_bot

Q78: A diabetic patient comes to you for advice regarding his diet. You advise him to include foods with a low glycemic index in the diet. Which of the following would you advise him for the same? (Q857761)

A. Cornflakes

B. Brown rice

C. Sucrose

D. Papaya

Correct Answer: D. Papaya

Explanation: diabetic patient should include low glycemic index (GI) foods in their diet, as these foods cause a slower and more gradual rise in blood sugar levels. From the options provided: Papaya : Low GI (55 or less) – Recommended for diabetic patients. Classification GI Index Range Examples Low GI 55 or less Most fruits and vegetables (except potatoes, watermelon, sweetcorn), whole grains, beans, lentils, oats, quinoa, guava Medium GI 56-69 Sucrose, basmati rice, brown rice, dairy products (Options B, C) High GI 70 and above Corn flakes, baked potato, some white rice varieties (e.g., jasmine), white bread, candy bar, syrupy foods (Options A)

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC4994556/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q79: What type of resistance is exhibited by the patient who is unresponsive to Isoniazid, Rifampicin, Ofloxacin, and Kanamycin? (Q857759)

A. Multidrug resistance

B. Extensively drug-resistant

C. Rifampicin resistant

D. Extremely drug-resistant

Correct Answer: B. Extensively drug-resistant

Explanation: drugs: R,H,Z,E (Rifampicin, Isoniazid, Pyrazinamide, Ethambutol). Mono-resistant (MR) Resistant to one 1st line anti-TB drug only. H-Mono-resistant (H-MR) Resistant to Isoniazid (H) only. Rifampicin resistant (RR) (Option C) Resistant to Rifampicin (R) only. Multi-drug resistant (MDR) (Option A) Resistant to both Rifampicin (R) & Isoniazid (H). Poly-Drug resistant (PDR) Resistant to 2 drugs other than Rifampicin (R) & Isoniazid (H). Pre-Xtensive resistant (pre-XDR) Any MDR patient (H+R) resistant to any fluoroquinolone. Extensive resistant (XDR) Any MDR patient (H+R) resistant to any fluoroquinolone and Group 4 drugs (Bedaquiline, Linezolid, Levo/Moxifloxacin). Extremely drug-resistant (Option D): It is likely a variation of the term "extensively drug resistant" (as seen in option b), but it is not a commonly used or accepted term in the context of drug resistance.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg 211

↑ *Back to this question in Part A*

@Neet_pg_bot

Q80: You are a doctor in a village. A 1-year-old child presents with fever and cough for 2 days and is refusing to feed. On examination, the child is calm, has a respiratory rate of 51 breaths/min, and stridor is audible while at rest. According to IMNCI guidelines, how should this child be classified? (Q857747)

A. Pneumonia

B. Cough and cold

C. Severe pneumonia

D. ARDS

Correct Answer: C. Severe pneumonia

Explanation: RDS is not classified under IMNCI guidelines. It is a critical care diagnosis based on specific criteria such as: Acute onset of respiratory distress. Bilateral infiltrates on chest imaging. PaO■/FiO■ ratio ≤300 mmHg.

SIGNS	CLASSIFY AS	IDENTIFY TREATMENT (Urgent pre-referral treatments are in bold print)
• Any general danger sign or • Chest indrawing or • Stridor in calm child	SEVERE PNEUMONIA OR VERY SEVERE DISEASE	• **Give first dose of Cotrimoxazole** • **Refer URGENTLY to hospital**
• Fast breathing	PNEUMONIA	• **Give Cotrimoxazole for 5 days.** • Soothe the throat and relieve the cough with a safe remedy. • Advise mother when to return immediately. • Follow-up in 2 days.
• No signs of pneumonia or very severe disease	NO PNEUMONIA. COUGH OR COLD	• If coughing more than 21 days, refer for assessment. • Soothe the throat and relieve the cough with a safe remedy • Advise mother when to return immediately. • Follow-up in 5 days if not improving.

@Neet_pg_bot

References:

Pneumonia guidelines- NHM

↑ *Back to this question in Part A*

@Neet_pg_bot

Q81: Which kit would you recommend for the treatment of a 20-year-old female who has recently engaged in sexual intercourse and is experiencing vaginal discharge and lower abdominal pain when following the syndromic management approach for sexually transmitted infections at the Suraksha clinic in the local primary health center? (Q857737)

A. Blue

B. Red

C. Black

D. Yellow

Correct Answer: D. Yellow

Explanation: kits along with medicines: Kit Colour Indication Medicines 1 Grey Urethral discharge Cervicitis Ano-rectal discharge Azithromycin, cefixime 2 Green Vaginitis Secnidazole, fluconazole 3 White Non-herpetic genital ulcers Azithromycin, B. Penicillin 4 Blue (Option A) Genital ulcers Penicillin allergy + Azithromycin, doxycycline 5 Red (Option B) Herpetic genital ulcers Acyclovir 6 Yellow Lower abdominal pain Cefixime metronidazole, doxycycline 7 Black (Option C) Inguinal bubo Azithromycin, doxycycline 8 Brown Anorectal discharge syndrome Cefixime, doxycycline

References:

Park textbook of preventive and social medicine, 25th edition, Pg. no. 472, 362.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q82: Re-infection with which of the following will lead to catastrophic symptoms even in the presence of antibodies? (Q857706)

A. Dengue

B. Yellow fever

C. Japanese encephalitis

D. Zika

Correct Answer: A. Dengue

Explanation: engue: First Exposure: Leads to immune sensitization to Dengue virus. Re-exposure: With a different Dengue serotype (e.g., DENV-2) can trigger antibody-dependent enhancement (ADE). Outcome: ADE can lead to severe Dengue, Dengue Hemorrhagic Fever (DHF), or Dengue Shock Syndrome (DSS). Mechanism: Cross-reactive antibodies from the first infection enhance the severity of the disease during the second infection. Result: Increased risk of severe illness due to immune system overreaction to the second Dengue serotype.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC3185591/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q83: What treatment should be administered to a patient diagnosed with P. Falciparum malaria from a North-Eastern state? (Q857149)

A. Artemether plus lumefantrine

B. Sulfadoxine plus pyrimethamine

C. Chloroquine

D. Mefloquine

Correct Answer: A. Artemether plus lumefantrine

Explanation: T regimens recommended Treatment of severe/complicated malaria: Initial parenteral treatment (48 hours) Follow-up treatment Quinine Loading dose: 20 mg/kg Maintenance dose : 10 mg/kg TDS Quinine 10 mg/kg TDS + Doxycycline 3 mg/kg (or) Clindamycin 10 mg/kg (if pregnant / children < 8 years) Total treatment duration: 7 days Artesunate : 2.4 mg/kg loading dose, then at 12th and 24th hour followed by once a day. Artemether : Loading dose of 3.2 mg/kg; maintenance dose of 1.6 mg/kg per day. Arteether : 150 mg per day for 3 days. ACT therapy North-eastern states: Age & weight adjusted ACT-AL for 3 days + primaquine on second day. Other states: ACT-SP (Option B) (sulfadoxine-pyrimethamine) for 3 days + primaquine on second day. Chloroquine (Option C): Is mainly used in treatment of infection by P. vivax and P. ovale with dosage of 25 mg/kg body weight (Mnemonic - VOC i.e. For Vivax and ovale → Chloroquine is used). Mefloquine (Option D) : This is an alternative ACT but is not the first-line recommendation in this scenario. Is effective against chloroquine-resistant forms of P. falciparum. Also used for chemoprophylaxis of malaria.

References:

Park’s Textbook of Preventive and Social Medicine 27th edition, Pages 311,312,313

↑ *Back to this question in Part A*

@Neet_pg_bot

Q84: A pregnant woman arrived at the emergency department following an incident where she was scratched by a stray dog while walking on the streets one hour ago. She has only suffered minor abrasions without any bleeding. What course of treatment should be provided to her? (Q857131)

A. No treatment as she is pregnant now

B. Only local wound cleaning

C. Local wound cleaning and rabies vaccine

D. Local wound cleaning, Rabies vaccines and immunoglobulins

Correct Answer: C. Local wound cleaning and rabies vaccine

Explanation: - Local wound cleaning and rabies vaccine: The patient falls under Category II according to WHO since there is no bleeding therefore she has to be administered rabies vaccine along with local wound cleaning. Rabies being a lethal disease, there is no contraindication for post exposure prophylaxis. Management of rabies wound: Category Exposure Management Class I (Option B) Licks and touch on intact skin (skin integrity not broken) Local wound management: soap, running water, iodine tincture for 15-20 min. Class II Abrasion, laceration (skin integrity broken) Local wound management Immediate Rabies vaccination Class III (Option D) Bleeding, licks on mucosa/ broken skin, deep tissue injury, all wild animal or bat bite Wound management (avoid suturing) Rabies vaccination Rabies immunoglobulin No treatment as she is pregnant now (Option A): Rabies is a lethal disease and hence has no post exposure prophylaxis contraindication, not even pregnancy.

References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 324-327

↑ *Back to this question in Part A*

@Neet_pg_bot

Q85: Based on Globocan 2020 data, which cancer type is the most prevalent among males in India? (Q857129)

A. Lung

B. Lip and oral cavity

C. Colorectal

D. Liver

Correct Answer: B. Lip and oral cavity

Explanation: bsolute numbers, Incidence, Both sexes, in 2022 (World Wide)- Lung Cancer. Age-Standardized Rate (World) per 100 000, Incidence, Both sexes, in 2022- Breast Cancer. Most common cancer in India in terms of absolute numbers, incidence: Lip/Oral Cancer in Males Breast cancer in females According to the National Cancer Registry, the most common cause of cancer in Males in India – Lung cancer. Females in India - Breast cancer. Important Ribbon Colors: Ribbon colour Meaning Red HIV/AIDS Pink Breast cancer Light Blue Prostate cancer Dark Blue Colon Cancer Green Mental illness Liver cancer Orange/Yellow Suicide prevention Leukaemia Kidney cancer White Lung cancer

References:

https://ncdirindia.org/All_Reports/Report_2020/default.aspx

https://gco.iarc.who.int/media/globocan/factsheets/populations/356-india-fact-sheet.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q86: What is the likely diagnosis for a 50-year-old male who worked in the dye industry and had exposure to aniline dyes, and is now experiencing bladder problems? (Q857128)

A. Squamous cell carcinoma

B. Basal cell carcinoma

C. Transitional cell carcinoma

D. Adenocarcinoma

Correct Answer: C. Transitional cell carcinoma

Explanation: hemical Cancer Note Aflatoxin Hepatocellular Carcinoma Aspergillus; stored grains Alkylating Agents Lymphoma & Leukemia Caused by chemotherapy Alcohol SCC of Oropharynx/Esophagus, Pancreatic Ca, HCC — Arsenic SCC of Skin, Angiosarcoma of Liver, Lung Ca Contained in cigarette smoke Cigarette Smoke Bladder, Lung, Oropharynx, Kidney, Esophagus Polycyclic hydrocarbons Nitrosamines Stomach Ca Smoked foods, Japan Napthylamine Urothelial (bladder) Ca Comes from cigarette smoke Vinyl Chloride Angiosarcoma of liver Polyvinyl chloride (PVC) pipes Chromium, Beryllium, Nickel, Silica Lung Ca —

References:

https://www.ncbi.nlm.nih.gov/books/NBK13216/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q87: What is the most reliable indicator of recent malaria transmission? (Q857096)

A. Spleen rate

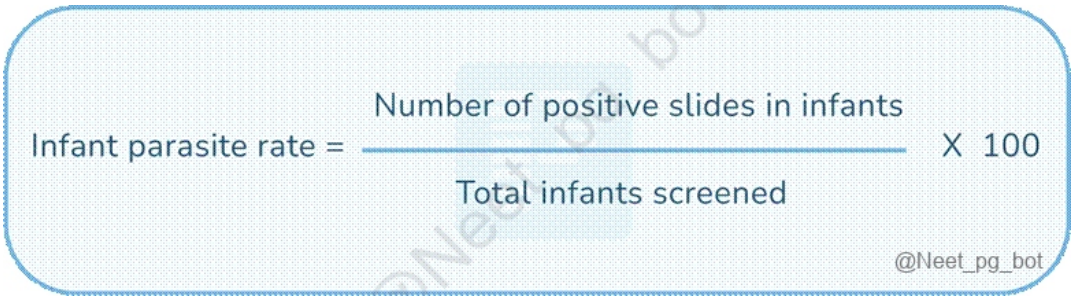
B. Infant parasite rate

C. Parasite density index

D. Slide positivity rate

Correct Answer: B. Infant parasite rate

Explanation: - Infant parasite rate The Infant parasite rate refers to the proportion of infants or young children who are infected with malaria parasites. Infants are particularly susceptible to malaria infection, and their infection rates can be a reliable indicator of recent malaria transmission within a community. The infant parasite rate (IPR) is the most sensitive indicator of recent malaria transmission in a population. If the IPR remains 0 for 3 consecutive years, the population can be considered free from malaria transmission. Note: The vectors responsible for previous malaria transmission in a population will not be included in the IPR results. Spleen rate (Option A): The spleen rate is an indicator of chronic or long-term malaria infection. Parasite density index (Option C): The parasite density index reflects the intensity of infection in individuals but may not be as sensitive for assessing recent transmission on a population level. Slide positivity rate (Option D): is commonly used as an indicator of malaria prevalence and can provide insights into ongoing transmission. However, the Infant parasite rate is considered to be a more sensitive index for recent transmission.



References:

Park's Textbook of Preventive and Social Medicine 27th edition, Page 306

↑ *Back to this question in Part A*

@Neet_pg_bot

Q88: According to the Colombo plan, which of the following statements regarding cancer treatment is correct? (Q855523)

A. Help with PET scan units for diagnosis of cancer

B. Human resource strengthening

C. Setting up chemotherapy units

D. Setting up cobalt therapy units

Correct Answer: D. Setting up cobalt therapy units

Explanation: The Colombo plan consists of 20 developing countries within the region and 6 non-regional members. Canada made a contribution by setting up Cobalt therapy units . The Colombo plan helps in promoting good living standards for the people of the area by evaluating the developmental plans and coordinating development assistance. The Colombo Plan {{caption_text}} Multilateral agency. Promotes the concept of

collective intergovernmental for economic and social development in South and Southeast Asia. Primary focus is on agricultural and industrial development and sometimes on health. Membership - 20 developing countries. 6 non-regional members - Australia, Canada, Japan, New Zealand, UK, USA. Provides Cobalt Radiotherapy Units to Medical Colleges AIIMS in New Delhi was established with financial assistance from New Zealand.



References:

Park's Textbook of Preventive and Social Medicine - Edition 27, Page 1031 Image: https://colombo-plan.org/history/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q89: Which of the following statements regarding drugs used in anti-tubercular treatment are true? A. Isoniazid inhibits mycolic acid synthesis B. Pyrazinamide is an enzyme inducer C. Rifampicin is used only in the treatment of tuberculosis D. Bedaquiline inhibits ATP synthase (Q855136)

A. A, B, C, D

B. B, C

C. A, C

D. A, D

Correct Answer: D. A, D

Explanation: A. Isoniazid inhibits mycolic acid synthesis : True . Isoniazid (INH) is a bactericidal drug that specifically inhibits the synthesis of mycolic acid , a key component of the mycobacterial cell wall. This mechanism is critical for its effectiveness against Mycobacterium tuberculosis . D. Bedaquiline inhibits ATP synthase : True . Bedaquiline is a newer anti-tubercular drug that specifically targets mycobacterial ATP synthase , disrupting energy production in the bacteria. It is used for multidrug-resistant tuberculosis (MDR-TB). B. Pyrazinamide is an enzyme inducer : False . Pyrazinamide is not an enzyme inducer. It works by disrupting mycobacterial membrane function and energy production. Rifampicin, not pyrazinamide, is a strong enzyme inducer. C. Rifampicin is used only in the treatment of tuberculosis : False . Rifampicin is used for other conditions besides tuberculosis, including leprosy, meningococcal prophylaxis, and certain staphylococcal infections . It is not exclusive to tuberculosis treatment.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 211

↑ *Back to this question in Part A*

@Neet_pg_bot

Q90: The drug shown in the image below is administered for: (Q855131)

A. Malaria

B. Dengue

C. Sexually transmitted infections

D. AIDS



@Neet_pg_bot

Correct Answer: A. Malaria

Explanation: The combination of Artesunate , Sulfadoxine , and Pyrimethamine is used for the treatment of malaria . Artesunate is an effective antimalarial drug that belongs to the class of artemisinin-based combination therapies (ACTs). Sulfadoxine and Pyrimethamine are used together as a combination therapy for treating uncomplicated malaria caused by Plasmodium falciparum.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC1242247/

Park’s Textbook of Preventive and Social Medicine, 26th Edition, Page 302

↑ *Back to this question in Part A*

@Neet_pg_bot

Q91: What is the accurate statement concerning preventive measures for typhoid transmission in the community? (Q855327)

A. Typhoid vaccine administration is the best method of preventing transmission.

B. Hygiene practice and clean sanitation control is more important than the typhoid vaccine.

C. In 10% of cases, person-to-person transmission occurs.

D. Drug resistance in typhoid is not as big a problem as in TB.

Correct Answer: B. Hygiene practice and clean sanitation control is more important than the typhoid vaccine.

Explanation: This is the most critical method to prevent the transmission of typhoid. Proper sanitation, clean drinking water, and good hygiene practices (like hand washing) are essential in controlling the spread of the disease. While the typhoid vaccine can help prevent infection, it does not address the root causes of transmission, which are primarily linked to contaminated water and food. Typhoid vaccine administration is the best method of preventing transmission (Option A) : While the typhoid vaccine is important in preventing infection, it does not address the underlying transmission routes, which are more effectively controlled by sanitation and hygiene measures. Therefore, it is not the best method of preventing transmission alone. In 10% of cases, person-to-person transmission occurs (Option C) : This is incorrect. Typhoid is primarily spread through contaminated food and water (fecal-oral route). Person-to-person transmission is less common. Drug resistance in typhoid is not as big a problem as in TB (Option D) : This is incorrect. Drug resistance, particularly multidrug-resistant Salmonella typhi , is an increasing concern in typhoid treatment, and it is considered a significant public health challenge.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 276-280

↑ *Back to this question in Part A*

@Neet_pg_bot

Q92: Which aspect is not included in the features of the Leprosy Mukt Bharat 2027 initiative? (Q855303)

A. Providing free treatment to prevent disability progression

B. Implementing measures for early detection through secondary prevention

C. Ensuring medical rehabilitation for individuals with existing deformities

D. Offering financial support for medical research on leprosy

Correct Answer: D. Offering financial support for medical research on leprosy

Explanation: Leprosy Mukt Bharat 2027 is an initiative by the Government of India aimed at eliminating leprosy-related disability and transmission . Its key features include: Providing free treatment to all leprosy patients to prevent disability progression Early detection and secondary prevention through active case finding Medical rehabilitation for patients with existing deformities and disabilities Not included: Offering financial support for medical research is not a core component of this program.

References:

https://www.who.int/news-room/fact-sheets/detail/leprosy

↑ *Back to this question in Part A*

@Neet_pg_bot

Q93: For which of the following airborne infections is it necessary to isolate patients in a separate room? (Q855286)

A. Measles

B. Rabies

C. Nipah

D. Aseptic meningitis

Correct Answer: A. Measles

Explanation: Measles is a highly contagious airborne infection caused by the Measles virus . It spreads via respiratory droplets and can remain infectious in the air for up to 2 hours after an infected person leaves the room. Isolation in a separate negative pressure room (airborne infection isolation room) is necessary to prevent its spread. Rabies (Option B) is transmitted through bites or saliva of infected animals, not through the airborne route. Therefore, patient isolation in a separate room is not required. Nipah (Option C): Nipah virus is primarily transmitted via close contact with infected animals or individuals, as well as their body fluids. Airborne transmission is rare, and isolation precautions usually involve contact and droplet precautions , not necessarily airborne isolation. Aseptic meningitis (Option D) is usually caused by viruses such as Enteroviruses , which are transmitted via the fecal-oral route or droplets. Airborne isolation is not required.

References:

Park’s Preventive and Social medicine, 27th edition, Page 164-165

Nelson Textbook of Paediatrics, 21st Edition, Page 1673, 1674

↑ *Back to this question in Part A*

@Neet_pg_bot

Q94: Which of the following medications is typically prescribed as the initial treatment for tuberculosis during the first 2 months? (Q858109)

A. Streptomycin

B. Ethambutol

C. Linezolide

D. Levofloxacin

Correct Answer: B. Ethambutol

Explanation: The initial 2-month phase (intensive phase) of tuberculosis treatment typically includes a combination of Isoniazid, Rifampicin, Pyrazinamide, and Ethambutol (HRZE) . Ethambutol is crucial in preventing drug resistance and enhancing treatment efficacy. Streptomycin (Option A) : is incorrect because while it was previously used as a first-line drug, it is now rarely included in the initial treatment due to the rise in drug-resistant TB and toxicity concerns. Linezolid (Option C) : is incorrect because it is a second-line drug reserved for multidrug-resistant TB (MDR-TB) cases, not for initial treatment. Levofloxacin (Option D) : is incorrect because it is also a second-line drug used in drug-resistant TB rather than the initial phase of standard treatment.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 214- 218

↑ *Back to this question in Part A*

@Neet_pg_bot

Q95: A patient presents with a Category III dog bite. He has a history of receiving rabies prophylaxis for a monkey bite 6 months ago. What is the next step in management? (Q857999)

A. Wound cleaning only

B. Wound cleaning + rabies vaccine on day 0 & 3

C. Rabies immunoglobulin (RIG) only

D. Wound cleaning+IM vaccine +RIG

Correct Answer: B. Wound cleaning + rabies vaccine on day 0 & 3

Explanation: A patient previously vaccinated for rabies (within 3–6 months) requires only a booster of two doses of rabies vaccine on days 0 and 3 after a new category 3 exposure. This ensures a rapid and sufficient anamnestic immune response without the need for additional interventions, such as rabies immunoglobulin. Wound cleaning only (Option A) : Wound cleaning alone is insufficient for managing a category 3 dog bite, even if the patient has been vaccinated previously. Rabies immunoglobulin (RIG) only (Option C) : For previously vaccinated, only vaccine booster is required; RIG is omitted. Wound cleaning + IM vaccine + RIG (Option D) : Rabies immunoglobulin (RIG) is only indicated for rabies-naïve patients or those who have not completed prior prophylaxis.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 319, 320.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q96: A 35-year-old homeless man presented with a 1-month history of fever, cough, and weight loss. Both sputum smears turned out to be negative, but the chest x-ray ordered was suggestive of tuberculosis. According to the recent NTEP guidelines, which is the next best line of management? (Q855540)

A. Repeat sputum smears

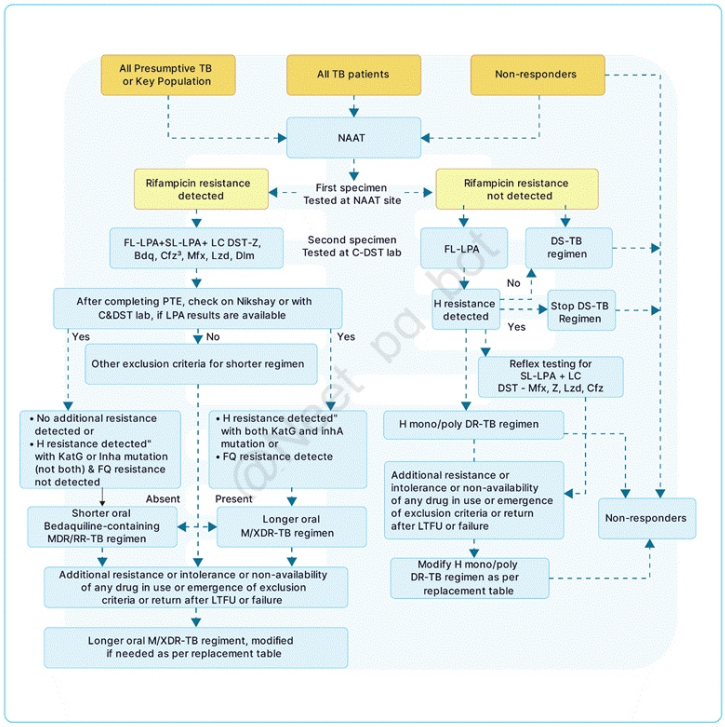
B. Ask for CBNAAT

C. Ask for line probe assay

D. Wait until TB culture results to start ATT

Correct Answer: B. Ask for CBNAAT

Explanation: According to the NTEP guidelines, a negative smear with positive chest X-ray findings would require a CBNAAT {{caption_text}} Diagnostic Modality Description Usage Sputum Smear Microscopy Microscopic examination of sputum samples to detect acid-fast bacilli (AFB). Used for initial screening and diagnosis, especially in resource-limited settings. Chest X-ray Imaging done to identify abnormalities suggestive of TB. Used to support diagnosis when clinical suspicion is high; not definitive for TB diagnosis. TruNAAT/CBNAAT Molecular tests that detect Mycobacterial DNA and rifampicin resistance. Recommended for initial diagnosis due to high sensitivity and specificity; rapid results. Line Probe Assay (LPA) Molecular test to detect specific genetic mutations associated with drug resistance (e.g., rifampicin, isoniazid). Used for detecting drug resistance in confirmed TB cases, not for initial diagnosis. Tuberculin Skin Test (TST) A skin test to measure immune response to injected tuberculin protein. Primarily used for screening latent TB infection; not specific for active TB diagnosis. Interferon-Gamma Release Assays (IGRAs) Blood cytokine analysis test that measures immune response to TB antigens. Used for detecting latent TB infection Sputum Culture Growing Mycobacteria from sputum samples to confirm TB and test for drug susceptibility. Takes several weeks to obtain results. Drug Susceptibility Testing (DST) Testing TB bacteria from patient samples to determine resistance to TB drugs. Used to guide treatment by identifying drug-resistant strains in confirmed TB cases. Repeat sputum smears (Option A): Previously it was done but not done after 2016. Repeat sputum smears are taken to monitor the treatment response. Ask for line probe assay (Option C): Line probe assay is usually used for the diagnosis of the first line antitubercular drug resistance tuberculosis and are not indicated in this case scenario. Wait until TB culture results to start ATT (Option D): Since it is slow growth, it takes around 4 weeks to get the sputum culture reports. Hence, it is not ideal to depend on culture reports to start ATT.



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References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg 214-230

↑ *Back to this question in Part A*

@Neet_pg_bot

Q97: Which of the following is the next appropriate step for a varicella infected pregnant women with no documentation of natural infection? (Q855535)

A. Administer prophylaxis with Varicella Zoster immunoglobulin

B. Prescribe acyclovir/valacyclovir for prophylaxis

C. Evaluate the baby with ultrasound for signs of infections

D. Obtain varicella zoster IgG serology in the women

Correct Answer: D. Obtain varicella zoster IgG serology in the women

Explanation: Parameter Details Chickenpox Seasonal affinity: Winter season Etiology: HHV-3 Route of transmission: Respiratory / aerosol route Age group affected: 5-9 years (school going age) Incubation period:

14-16 days Infectivity: 2 days prior to 5 days after the onset of rash SAR:> 90% Clinical Features Pre-eruptive stage: Sudden onset of mild to moderate fever lasting 2–3 days. Eruptive stage: Centripetal, pleomorphic rash with "Dew drop on rose petal" appearance. Complications Adults/Immunosuppressed: Pneumonia. Maternal varicella: Low birth weight, microcephaly, cataract, deafness, fetal wastage. Secondary bacterial infection: Cellulitis, osteomyelitis, erysipelas. Diagnosis PCR: Detecting VZV DNA. Cell culture: From saliva or vesicle fluid. Tzanck smear: Multinucleated giant cells. Control and Prevention Isolation: 6 days after rash appearance. Disinfection: Used specimens with infective secretions. Acyclovir: For adults to prevent complications; not indicated in children. VZV Immunoglobulin: Within 72 hours of exposure, for immunosuppressed individuals. Vaccine: 12–18 months of age; 0.5 ml subcutaneous injection.

References:

Park textbook of preventive and social medicine, 25th edition, Pg. no. 156- 159.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q98: Which of the following vaccines are given at birth? (Q793843)

A. Pentavalent, MR, HiB

B. BCG, OPV, MR

C. BCG, OPV, Hepatitis B

D. BCG, IP, Hepatitis B

Correct Answer: C. BCG, OPV, Hepatitis B

Explanation: Correct Option C - BCG, OPV, Hepatitis B: BCG, OPV, and Hepatitis B vaccines given at birth in many countries BCG: Tuberculosis protection OPV: Polio protection Hepatitis B vaccine: Protects against Hepatitis B Administered within 24 hours of birth Incorrect Options: Option A - Pentavalent, MR, HiB: Pentavalent, MR, and HiB not given at birth Option B - BCG, OPV, MR: MR vaccine given at 9 months, not at birth Option D - BCG, IP, Hepatitis B: IP vaccine usually given at 6, 10, and 14 weeks, not at birth

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q99: At what age is the first dose of hepatitis B vaccine given? (Q793732)

A. Birth

B. 6 weeks

C. 10 weeks

D. 6 months

Correct Answer: A. Birth

Explanation: Correct Option A - At Birth: First dose of hepatitis B vaccine: Administered within 24 hours of birth Provides timely protection against transmission from mother to baby Subsequent doses: At 1-2 months and 6 months of age to complete the series Recommended as routine childhood vaccination by WHO and CDC Incorrect Options: Option B - 6 weeks: Safe to administer at 6 weeks but recommended to complete series as soon as possible Option C - 10 weeks: 10 weeks would be too long a delay Option D - 6 months: Vaccine is safe and effective after 6 months, but recommended to administer as early as possible, ideally within 24 hours of birth

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q100: In how many days should the post exposure Measles vaccine be given? (Q793727)

A. With in 7 days

B. With in 3 days

C. With in 1 days

D. With in 10 days

Correct Answer: B. With in 3 days

Explanation: Incorrect Option B - Within 3 days: Incubation period for measles is 10-14 days. 10th day- fever stars 14th day -rashes start IP of vaccine-induced measles is 7 days. Post-exposure vaccine must be used with in 3 days of exposure Incorrect Options: Option A, C and D

References:

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↑ *Back to this question in Part A*

• [06_National Health Programs] 024 National Health Mission Rmnch - A Maternal Initiatives Child And Adolescents Health Initiatives

« Back to Folder Directory

[06_National Health Programs] 024 National Health Mission Rmnch - A Maternal Initiatives Child And Adolescents Health Initiatives — Quick Jump

Q1 (p. 1116)	*Q2 (p. 1117)*	*Q3 (p. 1118)*	*Q4 (p. 1119)*	*Q5 (p. 1123)*	*Q6 (p. 1124)*
Q7 (p. 1127)	*Q8 (p. 1128)*	*Q9 (p. 1129)*	*Q10 (p. 1130)*	*Q11 (p. 1131)*	*Q12 (p. 1133)*
Q13 (p. 1134)	*Q14 (p. 1136)*	*Q15 (p. 1137)*	*Q16 (p. 1138)*		

Q1: Which of the following is/are the components of the National Health Mission (NHM)? (Q840923)

A. Communicable & Non-communicable Disease

B. NUHM & NRHM

C. RMNCAH+ N

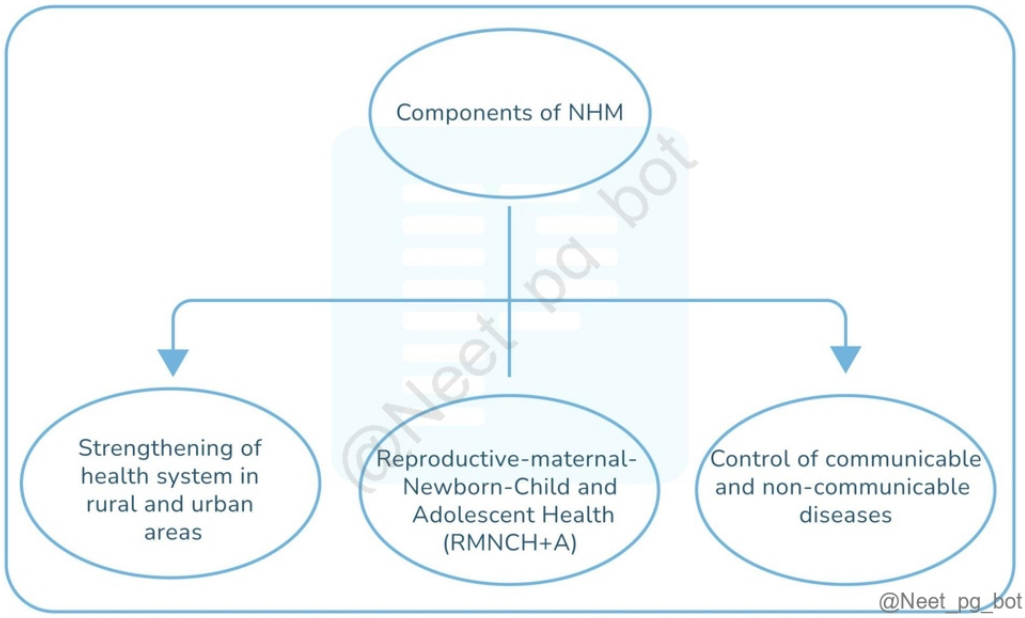
D. All the above

Correct Answer: D. All the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The National Health Mission, which includes the National Rural Health Mission (NRHM) and the National Urban Health Mission (NUHM), was launched in 2013. The components of NHM: Goals of NHM Reduce Infant Mortality Rate to 25/1000 live births Reduce Maternal Mortality Rate to 1/1000 live births Reduce Total Fertility Rate to 2.1 Reduce annual incidence and mortality from TB by half. Reduce prevalence of Leprosy to <1/10000 population and incidence to zero in all districts Annual malaria incidence to < 1/1000. <1% microfilaria prevalence in all districts. Eliminate kala-azar by 2015



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg no512

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following is not a component of RMNCAH+N? (Q840928)

A. Adolescent health

B. Newborn health

C. Geriatric health

D. Maternal health

Correct Answer: C. Geriatric health

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Reproductive, maternal, newborn, child, and Adolescent Health (RMNCAH+N) is a component of the National Health Mission, launched in 2013. Components of RMNCAH+N:



References:

https://nhm.gov.in/images/pdf/programmes/maternal-health/guidelines/5x5_matrix_2502.pdf

https://nhm.gov.in/images/pdf/programmes/maternal-health/guidelines/5x5_matrix_2502.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is not true regarding Janani Suraksha Yojana? (Q840931)

A. Launched in 2005

B. Promotes Institutional deliveries

C. Incentives are provided only to pregnant females delivering in institutions

D. It subsidizes the cost of C-sections up to Rs.1500.

Correct Answer: C. Incentives are provided only to pregnant females delivering in institutions

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Janani Suraksha Yojana was launched in 2005 (Option A) to decrease maternal and neonatal mortality by promoting deliveries at health institutions (Option B) . Incentives are provided to both pregnant women and ASHA workers (Option C): Category Rural areas Urban areas Mother's incentive ASHA's incentive Mother's incentive ASHA's incentive Low-performing states (LPS) 1400 600 1000 400 High-performing states

(HPS) 700 600 600 400 States under LPS: Uttar Pradesh, Uttarakhand, Madhya Pradesh, Jharkhand, Bihar, Rajasthan, Chhattisgarh, Odisha, Assam And Jammu & Kashmir, In LPS, all pregnant women delivering in Govt. Health centers and accredited private hospitals are given incentives irrespective of no. of deliveries. In HPS, below poverty line/SC/ST women delivering in Govt. Health centers and accredited private hospitals are given incentives and are limited to 2 live births. JSY subsidizes the cost of C-section and obstetric complications up to Rs.1500 (Option D) All BPL women delivering at home get an incentive of Rs.500, irrespective of number of deliveries, ASHA gets no incentive for home delivery ,as the government policies prioritize institutional deliveries for safety.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg no: 521.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following health programmes does the logo below represent? {{caption_text}} (Q840935)

A. Maa Programme (Mother’s Absolute Affection)

B. LAQSHYA

C. Pradhan Mantri Matru Vandana Yojana

D. Janani Shishu Suraksha Karyakram



Correct Answer: D. Janani Shishu Suraksha Karyakram

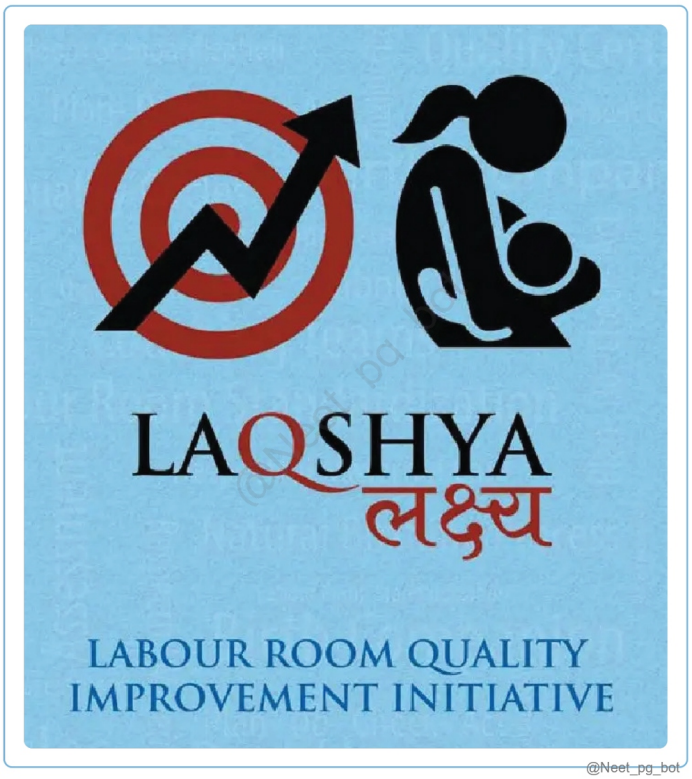
■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Janani Shishu Suraksha Karyakram (JSSK) was launched in 2011 to reduce out-of-pocket expenditures for pregnant women and infants up to one year of age. Amenities: Free Delivery (up to 3 days for normal deliveries and up to 7 days for C-section), Diagnostics, Drugs, Blood, Transport and Diet (3 days for normal and 7 days for C-section). Maa Programme (Option A) , to promote breastfeeding. LAQSHYA (Option B) , to promote improved care in delivery services in the labour room and maternal OTs applicable from CHC (Community Health Centres) and above , including District Hospitals (DHs), Medical Colleges , and high-load facilities. Pradhan Mantri Matru Vandana Yojana (Option C) to promote newborn well-being and infant immunization. Under PMMVY : First child: Mothers receive a cash incentive of ■5,000 , disbursed in two installments . Second child (if a girl): Mothers receive a cash incentive of ■6,000 , disbursed in a single installment .


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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg no: 522

↑ *Back to this question in Part A*

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Q5: Under the LaQshya scheme, what is the focus area for improving infrastructure in healthcare facilities? (Q840943)

A. Emergency services

B. Immunization services

C. Primary health centres

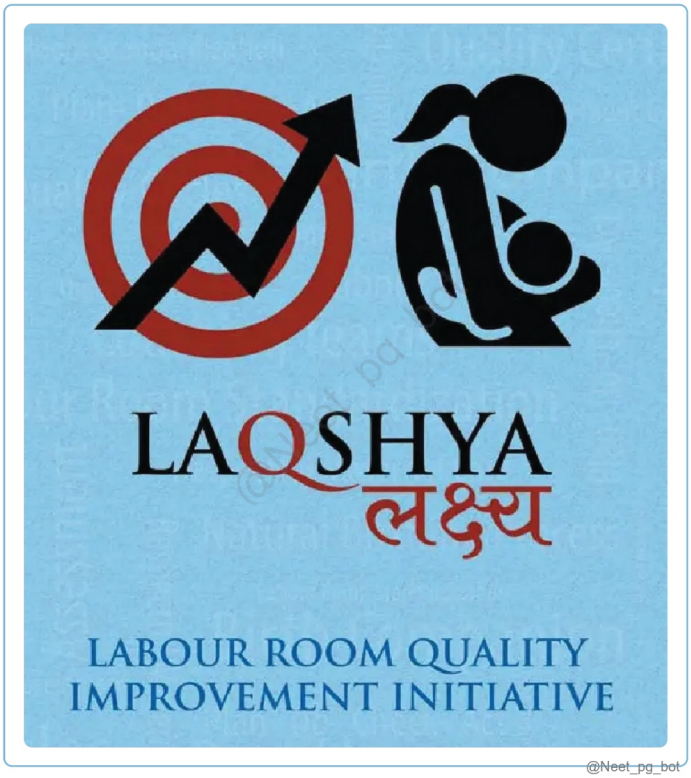
D. Labour rooms and maternity operation theatres

Correct Answer: D. Labour rooms and maternity operation theatres

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: LAQSHYA is a labour room quality improvement initiative under the Ministry of Health and Family Welfare that focuses on improving labour rooms and maternity operation theaters in public health facilities. LAQSHYA (LaborRoom Quality Improvement Initiatives): Aim Improved care in the delivery services in the labor room and ensuring the satisfaction of beneficiaries. Incentive For providing labor room care and ensuring the satisfaction of beneficiaries. Provided to health care setups - CHC, Sub-district hospital and District hospital. Sub centers and PHC are not a part of LAQSHYA. 80% satisfied beneficiaries will be provided incentives of: Rs. 6 lakhs: For Medical College hospitals Rs. 3 lakhs: District hospitals Rs. 2 Lakhs: First referral units NQAS score Platinum- 90% Gold- 80% Silver- 70%



References:

nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1307&lid=690

nhmmp.gov.in/WebContent/MH/Schemes/Dakshata/Activity%20Report%20Final%20(Sep-15).pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which maternal health initiative is not under the Ministry of Health and Family Welfare? (Q840946)

A. Pradhan Mantri Matru Vandana Yojana

B. Pradhan Mantri Surakshit Matritva Abhiyan

C. SUMAN scheme

D. MAA program

Correct Answer: A. Pradhan Mantri Matru Vandana Yojana

■ *Listen (English)*

■ *Listen (Hindi)*

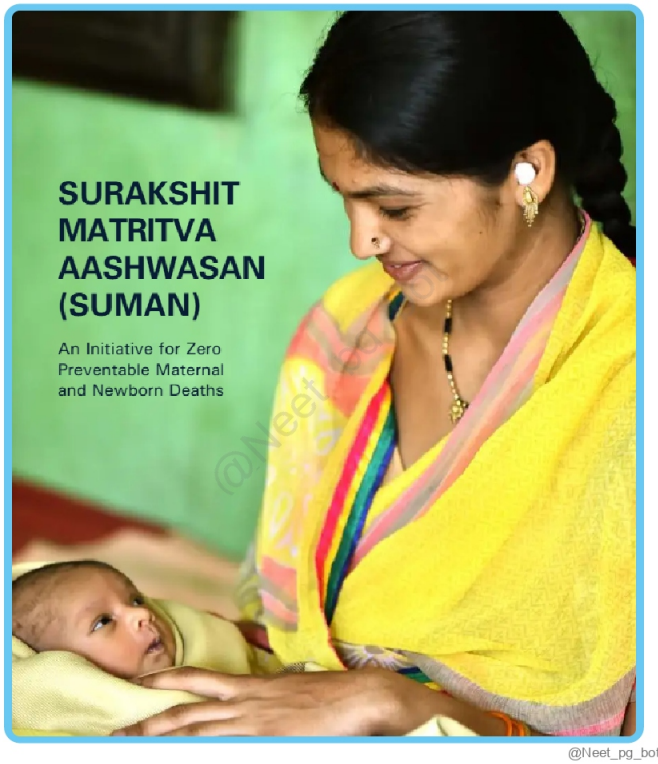
Explanation: Pradhan Mantri Matru Vandana Yojana falls under the Ministry of Women and Child Development (MWCD) Other schemes under MWCD ICDS SABLA PMMVY UJAWALA (to prevent trafficking of women and children) Pradhan Mantri Matru Vandana Yojana (Option A) This program is under the Ministry of Women and Child Development. The benefit is available to a woman for her first two living children, provided that the second child is a girl For the first child, an amount of 5000 will be provided in two installments. For the second child (if a girl), a benefit of 6000 will be provided in one installment after birth Pradhan Mantri Surakshit Matritva Abhiyan (Option B) On the 9th of every month, free antenatal services are provided to women, particularly in the 2nd or 3rd trimester, in government and private facilities that are part of the scheme. Aim - To identify high-risk pregnancies on time. This program is under the Ministry of Health and Family Welfare. Red card - Women at high risk. Green card - Women at no risk Blue card - Woman is a case of PIH Yellow card - Women with comorbidities (Diabetes, Thyroid) Surakshit Matritva Aashwasan (SUMAN) Scheme (Option C) This is also under the Ministry of Health and Family Welfare. Initiative: Zero preventable maternal and newborn deaths. Beneficiaries: Pregnant women during the antenatal period Women during delivery Women up to 6 months post-delivery Sick neonates Total number of services provided- 18 Maa Programme (Mother's Absolute Affection) (Option D) Aim- To promote breastfeeding. Under the Ministry of Health and Family Welfare. Functions: Lactation counselling and breastfeeding initiations. Stimulation and expression support through electric breast pumps Collection, storage, processing and dispensing of donor human milk



PRADHAN MANTRI
SURAKSHIT MATRITVA
ABHIYAAN

9th of Every Month

@Neet_pg_bot



@Neet_pg_bot



References:

wcd.nic.in/sites/default/files/FINAL%20PMMVY%20%28FAQ%29%20BOOKELT.pdf

suman.mohfw.gov.in/

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: 6x6x6 strategy is related to? (Q840950)

A. Anemia mukt bharat

B. Pradhan mantri poshan shakti nirman

C. RMNCH + A

D. Kishori shakti yojana

Correct Answer: A. Anemia mukt bharat

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The 6x6x6 strategy is related to Anemia Mukt Bharat. It stands for 6 beneficiaries, 6 interventions, and 6 institutional mechanisms. 6 interventions 6 strategies Prophylactic iron-folic acid supplementation. Deworming. Intensified year-round behaviour change communication campaign (solid body, smart mind), including ensured delayed cord clamping. Testing of anaemia using digital methods and point-of-care treatment. Mandatory provision of iron folic acid fortified foods in public health programmes. Addressing non-nutritional causes of anaemia in endemic pockets with a special focus on malaria, hemoglobinopathies, and fluorosis. National Anaemia Mukt Bharat Unit. Intra-ministerial coordination. Strengthening supply chain and logistics. Convergence with other ministries. National Centre of Excellence and Advanced Research on Anaemia Control. Anaemia Mukt Bharat dashboard and digital portal- One-stop shop for anaemia. 6 beneficiaries Children, 6-59 months of age (Bi-weekly Administer 1 ml of Iron and Folic Acid syrup containing 20 mg elemental iron and 100 mcg folic acid per dose) Children, 5-9 years of age- pink tablets (Weekly administer one sugar-coated pink tablet of Iron and Folic Acid containing 45 mg elemental iron and 400 mcg folic acid) Adolescent girls & boys (10-19 years of age)- blue tablets (Weekly administer one sugar-coated blue tablet of Iron and Folic Acid containing 60 mg elemental iron and 500 mcg folic acid) Women of reproductive age group (20-24 years of age).(Weekly, administer one sugar-coated red tablet of Iron and Folic Acid containing 60 mg elemental iron and 500 mcg folic acid) Pregnant women- Red tablets (180 tablets) Daily, 1 Iron and Folic Acid tablet should be taken starting from the fourth month of pregnancy (second trimester) and continued throughout the pregnancy (for at least 180 days). Each tablet contains 60 mg elemental iron and 500 mcg folic acid , is sugar-coated, and red in color. Lactating mothers (of 0-6 months child)- Red tablets .The tablet should also be continued for 180 days post-partum. Each tablet contains 60 mg elemental iron and 500 mcg folic acid , is sugar-coated, and red in color. Pradhan Mantri Poshan Shakti Nirman (Option B) provides meals to school-going children in government schools to decrease school drop-out rate and increase attendance rate.The supplementary nutrition provided under PM POSHAN includes up to half of a child's total protein requirement and one-third of their energy needs, especially in districts with high rates of anemia and malnutrition The 5x5 strategy is seen in RMNCH+A (Option C). It involves five high-impact interventions across five groups: reproductive, maternal, neonatal, child, and adolescent health. Kishori Shakti Yojana (Option D) aims to empower adolescent girls through nutrition and health education.

References:

nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797 \

pmposhan.education.gov.in/aboutus.html

nhm.gov.in/images/pdf/programmes/maternal-health/guidelines/5x5_matrix_2502.pdf

wcd.nic.in/kishori-shakti-yojana

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which international organization collaborated with the Government of India to implement IMNCI? (Q840951)

A. World Health Organization (WHO)

B. United Nations Children's Fund (UNICEF)

C. International Red Cross

D. Médecins Sans Frontières (MSF)

Correct Answer: A. World Health Organization (WHO)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: IMNCI, or Integrated Management of Neonatal and Childhood Illness, was introduced in India by the government of India in collaboration with WHO. IMNCI is an evidence-based strategy developed by the World Health Organization (WHO) and launched in India by the Government of India to reduce childhood mortality and morbidity by improving the quality of health care for children under five years old. Illnesses included: Acute respiratory infections (ARI) like Pneumonia Diarrhea 3 M's - Measles, malaria, malnutrition. Otitis Media

References:

main.mohfw.gov.in/sites/default/files/7091371954Mod%201%20INTRODUCTION%20R.pdf

www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/child-health/integrated-management-of-childhood-illness

nhm.gov.in/images/pdf/programmes/child-health/guidelines/imnci_chart_booklet.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: At what age are children screened under the RBSK program? (Q840952)

A. 0-5 years

B. 0-10 years

C. 0-15 years

D. 0-18 years

Correct Answer: D. 0-18 years

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Children from age 0 to 18 years are screened under the RBSK program. RBSK - Rashtriya Bal Swasthya Karyakram: Launched in 2013. Relies on early childhood screening and interventional services. Referral Unit/ Early intervention centre - District hospital Age group 0-6 years- urban or rural slums 6-18 years- government school-going children Screening Secondary level of prevention Screening done for 4Ds: Diseases Defects Deficiencies Developmental delays Referral unit- District hospital Screened by Mobile teams and this includes: Medical officers Ayush officers Pharmacists Lab technicians

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 529

https://nhm.gov.in/index4.php?lang=1&level=0&linkid=499&lid=773

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following is a specific objective of Navjaat Shishu Suraksha Karyakram (NSSK)? (Q840953)

A. To promote exclusive breastfeeding practices.

B. To increase access to prenatal care for expecting mothers.

C. To improve sanitation facilities in rural healthcare centers.

D. To prevent Perinatal Asphyxia-Related mortality.

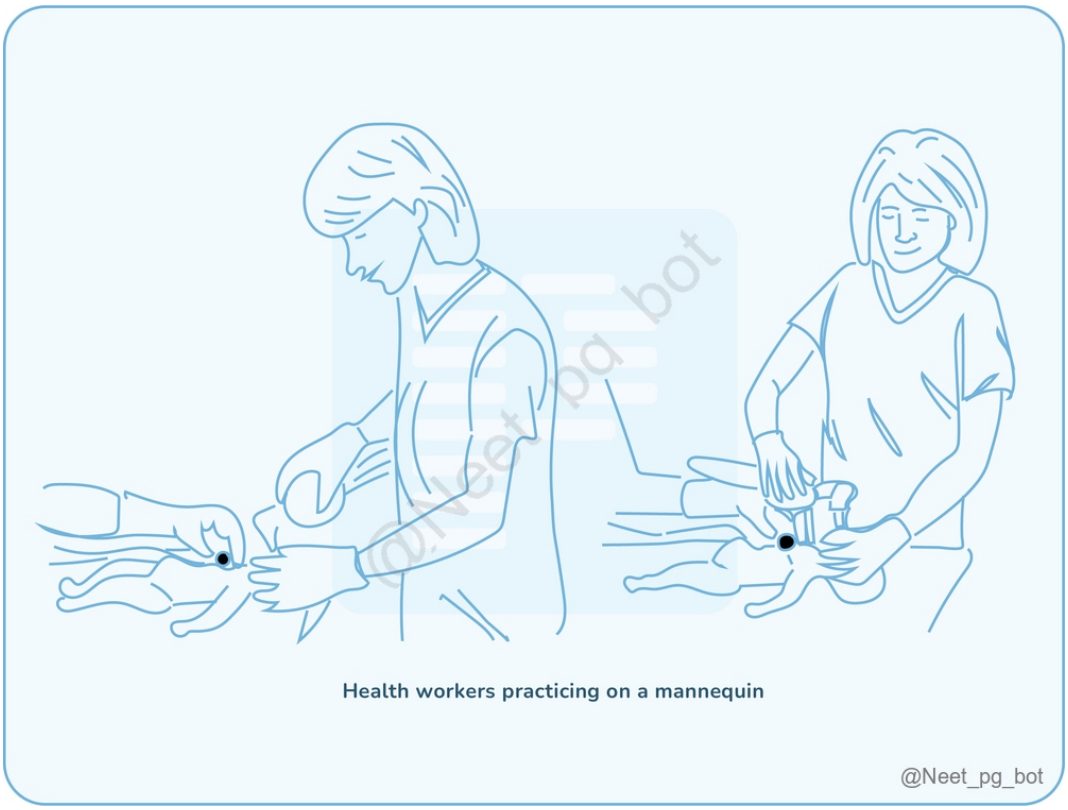
Correct Answer: D. To prevent Perinatal Asphyxia-Related mortality.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: NSSK aims to reduce India's Neonatal Mortality Rate, aligning with global health targets, emphasizing improved newborn health outcomes and reduced mortality from conditions like perinatal asphyxia. Navjaat Shishu Suraksha Karyakram(NSSK) A training program launched by the Indian Government to equip doctors and nurses with essential newborn care skills, specifically addressing birth asphyxia. Training program for medical officers (MOs) and auxiliary nurse-midwives (ANMs) is two days long The ultimate goal is to reduce newborn mortality and morbidity. Goals/Objectives Reduce Neonatal Mortality Rate: Decrease India's Neonatal Mortality Rate to single digits by 2030. Improve Newborn Care Quality: Enhance the quality of newborn care. Prevent Perinatal Asphyxia-Related Issues: Reduce morbidity and mortality linked to perinatal asphyxia. Strategies Capacity Building : Equip healthcare providers with necessary knowledge and skills. Essential Newborn Care and Resuscitation Training. Updated Curriculum and Training Methodology Standardized Equipment and Supplies : Provide clean, functional equipment. Effective Knowledge and Skill Transfer : Improve practical

application of training. Focus on "Golden Minute" : Quick assessment and resuscitation. Promoting Clean Birth Practices: Adhere to WHO's "six cleans". Kangaroo Mother Care (KMC). Promotion: Encourage KMC for low birth weight babies. Timely Immunization : Ensure vaccination before discharge. Educate parents on newborn care. Effective Neonatal Transport : Establish protocols for the safe transport of sick newborns. To promote exclusive breastfeeding practices (Option A): Incorrect because while important, this is mainly promoted by other programs like IMNCI or Breastfeeding promotion initiatives. To increase access to prenatal care (Option B): Incorrect because NSSK focuses on newborn care, not prenatal care. To improve sanitation facilities (Option C): Incorrect because sanitation is not an objective of NSSK but broader public health programs.



References:

nhm.gov.in/images/pdf/programmes/child-health/guidelines/imnci_chart_booklet.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: What is the primary objective of the India Newborn Action Plan (INAP)? (Q840954)

A. To achieve universal healthcare coverage by 2030.

B. To reduce neonatal mortality rate to single digits by 2030.

C. To eliminate maternal mortality completely by 2030.

D. To increase vaccination coverage for children under 5 years old.

Correct Answer: B. To reduce neonatal mortality rate to single digits by 2030.

- *Listen (English)*
- *Listen (Hindi)*

Explanation: INAP's primary objective is to achieve a neonatal mortality rate of less than 10 deaths per 1,000 live births by 2030. The India Newborn Action Plan (INAP) INAP, launched in June 2014, is a targeted strategy designed to reduce preventable newborn deaths and stillbirths in India. Developed in response to the global Every Newborn Action Plan (ENAP), INAP identifies evidence-based interventions to lower newborn and maternal mortality rates. Objectives and Goals Strategies to Achieve Goals Single Digit Neonatal Mortality Rate by 2030: Achieve <10 deaths per 1,000 live births. Stillbirth Rate by 2030: Target <10 stillbirths per 1,000 total births. RMNCH+A Framework: Implement within the existing healthcare framework. Six Intervention Packages: Cover all life stages of newborns. Preconception and antenatal care Care during labor and childbirth Immediate newborn care Care of the healthy newborn Care of the small and sick newborn Care beyond newborn survival Strategic Intervention Packages: Categorize interventions as essential, situational, and advanced. State-Specific Action Plans: Encourage tailored plans based on intervention packages. High Intervention Coverage: To prevent a significant proportion of newborn deaths, stillbirths, and maternal deaths by 2025. Monitoring and Evaluation: Systematic tracking and dashboard indicators for progress. Comprehensive Assessment: Conduct a thorough evaluation in 2020 to inform future strategies. Periodic Reviews: Review milestones every five years aligned with ENAP timelines.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 536 - 540

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: What is the primary focus area of the Rashtriya Kishor Swasthya Karyakram? (Q840955)

A. Reproductive and sexual health education only.

B. Comprehensive health care along with reproductive and sexual health.

C. Exclusive focus on non-communicable disease prevention.

D. Augmentation of facility-based services for maternal health.

Correct Answer: B. Comprehensive health care along with reproductive and sexual health.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Rashtriya Kishor Swasthya Karyakram India's first comprehensive adolescent health program Launched in January 2014, this initiative targets 253 million adolescents across India in their own environments. It introduces peer-led interventions within communities, complemented by improved facility-based services. The initiative expands the scope of adolescent health beyond reproductive and sexual health. Target Group Adolescents 10-19 years of age in Urban and rural areas Focus Girls and Boys; Married and Unmarried; In School and Out of school 7 Critical Components (7Cs) Coverage Content Communities Clinics Counseling Communication 6 Strategic Priorities Nutrition Sexual and reproductive health (SRH) Non-communicable diseases (NCDs) Substance misuse Injuries and violence(+ gender-based violence) Mental health-Peer Education Programme plays a key role in addressing adolescent health issues through trained Peer Educators, called "Saathiyas.



@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 27th edition,page 517

https://www.jknhm.com/rksk.php

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following is the comprehensive program the Ministry of Women and Child Development launched to combat trafficking? (Q840957)

A. Ujjawala scheme

B. Ujjwala Yojana

C. UJALA scheme

D. Saubhagya Scheme

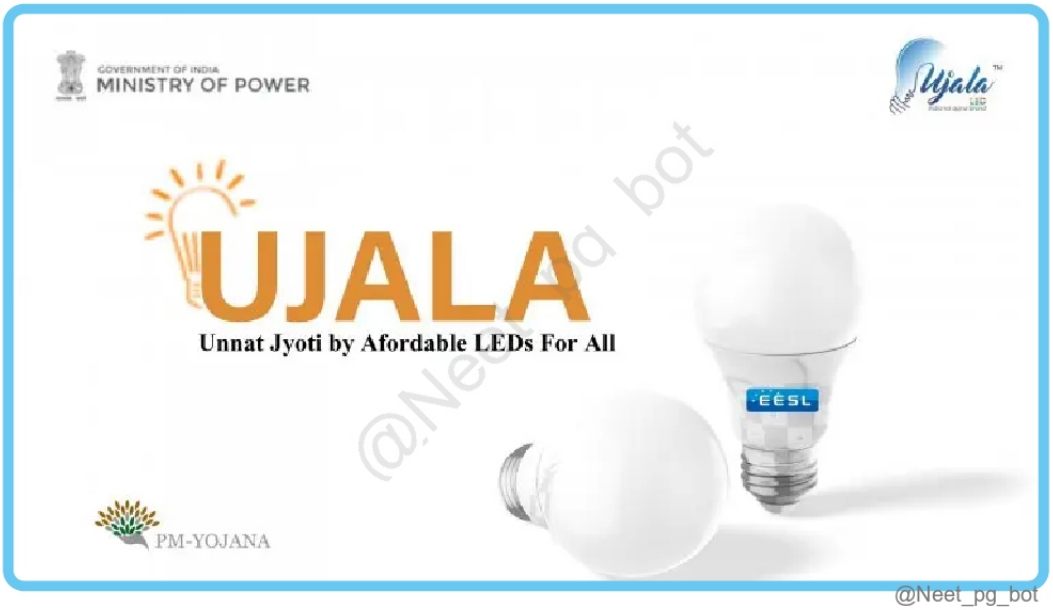
Correct Answer: A. Ujjawala scheme

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Ujjawala scheme The Ujjawala scheme, launched in India on December 4, 2007, by the Ministry of Women and Child Development, is a comprehensive program to combat trafficking. The scheme is primarily implemented through NGOs. Objectives/Goals Strategies to Achieve Goals Prevention Formation of community vigilance and adolescent groups, awareness creation preparation of IEC (Information, Education, Communication) material, organization of workshops. Rescue Safe withdrawal of victims from the place of exploitation. Rehabilitation Providing safe shelter, basic amenities, medical care, legal aid, vocational training, and employment opportunities to victims. Reintegration Supporting victims in their reintegration into society. Repatriation Providing support to cross-border victims for their safe return to their home countries. The Pradhan Mantri Ujjwala Yojana (PMUY) (Option B) is a key initiative to provide rural and underprivileged households with access to clean cooking fuels like LPG, replacing traditional cooking fuels. It comes under the Ministry of Petroleum and Natural Gas (MOPNG) The UJALA (Unnat Jyoti by Affordable LEDs for All) scheme (Option C) aims to promote energy efficiency by distributing LED bulbs at affordable prices. This initiative reduces energy consumption and lowers household electricity bills. It also contributes to environmental sustainability by cutting down carbon emissions. The Ministry of Power administers it. The PM Sahaj Bijli Har Ghar Yojana (PM Saubhagya scheme) (Option D) was initiated in September 2017 to provide electricity to every household by December 2018. The Ministry of Power administers it.





References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 670

https://www-india-gov-in.translate.goog/spotlight/pradhan-mantri-sahaj-bijli-har-ghar-yojana-saubhagya?_x_tr_sl=en&_x_tr_tl=hi&_x_tr_hl=hi&_x_tr_pto=tc

https://nihfw.ac.in/cms/committee--and-commission.php

https://pmuy.gov.in/about.html

Images:https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.deccanherald.com%2Ftags%2Fpradhan-mantri-ujjwala-yojana-scheme&psig=AOvVaw2nG0f3RwbbgbwCYSvyWm6n&ust=1719722551474000&source=images&cd=vfe&opi=89978449&ved=0CBQQjhxqFwoTCLDx6eaAgIcDFQAAAAAdAAAAABAJhttps://www.google.com/url?sa=i&url=https%3A%2F%2Fpm-yojana.in%2Fen%2Fujala-scheme&psig=AOvVaw1eckQ3StzjTMBIWQX9iXMi&ust=1719722091553000&source=images&cd=vfe&opi=89978449&ved=0CBQQjhxqFwoTCLi-p4z__4YDFQAAAAAdAAAAABAI

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which of the following is NOT a key activity under the Menstrual Hygiene Scheme? (Q840959)

A. Community-based health education and outreach to promote menstrual health.

B. Providing free school uniforms to adolescent girls.

C. Ensuring regular availability of sanitary napkins to adolescents.

D. Training of ASHA and nodal teachers in menstrual health.

Correct Answer: B. Providing free school uniforms to adolescent girls.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Menstrual Hygiene Scheme Objective : Promotion of menstrual hygiene among adolescent girls aged 10-19 years in rural areas. Aims: To ensure girls have adequate knowledge and information about menstrual hygiene. Provide access to high-quality sanitary napkins and safe disposal mechanisms. Key Activities: Community-Based Health Education and Outreach for Promoting menstrual health in the target population (Option A) . Availability of Sanitary Napkins regularly to adolescents (Option C) . Sourcing and Procuring sanitary napkins. Storage and Distribution of sanitary napkins to adolescent girls. Train ASHA and nodal teachers in menstrual health (Option D) . Implement safe disposal mechanisms for sanitary napkins.

References:

Park's Textbook of Preventive and Social Medicine, 27th ed Pg 533

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following statements is false regarding the Surakshit Matritva Aashwasan (SUMAN) scheme? (Q844361)

A. This program is under the Ministry of women and child development.

B. The scheme guarantees 18 specific services to its target groups.

C. The beneficiaries also include all sick neonates.

D. It is an initiative for zero preventable maternal and newborn deaths.

Correct Answer: A. This program is under the Ministry of women and child development.

Explanation: Surakshit Matritva Aashwasan (SUMAN) scheme is under the Ministry of health and family welfare. Launched in 2019. Initiative : Zero preventable maternal and newborn deaths. (Option D) Beneficiaries All pregnant women during the antenatal period. All women during delivery. All women up to 6 months post-delivery. All sick neonates. (Option C) Total number of services provided -18. (Option B) Service guarantee charter: Dignified, respectful, quality health care. Denial of services not tolerated. Ensure positive birth experience. Schemes under MWCD ICDS (Integrated Child Development Services) SABLA (Rajiv Gandhi Scheme for Empowerment of Adolescent Girls) PMMVY (Pradhan Mantri Matru Vandana Yojana) UJAWALA



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 522

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Which of the following is a false statement regarding Home-Based Newborn Care (HBNC) and Facility-Based Newborn Care (FBNC)? (Q846675)

A. HBNC involves home visits by ASHAs to identify complications and provide counseling, while FBNC provides specialized care for newborns at risk in healthcare facilities.

B. HBNC involves community-based interventions, including neonatal resuscitation and infection management, to stabilize newborns in the home before referral to higher facilities.

C. FBNC includes care for preterm infants and newborns requiring specialized services such as resuscitation and thermal protection in NICUs and SCBUs.

D. HBNC includes regular follow-up visits for sick newborns after hospital discharge to monitor recovery and ensure proper care.

Correct Answer: B. HBNC involves community-based interventions, including neonatal resuscitation and infection management, to stabilize newborns in the home before referral to higher facilities.

Explanation: HBNC involves community-based interventions, including neonatal resuscitation and infection management, to stabilize newborns in the home before referral to higher facilities. Home-Based Newborn Care (HBNC): Objective : To reduce neonatal and infant mortality by ensuring proper newborn care through community home visits.HBNC includes regular follow-up visits for sick newborns after hospital discharge to monitor recovery and ensure proper care. (Option D ruled out) Key Responsibilities : ASHAs visit mothers and newborns at specified intervals, providing counseling, identifying danger signs, and ensuring timely referrals to higher facilities if needed. (Option A ruled out) Visit Schedule : Institutional Deliveries : 6 visits (Days 3, 7, 14, 21, 28, 42). Home Deliveries : 7 visits (Days 1, 3, 7, 14, 21, 28, 42). Support : ASHAs are guided by ANMs (Auxiliary Nurse Midwives). Impact : Over 75% of neonatal deaths occur within the first 7 days. Early detection and referral via HBNC help reduce mortality. Over 40% of deaths happen within the first 24 hours, highlighting the need for early intervention. Key Components : Early Identification of complications like prematurity, low birth weight, and illness. Postpartum Counseling for mothers and referrals for sick newborns. Facility-Based Newborn Care (FBNC): Objective : To provide specialized care for newborns at risk of complications within healthcare facilities. Key Responsibilities : Neonatal Resuscitation , stabilization, and immediate care for newborns with complications such as asphyxia or infection. Thermal Protection and Feeding Support for preterm and low birth weight infants. Infection Prevention and ongoing monitoring for high-risk newborns. (Option C ruled out) Components of FBNC include : Newborn Care Corners (NBCCs) within delivery rooms for essential and life-saving care, including resuscitation Newborn Stabilization Units (NBSUs) located near maternity wards for short-term care of sick and low birth weight newborns Special Newborn Care Units (SNCUs) near labor rooms offering special care (excluding assisted ventilation and major surgery) for sick newborns. Impact : Timely interventions in facilities reduce neonatal mortality and prevent long-term disabilities. Early Identification of complications ensures better outcomes for newborns with birth asphyxia, infections, or other health risks.

References:

HBNC

FBNC

↑ *Back to this question in Part A*

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• [06_National Health Programs] 025 Nacp Global Initiatives

« Back to Folder Directory

[06_National Health Programs] 025 Nacp Global Initiatives — Quick Jump

Q1 (p. 1140) *Q2 (p. 1141)* *Q3 (p. 1142)* *Q4 (p. 1143)* *Q5 (p. 1144)* *Q6 (p. 1145)*
Q7 (p. 1145) *Q8 (p. 1147)* *Q9 (p. 1149)* *Q10 (p. 1150)* *Q11 (p. 1151)* *Q12 (p. 1152)*
Q13 (p. 1153) *Q14 (p. 1153)* *Q15 (p. 1154)*

Q1: Which of the following is NOT a part of the target adopted by UNAIDS to end the AIDS epidemic? (Q840692)

A. 95% of people living with HIV know their status.

B. 95% of people living with HIV receive antiretroviral therapy (ART).

C. 95% of people receiving ART show decreased viral load.

D. 95% of people living with HIV have access to experimental treatments

Correct Answer: D. 95% of people living with HIV have access to experimental treatments

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: 95% of people living with HIV to have access to experimental treatment is not a part of the targets adopted by UNAIDS. Target & Goal for 2025 by UNAIDS HIV Services 95-95-95 Testing and Treatment 95% know HIV status 95% on antiretroviral therapy 95% achieve viral suppression Women of Reproductive Age 95% have HIV and sexual/reproductive health needs met, 95% of pregnant/breastfeeding women achieve viral suppression, 95% of children tested People at Risk of HIV 95% use suitable, prioritized, effective prevention options Integration General Integration: Ensure 90% of individuals are linked to services for communicable/non-communicable diseases, violence, and mental health. TB and HIV Services Maternal and Newborn Care HPV Vaccination: Ensure 90% of school-aged girls in priority countries receive HPV vaccination and schistosomiasis screening/treatment. Sexual and Reproductive Health Services Social Enablers The 10-10-10 targets aim to eliminate social and legal barriers that hinder access to and utilization of HIV services. Fewer than 10% of countries maintain punitive laws and policies restricting access to services. Fewer than 10% of people living with HIV and key populations face stigma and discrimination. Fewer than 10% of women, girls, people living with HIV, and key populations experience gender inequality and violence. Achieve relevant SDG targets by 2030 95% of people living with HIV know their status (Option A): This is the first "95" of the 95-95-95 target. Goal: Ensure early diagnosis to initiate treatment and reduce transmission. This is a part of the UNAIDS target. 95% of people living with HIV receive antiretroviral therapy (ART)(Option B) : This is the second "95" . Once diagnosed, people should be promptly started on ART. This is a part of the UNAIDS target. 95% of people receiving ART show decreased viral load (Option C): This is the third "95". Goal: Achieve viral suppression to keep people healthy and prevent transmission. This is a part of the UNAIDS target.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no. 393-394.

https://www.unaids.org/sites/default/files/2025-AIDS-Targets_en.pdf - Page no. 10

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: According to the Sustainable Development Goals (SDGs), the aim is to end the HIV/AIDS epidemic by what year? (Q840693)

A. 2024

B. 2025

C. 2040

D. 2030

Correct Answer: D. 2030

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: According to the Sustainable Development Goals (SDGs), UNAIDS & UN aim to end the HIV/AIDS epidemic by 2030. Sustainable Development Goal (SDG): The Sustainable Development Goals (SDGs), adopted by the United Nations and UNDP in 2015, aim to eradicate poverty, ensure prosperity, and protect the planet by 2030. There are 17 goals, of which 1, 2, 3, 4, 5, 8, 10, 11, 16, and 17 are critical to ending the HIV/AIDS epidemic by 2030. In total, there are 17 goals and 169 targets. Goal no. 3: Direct health related goal Good health and wellbeing 13 targets: 3.1: ↓ MMR to < 70/1,00,000 live births 3.2: ↓ Neonatal mortality rate to 12/ 1000 live births & Reduce Under 5 mortality rate to 25/1000 LB 3.3: ↓ Communicable disease 3.4: ↓ Premature mortality due to NCDs by 33% 3.5: ↓ Addiction 3.6: ↓ RTA 3.7: Reproductive health 3.8: Universal Health Indirect health-related goals: Goal no 1, 2, 4, 5, and 6 India's National Strategic Plan for HIV/AIDS elimination aims for the year 2024 (Option A) . While this reflects a commitment to early action, it is not the global SDG target.



@Neet_pg_bot

References:

www.undp.org/sustainable-development-goals

www.unaids.org/sites/default/files/2025-AIDS-Targets_en.pdf - Pg 10

www.undp.org/turkiye/projects/sustainable-development-goals-investment-initiative

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: By 2024, what percentage reduction in new HIV infections does the National Strategic Plan for HIV/AIDS in India aim to achieve, using a 2010 baseline? (Q840696)

A. 75%

B. 90%

C. 80%

D. 95%

Correct Answer: C. 80%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The National Strategic Plan for HIV/AIDS in India aims to achieve an 80% reduction (using a 2010 baseline) in new HIV infections by 2024. National Strategic Plan for HIV/AIDS and STIs 2017-2024 implemented in India aims to achieve an "AIDS-free India" by providing universal coverage of HIV prevention, testing, and treatment. The plan sets a goal of zero new infections, zero AIDS-related deaths, and zero AIDS-related stigma and discrimination. 6 Key Objectives of the National Strategic Plan for HIV/AIDS in India (2017-2024) Objective Target Timeline Objective 1: Reduce new HIV infections 80% reduction (using a 2010 baseline) By 2024 Objective 2: Ensure people living with HIV (PLHIV) know their status 95% of estimated PLHIV know their HIV status By 2024 Objective 3: Ensure PLHIV have ART initiation and retention 95% of PLHIV have initiated and are retained on antiretroviral therapy (ART) By 2024 Objective 4: Eliminate mother-to-child transmission Eliminate mother-to-child transmission of HIV and syphilis By 2020 Objective 5: Eliminate HIV/AIDS-related stigma and discrimination Eliminate stigma and discrimination related to HIV/AIDS By 2020 Objective 6: Facilitate sustainable NACP service delivery Ensure the National AIDS Control Programme (NACP) service delivery is sustainable By 2024

References:

Park's Textbook of Preventive and Social Medicine, 27th edition Page no. 502-503.

https://naco.gov.in/sites/default/files/Paving%20the%20Way%20for%20an%20AIDS%2015122017.pdf

https://naco.gov.in/sites/default/files/NACP_V_Strategy_Booklet_0.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following types of surveillance is NOT used in India's National AIDS Control Programme to track and understand the HIV/AIDS epidemic? (Q840699)

A. Environmental Surveillance

B. Sentinel Surveillance

C. Behavioral Surveillance

D. Passive Surveillance

Correct Answer: A. Environmental Surveillance

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Environmental Surveillance is NOT typically used for HIV/AIDS. It focuses on monitoring factors in the environment that could influence disease transmission, which is not directly relevant to HIV/AIDS. Types of surveillance activities used in India to detect the spread of HIV: HIV Sentinel Surveillance HIV Sero-Surveillance AIDS Case Surveillance STD Surveillance Behavioral Surveillance Integration with Other Diseases

References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg no. 496.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: How frequently is Sentinel Surveillance for HIV conducted under the National AIDS Control Programme in India? (Q840701)

A. Annually

B. Biennial

C. Twice a year

D. Three times a year

Correct Answer: B. Biennial

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: HIV sentinel surveillance is conducted biennially, with the most recent surveillance in India done in 2021. HIV Sentinel Surveillance HIV sentinel surveillance tracks missing cases and monitors HIV infection trends in specific groups and regions to understand epidemic dynamics and guide public health interventions. Objectives Monitor HIV infection trends & emerging pockets of HIV infection. Estimate HIV prevalence in general population as well as high-risk groups and burden in the country and high-risk groups across states. Provide data for program evaluation and improvement. Key Features Focus on High-Risk Groups: Commercial sex workers (CSW), men who have sex with men (MSM), injecting drug users, transgender individuals, single male migrants, and long-distance truck drivers. Antenatal Women as Proxies: Includes data from antenatal women to estimate HIV prevalence in the general population. Specific Sample Size: Total sample size in India(from the 2016-2017 study) is 900, divided among CSWs (250), MSMs (250), and antenatal women (400). Sample size from 2021 study - 400 antenatal women. Key Uses Resource Allocation: Helps direct resources and interventions to the most affected areas and populations. Program Evaluation: Tracks trends to evaluate the effectiveness of HIV/AIDS control programs. Early Warning System: Acts as an early warning for emerging outbreaks or changes in transmission patterns. Frequency and Timing Conducted biennially, with the most recent surveillance in India done in 2021

References:

Parks Textbook of Preventive and Social Medicine 27e Page no. 496.

https://naco.gov.in/sites/default/files/HIV%20SENTINEL%20SURVEILLANCE_06_12_2017_0.pdf

https://naco.gov.in/sites/default/files/HIV%20Sentinel%20Surveillance%20Plus%202021.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following laboratory markers may be positive during the window period of HIV infection? (Q840704)

A. Gp41 antigen

B. P24 antigen

C. Beta-2 microglobulin (B2M)

D. Gp120 antigen

Correct Answer: B. P24 antigen

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: P24 antigen is a laboratory marker that tests positive in the window period of HIV infection. Laboratory investigations for HIV Screening tests ELISA screens for HIV antibodies (most sensitive) Confirmatory tests Western blot - A confirmatory test confirms specific antibodies against p24 and gp41 proteins. (highly specific) Confirmatory test for adults - qPCR for HIV1 Confirmatory tests of infants < 1 year - HIV DNA RT-PCR Virus Isolation Direct virus testing is not standard; HIV isolation from cultured lymphocytes is costly and resource-intensive. CD4 Lymphocyte Count Most reliable predictor of HIV progression; absolute count indicates immune system health, with <200 cells/µL signalling a high risk of AIDS-related infections. CD4 Lymphocyte Percentage Independent indicator of disease progression; <14% suggests a heightened risk of AIDS-related complications. HIV Viral Load Tests Measure actively replicating HIV in blood; correlate with disease progression and assess antiretroviral therapy effectiveness. Other Markers Beta-2 microglobulin (B2M) levels (Option C) and p24 antigen presence indicate immune activation and viral replication, aiding disease assessment. P24 antigen tests positive in the window period (Option B)

References:

Parks Textbook of Preventive and Social Medicine 27th edition, Pg 400 - 401

https://www.ncbi.nlm.nih.gov/books/NBK482145/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Match the following STI/RTI kits available at Suraksha clinics with their corresponding contents. Kit Color Contents 1. Grey A. Genital ulcers 2. Green B.

Inguinal bubo 3. White C. Urethral discharge, anorectal discharge, and cervicitis 4. Yellow D. Lower abdominal pain 5. Black E. Vaginitis (Q840711)

A. 1-C, 2-E, 3-A, 4-D, 5-B

B. 1-D, 2-A, 3-B, 4-C, 5-E

C. 1-E, 2-D, 3-C, 4-B, 5-A

D. 1-B, 2-C, 3-D, 4-A, 5-E

Correct Answer: A. 1-C, 2-E, 3-A, 4-D, 5-B

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Suraksha Clinics: Integrating STI/RTI Treatment and HIV/AIDS Control Government STI/RTI clinics, branded as "Suraksha Clinics," offer free standardized integrated STD and RTI treatment services at district-level and above healthcare facilities. Under National AIDS Control Program (NACP) Referral Centers STD Clinics at district, block, and First Referral Unit (FRU) levels act as referral centers for specialized treatment. Counselling and Condom Distribution Counselling services and high-quality condoms are provided to promote safer sexual practices. Utilizes the expertise of NGOs in providing counselling services at STD clinics. Training and strengthening existing centers Existing STD clinics in hospitals and medical colleges are strengthened with technical support, equipment, Training for medical staff to manage STDs/RTIs using a syndromic approach. Pre-packed STI/RTI Color-Coded Kits Free pre-packed kits provided to clinics, centrally procured and distributed through State AIDS Control Societies. Kit Colors and Conditions Kit 1 (Grey) Urethral discharge, anorectal discharge, and cervicitis Kit 2 (Green) Vaginitis Kit 3 (White) Genital ulcers Kit 4 (Blue) Genital ulcers Kit 5 (Red) Genital ulcers Kit 6 (Yellow) Lower abdominal pain Kit 7 (Black) Inguinal bubo



References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg 501

https://naco.gov.in/sti-rti-service

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following correctly describes the HIV diagnosis strategy for symptomatic and asymptomatic individuals? A. A single rapid test confirms HIV for both groups. B. Asymptomatic individuals need three reactive rapid tests at an SA-ICTC. C. Symptomatic individuals with discordant tests (1st + ve,2nd - ve) are retested after 14–28 days. D. Asymptomatic individuals with a reactive test are immediately considered HIV-positive. (Q840713)

A. A and C

B. B and D

C. B and C

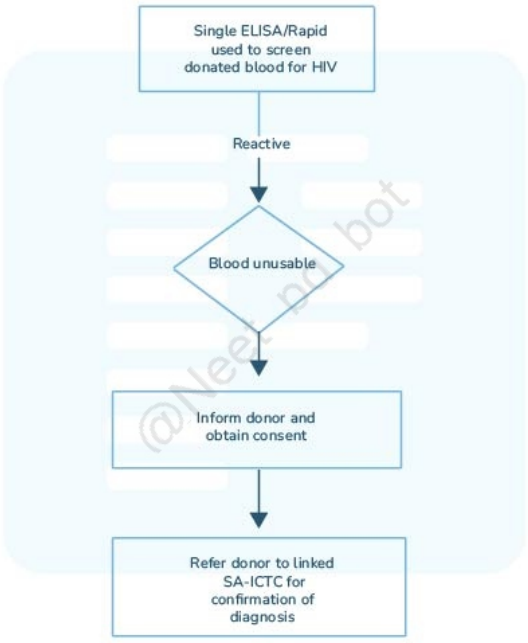
D. A and B

Correct Answer: C. B and C

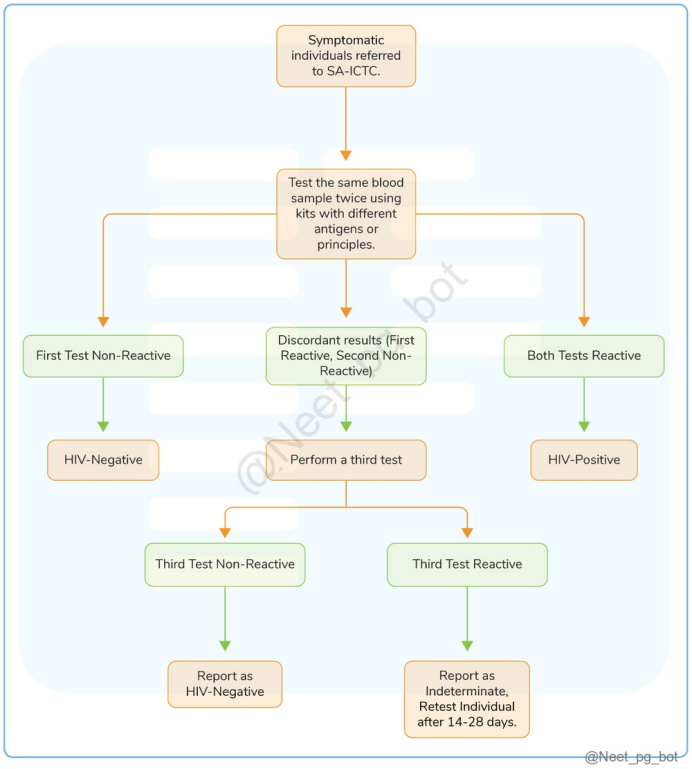
■ *Listen (English)*

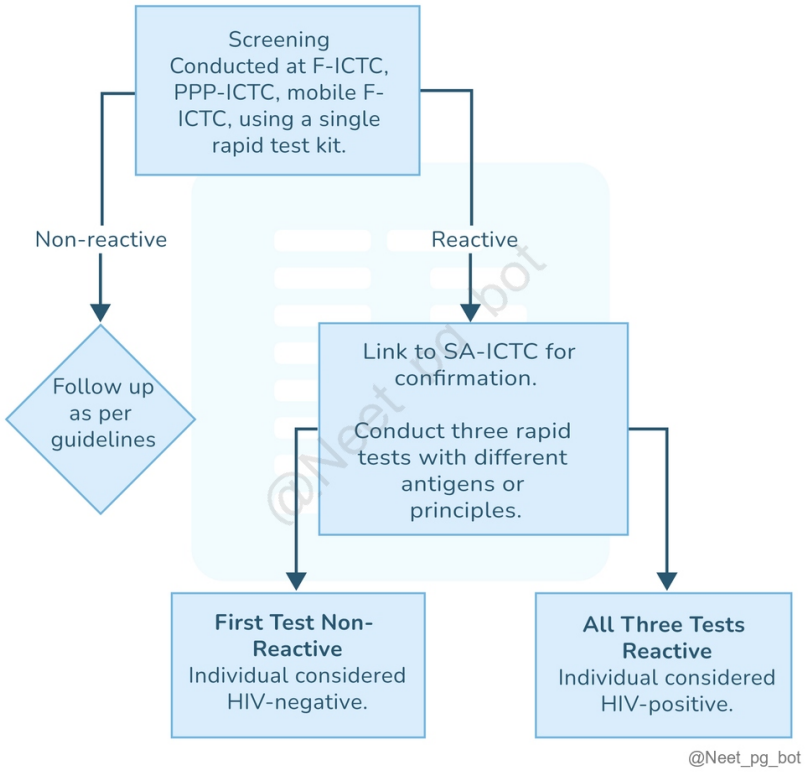
■ *Listen (Hindi)*

Explanation: Statement B: Asymptomatic individuals are tested with three rapid tests at an SA-ICTC, and a diagnosis is confirmed if all three tests are reactive. Statement C: Symptomatic individuals are retested after 14–28 days if the third test after a discordant result (first reactive, second non-reactive) is also reactive. Integrated Counselling and Testing Centres (ICTC) : These centres screen for HIV infection in multiple settings. Types of ICTC: Fixed ICTC: Standalone ICTC and Faculty ICTC Mobile ICTC Tests done in ICTC include: ELISA (most sensitive) Rapid test or spot test Guidelines for ICTC: For Blood transfusions For Symptomatic patients (vs Statement A) For Asymptomatic patients (vs Statement A&D)


Single ELISA/Rapid used to screen donated blood for HIV
Reactive
Blood unusable
Inform donor and obtain consent
Refer donor to linked SA-ICTC for confirmation of diagnosis

@Neet_pg_bot


Symptomatic individuals referred to SA-ICTC.
Test the same blood sample twice using kits with different antigens or principles.
First Test Non-Reactive
Discordant results (First Reactive, Second Non-Reactive)
Both Tests Reactive
HIV-Negative
Perform a third test
HIV-Positive
Third Test Non-Reactive
Third Test Reactive
Report as HIV-Negative
Report as Indeterminate, Retest Individual after 14-28 days.
@Neet_pg_bot



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no.: 497

https://naco.gov.in/sites/default/files/National%20HIV%20Counselling%20&%20Testing%20Services%20Guideline,%20Dec%202016_0.pdf - Page no. 66 to 69

↑ *Back to this question in Part A*

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Q9: A 32-year-old woman comes to her primary care physician for a routine check-up. As part of preventive care, the physician recommends several health screenings, including HIV testing. Which of the following describes the standard approach to HIV testing in this setting? (Q840719)

A. Opt-in testing.

B. Opt-out testing.

C. Both opt-in and opt-out testing.

D. Compulsory testing

Correct Answer: B. Opt-out testing.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: HIV testing is recommended as opt-out testing in routine health care settings . Under this strategy, the patient is informed that HIV testing will be performed as part of routine tests unless they decline. This increases uptake, reduces stigma, and normalizes HIV testing. HIV Testing Strategies Strategy Description Used in Opt-in testing (Option A) Patient is offered HIV test and must give explicit consent to be tested Common in older models and low-prevalence areas Opt-out testing (Option B) HIV testing is done as part of routine care unless the patient actively refuses Recommended by CDC, WHO for generalized testing Compulsory testing (Option D) HIV test is done without the patient's consent or knowledge (e.g., blood donation screening) Used in select public health or legal situations Both opt-in and opt-out (Option C) Not a formal strategy- rather a theoretical combination Not standardized or recommended together

References:

https://data.unaids.org/una-docs/hivtestingpolicy_en.pdf

https://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2023/november/20231129_new-research-on-opt-out-hiv-testing-england

↑ *Back to this question in Part A*

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Q10: A 32 Y/o HIV-positive woman has just delivered a healthy baby girl. The mother has been on ART throughout her pregnancy and has maintained an undetectable viral load. Which of the following medications should the newborn be started on? (Q840914)

A. Zidovudine

B. Tenofovir

C. Nevirapine

D. Efavirenz

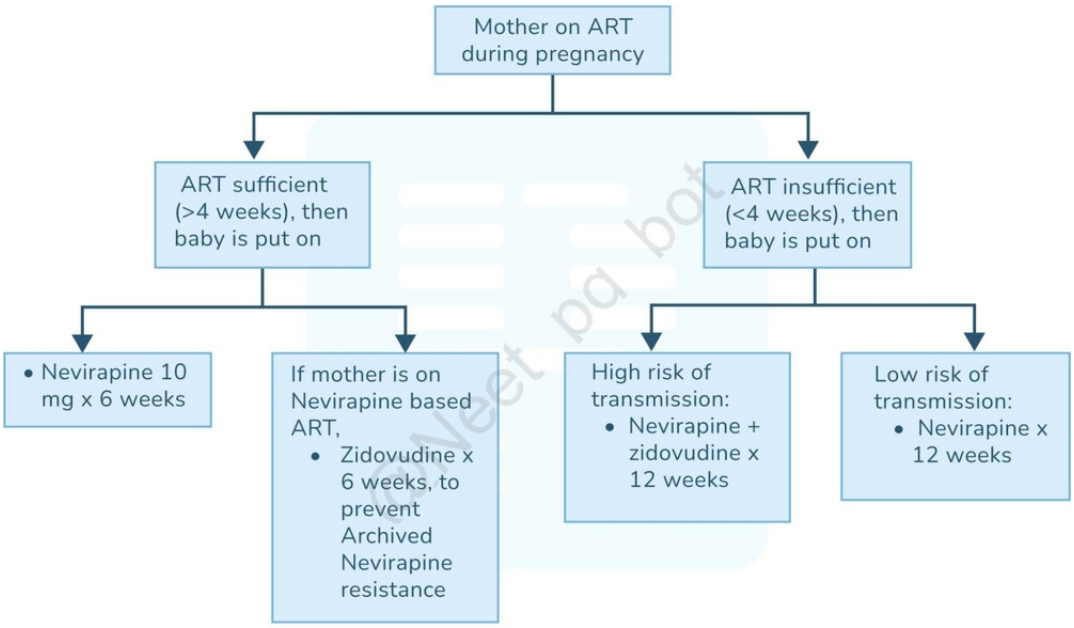
Correct Answer: C. Nevirapine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Nevirapine is the drug that must be started for a newborn born to an HIV-positive mother on ART right from the beginning of pregnancy. Prevention of Parent to Child Transmission of HIV (PPTCT): This

programme was launched in the year 2002 to decrease the risk of transmission of HIV from pregnant women to infants. Guideline for PPTCT: Early infant diagnosis (EID): HIV DNA RT-PCR is the IOC. If positive: ART is started immediately. If negative: Follow up every 6 months till 2 years of age.



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References:

Park's Textbook of Preventive and Social Medicine, 27th edition pg no: 498,

https://naco.gov.in/sites/default/files/National_Guidelines_for_PPTCT.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: A 30 Y/o HIV-positive woman has just given birth to a healthy baby girl. She is currently on antiretroviral therapy (ART) and has maintained an undetectable viral load throughout her pregnancy. Which of the following advice is given by her healthcare provider on the breastfeeding protocol? (Q840917)

A. Breastfeeding is contraindicated as the risk of transmission is high.

B. Breastfeeding is continued till 2 years of age if the newborn is positive for HIV.

C. If the mother forgets to take ART, formula feeds can be given.

D. Breastfeeding should only be initiated if the newborn is positive for HIV.

Correct Answer: B. Breastfeeding is continued till 2 years of age if the newborn is positive for HIV.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Breastfeeding protocol in HIV positive mother: Exclusive breastfeeding is recommended for the first six months for HIV-positive women. This applies whether the mother is on ART early or the infant receives ARV prophylaxis for 6 weeks. After six months, introduce complementary foods for other infants. Avoid mixed feeding at all costs (breast milk and other milk) during the first six months. If the infant tests HIV-negative, continue breastfeeding until 12 months If the infant is HIV-positive, continue breastfeeding until 2 years old.

References:

https://naco.gov.in/sites/default/files/National_Guidelines_for_PPTCT.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: A 30 Y/o healthcare worker accidentally suffers a needlestick injury while drawing blood from a patient known to be HIV-positive. Which of the following medications should be immediately started for the healthcare worker? (Q840919)

A. Sulfamethoxazole + Trimethoprim

B. Isoniazid + Pyridoxine

C. Zidovudine

D. Tenofovir + Lamivudine + Dolutegravir

Correct Answer: D. Tenofovir + Lamivudine + Dolutegravir

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Post-exposure prophylaxis (PEP) for HIV: PEP should be offered to individuals who may have been exposed to HIV through occupational exposure (e.g., healthcare workers) or sexual assault. The decision of whether or not to offer PEP is based on the type of exposure and the HIV status of the source. PEP should be started immediately after exposure, preferably within 72 hours. Treatment regimen: Tenofovir + Lamivudine + Dolutegravir (Option D) Once daily for 28 days Best if initiated within 2 hours, but can be given up to 72 hours. Sulfamethoxazole + Trimethoprim (Option A) is given as prophylaxis against opportunistic infection in patients with CD4+ cells < 200. Isoniazid + Pyridoxine (Option B) is given as prophylaxis against tuberculosis. Zidovudine (Option C) , a NRTI, as a single agent, is not used for prophylaxis against HIV.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg no 405

https://naco.gov.in/sites/default/files/National_Guidelines_for_HIV_Care_and_Treatment_2021.pdf

https://www.naco.gov.in/sites/default/files/RevisedGuidelinesforPostExposureProphylaxis(PEP)forHIV.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following statements regarding the prophylaxis of Pneumocystis jirovecii in people living with HIV (PLHIV) is false? (Q844360)

A. Cotrimoxazole Preventive Therapy is started when a patient's CD4 count < 350/mm³.

B. Administer one double strength tablet, containing 800 mg Sulfamethoxazole and 160 mg Trimethoprim.

C. Cotrimoxazole Preventive Therapy is initiated based on the presence of clinical symptoms of Pneumocystis pneumonia, regardless of the patient’s CD4 count.

D. The therapy is stopped when CD4 count >350/mm³ on 2 separate measurements taken 6 months apart

Correct Answer: C. Cotrimoxazole Preventive Therapy is initiated based on the presence of clinical symptoms of Pneumocystis pneumonia, regardless of the patient’s CD4 count.

Explanation: Cotrimoxazole Preventive Therapy (CPT) is used to prevent opportunistic infections such as Pneumocystis jirovecii in HIV-positive patients. The therapy consists of one double strength tablet containing 800 mg of Sulfamethoxazole and 160 mg of Trimethoprim. (Option B) CPT is initiated when the CD4 count is below 350/mm³. (Option A) The therapy is stopped when the CD4 count is above 350/mm³ on two separate measurements taken six months apart, provided there are no WHO stage 3 or 4 conditions. (Option D)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg no 500.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A 26-year-old male presents with anorectal pain, itching, and discharge. On further enquiry, there is history of receptive anal intercourse and use of sex toys with his partner. Examination showed mucoid discharge. Which of the following kits will be used in the management of this condition? (Q849240)

A. Black

B. Grey

C. Brown

D. Yellow

Correct Answer: C. Brown

Explanation: The given clinical scenario of a patient with anorectal pain, itching, mucoid discharge, receptive anal intercourse, and use of sex toys suggests anorectal discharge syndrome. It is managed with brown kit. In 2024, a new brown kit (kit 8) was introduced for syndromic management of anorectal discharge, under the NACP. Previously, there were only 7 kits for STI treatment and anorectal discharge was managed with kit 1 (grey colour). Brown kit: Tab. Cefixime 800 mg stat. Tab. Doxycycline 100 mg (14 capsules as twice/day dose for 7 days). Anorectal discharge syndrome: It is common among individuals who engage in receptive anal intercourse. A few examples of high-risk sexual behavior associated with anorectal infections are: Receptive anal sex. Oro-anal sex (anilingus or rimming). Fisting (inserting a hand into the rectum). Fingering (touching another's genitals or anus using fingers or digital-anal penetration). Nudging (unprotected penile-anal external contact without penetration). Dipping (partly inserting or briefly inserting the penis into the anus without a condom, followed by immediate withdrawal). Sharing sex toys. Causative organisms Proctitis: Neisseria gonorrhoeae, Chlamydia trachomatis, M. genitalium, and HSV. Proctocolitis: Shigella, Campylobacter, Salmonella, cytomegalovirus and amoebiasis. Clinical presentations Anorectal pain, itching, discharge, and bleeding. Sensation of rectal fullness. Tenesmus (difficulty in passing stools). Mucus streaking of stools. Examination findings Before examining the patient, establish that the person engages in receptive anal sex. Visual examination may reveal ulcers, excoriations, vesicles, and discharge. Digital rectal and anoscopic examination should not be carried out if the client has painful perianal/anal disease such as herpetic ulcers, fissures, or hemorrhoids. May demonstrate bloody, mucoid and/or purulent discharge.

References:

https://naco.gov.in/sites/default/files/National%20Technical%20Guidelines%20on%20STI%20and%20RTI_Final.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Regarding HIV pre-exposure prophylaxis (PrEP), which of the following statements are correct? The recommended drug combination is Tenofovir + Emtricitabine. PrEP is indicated for HIV-positive individuals to prevent disease progression. PrEP is recommended for men who have sex with men (MSM), sex workers, and injection drug users at high risk. PrEP should be considered for HIV-negative individuals with an HIV-positive sexual partner. (Q876250)

A. 1, 2, and 3

B. 1, 3, and 4

C. 2 and 3

D. 1 and 2

Correct Answer: B. 1, 3, and 4

Explanation: Correct Option B - 1, 3, and 4: PrEP is given to HIV-negative individuals at substantial risk of infection — such as MSM, sex workers, injection drug users, and those with HIV-positive partners. The recommended regimen is Tenofovir + Emtricitabine taken once daily. It is not used for treating HIV-positive individuals.

↑ *Back to this question in Part A*

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• [06_National Health Programs] 026 National Tb Elimination Program Ntep

« Back to Folder Directory

[06_National Health Programs] 026 National Tb Elimination Program Ntep — Quick Jump

Q1 (p. 1156)	*Q2 (p. 1157)*	*Q3 (p. 1158)*	*Q4 (p. 1158)*	*Q5 (p. 1159)*	*Q6 (p. 1160)*
Q7 (p. 1161)	*Q8 (p. 1164)*	*Q9 (p. 1165)*	*Q10 (p. 1166)*	*Q11 (p. 1168)*	*Q12 (p. 1169)*
Q13 (p. 1170)	*Q14 (p. 1171)*	*Q15 (p. 1172)*	*Q16 (p. 1172)*	*Q17 (p. 1173)*	*Q18 (p. 1174)*
Q19 (p. 1175)	*Q20 (p. 1176)*	*Q21 (p. 1177)*	*Q22 (p. 1177)*		

Q1: A 30 year old female came with complaints of evening rise of temperature, night sweats, cough and blood in sputum for the past 5 weeks. The doctor suspects TB and orders Sputum AFB, CBNAAT, and chest X-ray for the patient. All of the tests come out positive confirming her diagnosis of TB. The CBNAAT shows she is resistant to rifampicin but sensitive to isoniazid on first-line LPA. Which of the following would be the most appropriate treatment regimen for her? (Q840545)

A. 18 months:BDQC■L■ (Bdq-Bedaquiline, C-Cycloserine, C-Clofazimine, L-Linezolid, L-Levofloxacin).

B. 6■month all-oral regimen for RR-TB: Bedaquiline + Delamanid + Linezolid + Levofloxacin + Clofazimine (BDLLfxC)

C. 2 months : HRZE (H-Isoniazide, R- Rifampicin, Z-Pyrazinamide, E-Ethambutol) 4 months: HRE (H-Isoniazide, R- Rifampicin, E-Ethambutol)

D. 6 months: ZERO (Z-Pyrazinamide, E-Ethambutol, R-Rifampicin, O-Levofloxacin).

Correct Answer: B. 6■month all-oral regimen for RR-TB: Bedaquiline + Delamanid + Linezolid + Levofloxacin + Clofazimine (BDLLfxC)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Treatment choice according to 2025 guidelines 2025 WHO and Indian NTEP guidelines recommend shorter, all-oral regimens for RR/MDR-TB. The 6■month BDLLfxC regimen consists of: Bedaquiline (BDQ) – bactericidal, core drug for RR/MDR-TB Delamanid (DLM) – second-line bactericidal drug Linezolid (LZD) – potent companion drug Levofloxacin (Lfx) – fluoroquinolone Clofazimine (Cfz) – companion drug 18 months BDQC■L■ (Option A): Long, older regimen; less preferred per 2025 guidelines. 2 months HRZE + 4 months HRE (Option C): First-line regimen; ineffective in RR-TB . 6 months ZERO (Z, E, R, O) (Option D): Not a

standard regimen; contains Rifampicin , which patient is resistant to.

References:

Park's Textbook of Preventive and Social Medicine, 27th ed. Pg 225

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A 35 year old HIV-positive patient presents with clinical features of persistent cough, night sweats, fever, and weight loss. A chest X-ray shows upper lobe infiltrates and sputum tests are positive for acid-fast bacilli (AFB). What is the next step in management? (Q845078)

A. Start antitubercular therapy (ATT) immediately and antiretroviral therapy (ART) 2 weeks later.

B. Start ART immediately and defer ATT until HIV is controlled.

C. Start ATT and ART simultaneously.

D. Delay ATT and ART until the CD4 count is above 200 cells/mm³.

Correct Answer: A. Start antitubercular therapy (ATT) immediately and antiretroviral therapy (ART) 2 weeks later.

Explanation: This is appropriate as initiating ATT promptly is crucial for managing TB. Delaying ART for 2 weeks helps reduce the risk of immune reconstitution inflammatory syndrome (IRIS) , which can occur if ART is started too soon. Immune Reconstitution Inflammatory Syndrome (IRIS): IRIS is a condition that can occur in HIV-positive patients shortly after starting ART. As the immune system recovers, it can mount an exaggerated inflammatory response to previously acquired opportunistic infections, such as TB. This can lead to worsening symptoms and complications, including fever, respiratory distress, and even increased mortality. By delaying ART for a short period after starting ATT, the risk of IRIS can be minimized, allowing the patient to stabilize with effective TB treatment before their immune system is fully reconstituted. Start ART immediately and defer ATT until HIV is controlled (Option B): This could worsen the TB condition due to delayed ATT, leading to disease progression. Start ATT and ART simultaneously (Option C): Starting both therapies simultaneously increases the risk of IRIS. Delay ATT and ART until the CD4 count is above 200 cells/mm³ (Option D): This approach is contraindicated, as immediate treatment for active TB is critical, irrespective of CD4 count. Delaying treatment puts the patient at risk for worsening TB disease.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 235.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Match the following based on the correct explanation given Category Description 1. Monoresistant TB A. Resistant to both Rifampicin (R) & Isoniazid (H). 2. Multidrug resistant TB B. Resistant to 2 drugs other than Rifampicin (R) & Isoniazid (H). 3. Extensive drug resistant TB C. Any MDR patient (H+R) resistant to any fluoroquinolone and Group 4 drugs (Bedaquiline, Linezolid, Levo/Moxifloxacin). 4. Polydrug resistant TB D. Resistant to one 1st line anti-TB drug only (Q844358)

A. 1-A , 2-B , 3-C , 4-D

B. 1-D , 2-A , 3-B , 4-C

C. 1-D , 2-A , 3-C , 4-B

D. 1-C , 2-B , 3-A , 4-D

Correct Answer: C. 1-D , 2-A , 3-C , 4-B

Explanation: Classification of TB patient based on drug testing Category Description Drug sensitive TB Patients are sensitive to 4 TB drugs: H, R, Z, E (Isoniazid, Rifampicin, Pyrazinamide, Ethambutol). Mono-resistant (MR) Resistant to one 1st line anti-TB drug only. H-Mono-resistant (H-MR) Resistant to Isoniazid (H) only. Rifampicin resistant (RR) Resistant to Rifampicin (R) only. Multi drug resistant (MDR) Resistant to both Rifampicin (R) & Isoniazid (H). Poly-Drug resistant (PDR) Resistant to 2 drugs other than Rifampicin (R) & Isoniazid (H). Pre-Xtensive resistant (pre-XDR) Any MDR patient (H+R) resistant to any fluoroquinolone. Extensive resistant (XDR) Any MDR patient (H+R) resistant to any fluoroquinolone and Group 4 drugs (Bedaquiline, Linezolid, Levo/Moxifloxacin).

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 211

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: According to the NTEP guidelines, what population size does each Tuberculosis Unit (TU) cover? (Q840575)

A. 1 per 50,000 in rural/urban areas and 1 per 25,000 in hilly/tribal areas

B. 1 per 100,000 in rural/urban areas and 1 per 50,000 in hilly/tribal areas

C. 1 per 200,000 in rural/urban areas and 1 per 100,000 in hilly/tribal areas

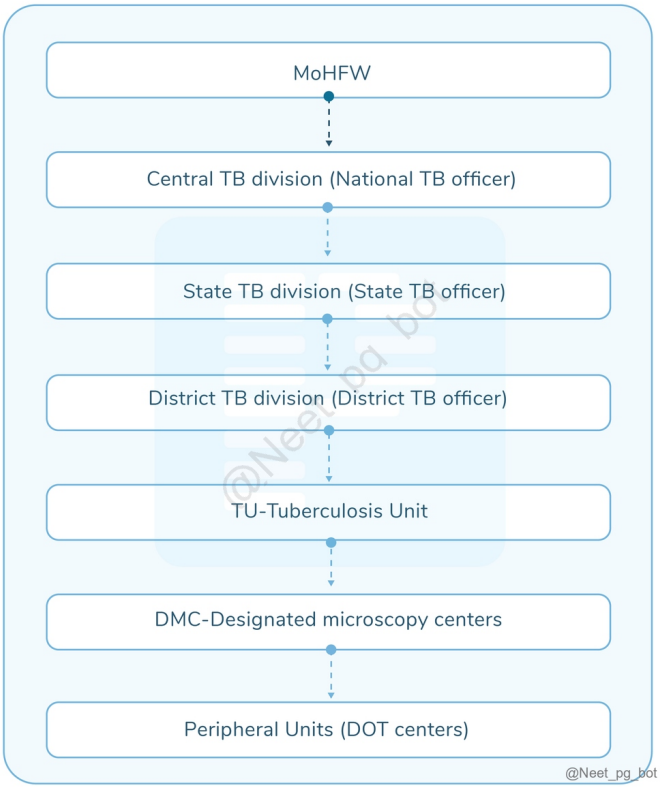
D. 1 per 300,000 in rural/urban areas and 1 per 150,000 in hilly/tribal areas

Correct Answer: C. 1 per 200,000 in rural/urban areas and 1 per 100,000 in hilly/tribal areas

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: TB Unit: The TU is the nodal point for TB control activities in the sub-district- at CHC level Covers a population of 200,000 (1.5 – 2.5 lakh) in urban/rural areas and 100,000 (0.75 – 1.25 lakh) in hilly/tribal/difficult areas. Each TU includes a Medical Officer-TB Control (MO-TC) and a Senior Treatment Supervisor (STS). Extra staff are provided based on TB case load. Each TU has a Designated Microscopy Centre (DMC)(most peripheral unit to diagnose Tb) for every 50,000 - 100,000 population, expanding to PHCs and various hospitals for wider coverage. Organizational/ Structural Setup:



References:

ntep.in/node/366/CP-organizational-structure-ntep#

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which initiative in India focuses on supporting District Drug Resistant TB Centres (DDR -TC) in management of drug-resistant tuberculosis (TB)? (Q840571)

A. Indian TB Genomic Surveillance Consortium

B. DT3 Centers

C. Dare2eraD TB (2022)

D. TRACE-TB Project

Correct Answer: B. DT3 Centers

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: DT3C - Difficult to Treat TB Centers , are specialized facilities at State/National level - established under the NTEP in India. Initiative to support District and Nodal Drug-resistant TB Centres (DR-TBCs) for effective management of Drug-resistant TB (DR-TB) cases. The DR-TBC shares patient queries in a standardized format ahead of time to enable discussion through state nodal officer. The primary goal of D3T centers is to improve treatment outcomes for challenging TB cases and to reduce the spread of drug-resistant TB within communities. "Dare2eraD TB" - Data-Driven Research to Eradicate TB (Option C): It is an umbrella program introduced by the Department of Biotechnology (DBT) on World TB Day, March 24, 2022. It comprises following initiatives: Indian Tuberculosis Genomic Surveillance Consortium - InTGS (Option A) To track genomic variations in M. tuberculosis across a network of multiple laboratories. Indian TB Knowledge Hub- Webinar Series - InTBK Hub Researching therapies that target host responses against TB and establishing an evidence-based regimen for treating extra-pulmonary tuberculosis. TRACE-TB Project (Option D): "Transformative Research and Artificial Intelligence Capacity for Elimination of TB and Responding to Infectious Diseases." It is an initiative aimed at utilizing artificial intelligence and transformative research to improve the detection, treatment, and management of tuberculosis (TB) and other infectious diseases. Done by Wadhwani AI in partnership with USAID to support the NTEP.

References:

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dbtindia.gov.in/sites/default/files/Dare2eraD%20TB.pdf

www.wadhwaniai.org/wp-content/uploads/2021/10/1_NTEP_reportV11_020721.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: When is World Tuberculosis (TB) Day observed, and what is the theme for 2024? (Q840570)

A. March 24; "Invest to End TB. Save Lives."

B. March 24; "Yes! We Can End TB."

C. April 24; "The Clock is Ticking."

D. April 24; "Unite to End TB."

Correct Answer: B. March 24; "Yes! We Can End TB."

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: World Tuberculosis (TB) Day Date: March 24th of every year Theme for 2024: "Yes! We can end TB." Purpose: World TB Day raises awareness about tuberculosis globally. It highlights progress in prevention, treatment, and control efforts while advocating for continued action to eliminate TB worldwide. The theme underscores the importance of investing in research, healthcare infrastructure, and public health strategies to achieve the goal of ending TB as a public health threat.

References:

www.who.int/europe/news-room/events/item/2024/03/24/default-calendar/world-tb-day-2024#:~:text=World%20Tuberculosis%20(TB)%20Day%2C,We%20can%20end%20TB%E2%80%9D.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which technology-based initiative has been implemented by the Indian government to track and manage tuberculosis (TB) cases? (Q840567)

A. Swasthya Sathi

B. eVIN

C. Nikshay

D. Aarogya Setu

Correct Answer: C. Nikshay

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Nikshay is the technology based initiative launched by GoI to track and manage TB cases. NI-KSHAY (Ni=End, Kshay=TB): Web-based TB patient management system under the National Tuberculosis Elimination Programme (NTEP). Used to register TB cases, order lab tests, record treatment details, monitor treatment adherence, transfer cases between providers. Acts as the National TB Surveillance System, reporting data to the government. Used by Health workers in both public and private sectors nationwide. Other Technology based initiatives for TB: TRUENAT: Rapid molecular diagnostic tool developed locally This platform employs real-time PCR integrated into micro-PCR chips Truenat MTB and Truenat MTB Plus - detect Mycobacterium tuberculosis bacteria for TB diagnosis Truenat MTB-RIF Dx - identifies resistance to rifampicin. 99DOTS: A cost-effective method to monitor and improve adherence to TB medication. Anti-TB blister packs are wrapped in envelopes with hidden toll free phone numbers revealed only when doses are dispensed. Patients make a call to the hidden number after taking their medication, confirming dose intake. MERM (Medication Event Reminder Monitor): An electronic device designed to enhance TB medication adherence by providing reminders and tracking medication intake. Reminders: Issues audio reminders to patients to take their TB medication. Monitoring: Records the date and time when the medication box is opened, allowing for accurate tracking of adherence. Swasthya Sathi (Option A): Launched by the Chief Minister of West Bengal. Provides health coverage up to Rs. 5 lakh per family annually for secondary and tertiary care. {{caption_text}} The eVIN (Electronic Vaccine Intelligence Network) (Option B) initiative is designed to deliver real-time updates on vaccine inventory levels, distribution, and storage conditions across all cold chain locations within the country. {{caption_text}} Aarogya Setu (Option D) is a mobile application developed by the GoI to track and mitigate the spread of COVID-19 by providing users with information on their risk of infection based on their location and contact history.





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References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: What is the monthly financial incentive provided under the Nikshay Poshan Yojana for TB patients to support their nutritional needs? (Q840564)

A. Rs 300

B. Rs 500

C. Rs 750

D. Rs 1000

Correct Answer: D. Rs 1000

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Nikshay Poshan Yojana is a scheme for TB patients by the MoHFW, GOI Monthly amount: TB patients receive financial assistance of ■1,000 per month. Objective: This scheme provides nutritional support during TB treatment, which plays a vital role in the cure. DOTS provider Anyone can act as a DOTS provider, except the patient's own parents DOTS provider On successful treatment completion of new and previously treated TB patients, ■1000 is given On successful treatment completion of MDR and XDR TB patient, ■5000 is given At the end of the IP phase, ■2000 is given At the end of the CP phase, ■3000 is given Private practitioners Total incentive ■1000 On notifying a case of TB: Rs 500 is given On treatment completion: ■500 is given A private practitioner should notify a case of TB within 30 days of starting treatment to the district TB officer Failure to notify is a punishable offence Fine ■10,000

References:

tbcindia.gov.in/WriteReadData/l892s/6851513623Nutrition%20support%20DBT%20Scheme%20details.pdf

tbcindia.gov.in/WriteReadData/l892s/23294204DBTManualForNTEP.pdf

↑ *Back to this question in Part A*

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Q9: You diagnose a 35 year old man with tuberculosis. Further questioning his social history reveals that he lives with his elderly parents and wife in a seemingly small apartment. Which of the following would you recommend as prophylactic treatment for his family members? (Q840561)

A. Isoniazid (600mg OD) for 6 months

B. Shorter TPT (TB Preventive Therapy) - Rifapentine + Isoniazid weekly for 3 months

C. Pyrizinamide (800mg OD) for 3 months.

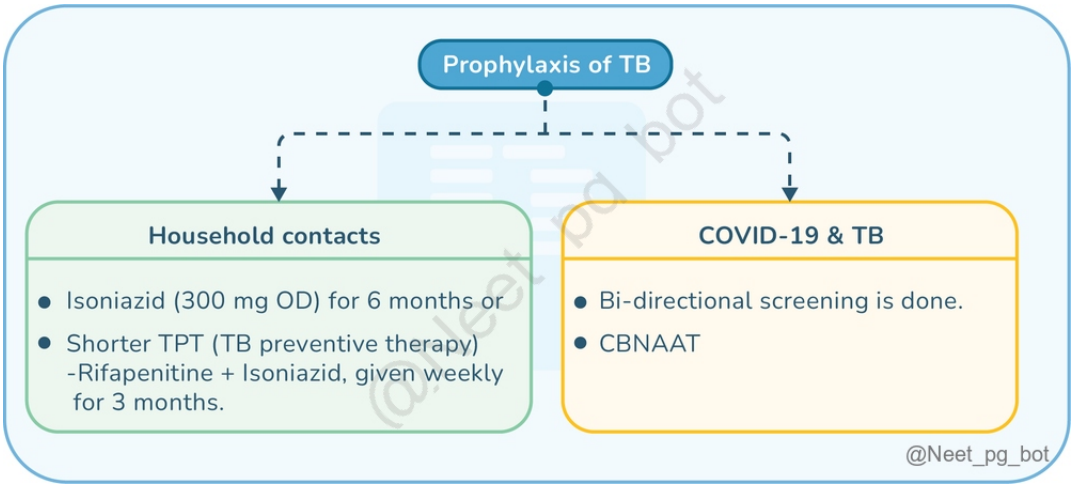
D. Rifampicin (1500mg OD) for 9 months.

Correct Answer: B. Shorter TPT (TB Preventive Therapy) - Rifapentine + Isoniazid weekly for 3 months

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Close household contacts of a patient with active tuberculosis are at high risk of developing TB, especially elderly and immunocompromised individuals. TB Preventive Therapy (TPT) is recommended for these contacts after ruling out active disease. Short-course regimens such as weekly Rifapentine + Isoniazid for 3 months (3HP) are WHO-endorsed , effective, and improve compliance. Particularly beneficial in resource-limited and high-burden settings due to shorter duration and fewer side effects. TB Preventive Therapy (TPT) Options Regimen Drugs Used Duration Target Groups Notes 3HP Isoniazid + Rifapentine (weekly) 3 months Adults and children >2 years, PLHIV, household contacts WHO-recommended; shorter duration improves adherence 6H Isoniazid daily 6 months All age groups, including children and PLHIV Traditional regimen; effective but lower adherence due to long duration 3HR Isoniazid + Rifampicin daily 3 months Children <15 years, PLHIV, household contacts WHO-recommended; safe for children 4R Rifampicin daily 4 months Individuals intolerant to INH, or where INH resistance is suspected Alternative regimen when INH is contraindicated Isoniazid (600 mg OD) for 6 months (Option A): Correct regimen (6H) but longer duration and more hepatotoxicity; 3HP is preferred. Pyrizinamide (800 mg OD) for 3 months (Option C): Incorrect. Pyrazinamide is not used in TPT due to significant hepatotoxicity and lack of preventive efficacy when used alone. Rifampicin (1500 mg OD) for 9 months (Option D): Incorrect. 9 months of Rifampicin monotherapy is not a standard TPT regimen; usual Rifampicin-only TPT is 4 months (4R) .



References:

www.who.int/docs/default-source/campaigns-and-initiatives/world-tb-day-2020/5-faqs-tb-preventive-treatment.pdf?sfvrsn=d633097e_2

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A 25 year old woman, who is 18 weeks pregnant, is diagnosed with MDR-TB. She comes to you for advice on how to proceed with her pregnancy and treatment. What is the most appropriate management plan for this patient? (Q840560)

A. Start the Shorter oral Bedaquiline regimen immediately and continue the pregnancy.

B. Advise Medical Termination of Pregnancy (MTP) and if done, start the Shorter oral Bedaquiline regimen.

C. Start the Longer oral Bedaquiline regimen immediately and continue the pregnancy.

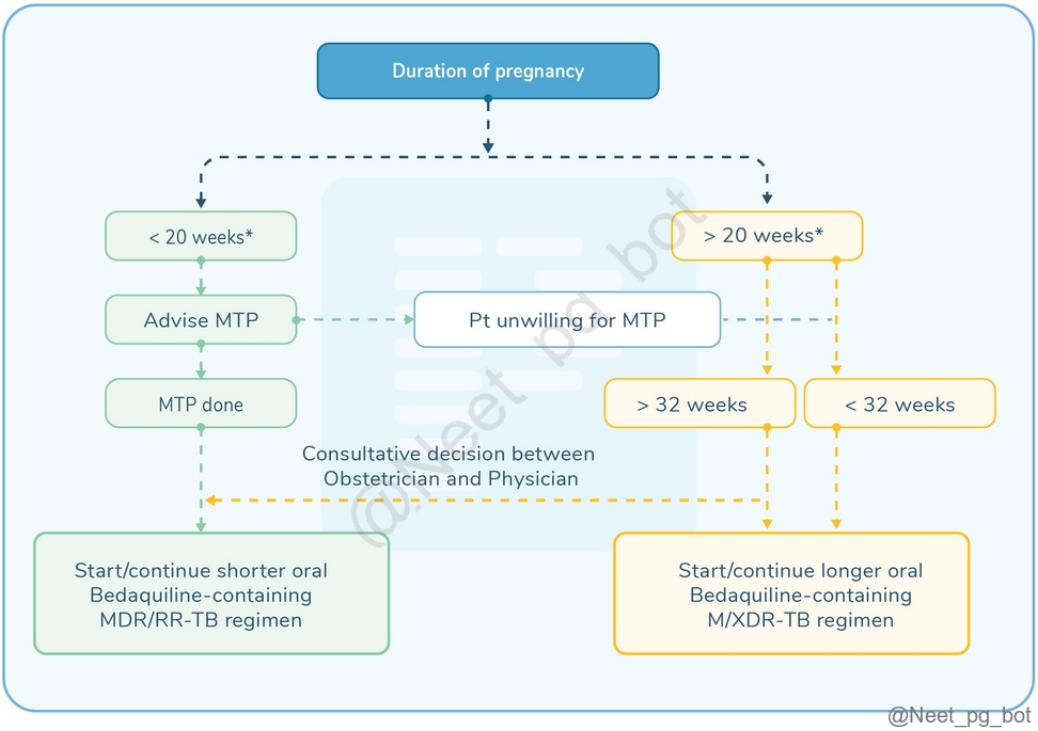
D. Continue the pregnancy without initiating any TB treatment until the second trimester.

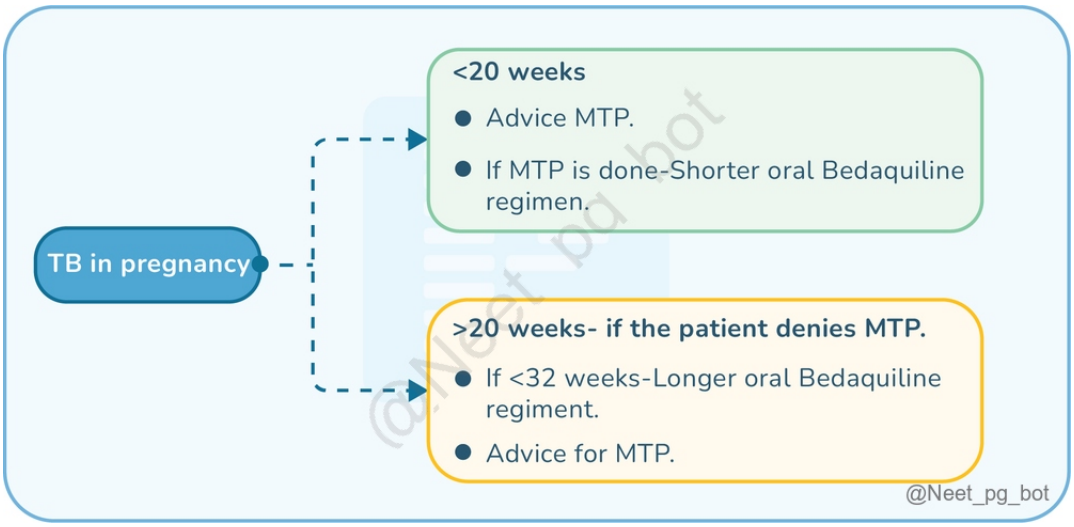
Correct Answer: B. Advise Medical Termination of Pregnancy (MTP) and if done, start the Shorter oral Bedaquiline regimen.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The guidelines suggest advising MTP for pregnant mothers who are less than 20 weeks pregnant (due to significant risk to both mother & fetus) and, if MTP is performed, the Shorter oral Bedaquiline regimen should be given. Starting the Shorter oral Bedaquiline regimen and continuing the pregnancy is not advised for a woman who is less than 20 weeks pregnant according to the guidelines given by MoHFW, Govt. of India. (Option A) The Longer oral Bedaquiline regimen is suggested for those who are more than 20 weeks pregnant and less than 32 weeks if MTP is declined. This patient is only 18 weeks pregnant. (Option C) Delaying TB treatment is not appropriate due to the risk of disease progression and harm to both mother and fetus. (Option D)





References:

Management of Drug Resistant TB in pregnancy - MoHFW Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 230

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following is false regarding the BPaL regimen used in the treatment of tuberculosis? (Q840548)

A. It was first studied clinically in the Nix-TB trial conducted by WHO

B. It can be used in patients with XDR-TB

C. It is used to treat MDR-TB patients who are unresponsive to treatment

D. It is used only in Rifampicin-resistant TB

Correct Answer: D. It is used only in Rifampicin-resistant TB

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: BPaLM regimen is a 6-month, all-oral, four-drug combination (Bedaquiline, Pretomanid, Linezolid, and Moxifloxacin), used to treat multidrug-resistant tuberculosis (MDR-TB). It was first studied clinically in the Phase 3 Nix-TB Trial conducted by WHO in 2022 (Option A) . It was Adopted by MOHFW (Ministry of health and family welfare) in 2024 Nix-TB participants with XDR-TB (Option B) and treatment-intolerant or nonresponsive MDR-TB (Option C) were enrolled for treatment with the BPaL regimen. Dosage: B - B edaquiline 400mg once daily for 2weeks, then 200mg 3 times per week afterwards, or 200mg once daily for 8 weeks, then

100 mg daily P - P retomanid (200mg OD) L - L inezolid (600mg OD) M - M oxifloxacin (400mg OD) Side Effects: Linezolid: Anemia, thrombocytopenia, optic neuritis, peripheral neuritis Pretomanid: C/I in pregnant and lactating women hypothyroidism Bedaquiline: Cardiac conduction disorders, hypokalaemia For rifampicin-only resistant cases, the shorter oral bedaquiline-containing regimen is used (Option D) .

References:

www.tballiance.org/portfolio/regimen/bpal

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 224

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following statements is true regarding global initiative to control TB ? (Q840533)

A. To eliminate TB by 2050 under the End TB initiative.

B. To reduce mortality of TB by 80% under Sustainable Development Goals

C. To reduce mortality & incidence of TB by 30% under the Stop TB initiative

D. To reduce incidence of TB by 80% under Sustainable Development Goals

Correct Answer: D. To reduce incidence of TB by 80% under Sustainable Development Goals

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: SUSTAINABLE DEVELOPMENT GOAL (SDG) TO CONTROL TB Aim: To eliminate TB by 2030. Target: Set by WHO To reduce mortality of TB by 90% (Option B) . To reduce incidence of TB by 80% (Option D) . Global targets under SDG: To reach 90% of all people with TB. To reach 90% of all key populations (Slum dwellers, prisoners, difficult to reach, occupational exposures-silicosis). To achieve 90% treatment. END TB Launched by WHO in 2015. Frameline: 2015 - 2035 Aim: Eliminate TB by 2035 (Option A) Target: 95-90-0 Reduce mortality of TB by 95% Reduce incidence of TB by 90% Zero out of pocket expenditure - Government should look after the treatment. STOP TB It was in alignment with Millennium development goals. Target: To reduce mortality & incidence of TB by 50% (Option C) And eliminate TB by 2050.



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 237, 238

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: How many weight band categories are present in the Daily Drug Regimen (DDR) for the treatment of tuberculosis in adults? (Q840543)

A. Five

B. Six

C. Three

D. Four

Correct Answer: A. Five

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The adult tuberculosis protocols often categorize patients into weight bands to adjust medication dosages appropriately. There are 5 weight band categories present in the treatment of adult TB. Advantages of weight bands: Increased compliance Decrease the chance of Drug-resistant TB Weight category (kg) Number of tablets (FDCs) Intensive phase- 4 FDC (HRZE)- 75/100/400/275 Continuation phase- 3 FDC (HRE)- 75/150/275 25-34 2 2 35-49 3 3 50-64 4 4 65-75 5 5 >75* 6 6 Note: Patients >75 kg may receive five tablets per day if they do

not tolerate the revised dose. Total doses taken in the Intensive phase (IP) is 56 doses. Total doses taken in the Continuation phase (CP) is 112 doses. 6 weight bands are used to manage pediatric TB but not adult TB. (Option B) HRZ is given as FDC, and Ethambutol is given as a separate tablet. Weight category (kg) Number of tablets (dispersibe FDCs) Intensive phase Continuation phase HRZ E HR E 50/75/150 100 50/75 100 4-7 1 1 1 1 8-11 2 2 2 2 12-15 3 3 3 3 16-24 4 4 4 4 25-29 3 + 1A* 3 3 + 1A* 3 30-39 2 + 2A* 2 2 + 2A* 2 *A=Adult FDC (HRZE = 75/150/400/275; HRE = 75/150/275). It is added in higher weight band categories i.e., > 25 kg as these children may be able to swallow tablets

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 221

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A 45 year old woman presents to a Community Health Center (CHC) with a persistent cough, fever, and night sweats for the past three weeks. She has significant weight loss and a known history of contact with a TB patient. The clinician suspects TB and aims to confirm the diagnosis. According to NTEP guidelines, which of the following diagnostic modalities is not typically used for the initial diagnosis of TB? (Q840542)

A. Sputum smear microscopy

B. Chest X-ray

C. F/S Line Probe Assay

D. TruNAAT/CBNAAT

Correct Answer: C. F/S Line Probe Assay

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The F/S Line Probe Assay is not typically used for the initial diagnosis of TB according to NTEP guidelines. Diagnostic Modality Usage Sputum Smear Microscopy For initial screening and diagnosis, especially in resource-limited settings. Chest X-ray To support diagnosis when clinical suspicion is high. TruNAAT/CBNAAT For initial diagnosis, due to high sensitivity and specificity, rapid results. Line Probe Assay (LPA) For detecting drug resistance in confirmed TB cases. Tuberculin Skin Test (TST) For screening latent TB infection. Interferon-Gamma Release Assays (IGRAs) For detecting latent TB infection Sputum Culture Gold standard for TB diagnosis; takes several weeks to obtain results. Drug Susceptibility Testing (DST) To guide treatment by identifying drug-resistant strains in confirmed TB cases.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 214-230

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A 50 year old man diagnosed with TB has undergone drug susceptibility testing (DST). The results show that he is resistant to both isoniazid and rifampicin but susceptible to all fluoroquinolones and second-line injectable drugs. According to the classification based on drug resistance in the NTEP guidelines, how should this patient's case be categorized? (Q840541)

A. Monoresistant TB

B. Polydrug-resistant TB

C. Multidrug-resistant TB (MDR-TB)

D. Extensively drug-resistant TB (XDR-TB)

Correct Answer: C. Multidrug-resistant TB (MDR-TB)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The patient's case should be categorized as Multidrug-resistant TB (MDR-TB) because he is resistant to both isoniazid (H) and rifampicin (R) , which defines MDR-TB. The classification is based on the resistance to these two key first-line anti-TB drugs. Classification of TB Patients Based on Drug Testing Category Description Drug sensitive TB Patients are sensitive to 4 TB drugs: R,H,Z,E (Rifampicin, Isoniazid, Pyrazinamide, Ethambutol). Mono-resistant (MR) (Option A) Resistant to one 1st line anti-TB drug only. H-Mono-resistant (H-MR) Resistant to Isoniazid (H) only. Rifampicin resistant (RR) Resistant to Rifampicin (R) only. Multi drug resistant (MDR) (Option C) Resistant to both Rifampicin (R) & Isoniazid (H). Poly-Drug resistant (PDR) (Option B) Resistant to 2 drugs other than Rifampicin (R) & Isoniazid (H). Pre-Xtensive resistant (pre-XDR) Any MDR patient (H+R) resistant to any fluoroquinolone. Extensive resistant (XDR) (Option D) Any MDR patient (H+R) resistant to any fluoroquinolone and Group 4 drugs (Bedaquiline, Linezolid, Levo/Moxifloxacin).

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 211

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A 40 year old woman has been diagnosed with TB. Her medical records indicate she completed a full course of TB treatment and was declared cured two years ago. However, she is now presenting with symptoms of TB again and has a positive sputum test. According to the classification based on the history of previous TB treatment under the NTEP, how should this patient's case be categorized? (Q840540)

A. New case

B. Treatment after failure

C. Treatment after loss to follow-up

D. Recurrent TB case

Correct Answer: D. Recurrent TB case

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This patient's case should be categorized as a "Recurrent TB case" because she had previously completed a full course of TB treatment and was declared cured. According to the NTEP classification, a recurrent TB case includes patients who were previously treated for TB, declared cured or treatment completed, and are now diagnosed with a recurrent episode of TB. Classification of TB Patients based on History of Treatment Category Description New case (Option A) Newly diagnosed case and has never taken TB treatment before/taken treatment for <1 month duration. Previously treated case Taken TB treatment earlier for >1 month. Recurrent TB case TB patient declared cured or treatment complete, presents again as a microbiologically confirmed TB case. Treatment after failure (Option B) TB patient who had been treated for TB & presents as a failure at the most recent course of treatment or is positive even at 5 months of treatment. Treatment after loss to follow up (Option C) A TB patient who received treatment for >1 month & registered as loss to follow up, is presenting again as a microbiologically positive TB case. Other previously treated patients Earlier treatment is not known or not documented. Transferred in Treatment starts at one TB unit, then the patient is transferred to another TB unit. Cure : Treatment is complete + sputum negative report at the end of the treatment. Treatment complete: Treatment is complete + sputum report is not available

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 211

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: A 35 year old man visits the clinic with a persistent cough and fever lasting for more than 2 weeks. He also reports experiencing night sweats and significant weight loss over the past month. Sputum smear tests or radiological tests are not yet done.

According to the new terminologies in NTEP, how should this patient's case be categorized? (Q840539)

A. Clinically diagnosed TB case

B. TB suspect

C. Sputum negative TB case

D. Presumptive TB case

Correct Answer: D. Presumptive TB case

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The patient should be categorized as a " Presumptive TB case " according to NTEP's new terminologies as the patient is showing cough, fever or night sweats & apparent loss in weight for more than 2 weeks . The term Presumptive TB case is used in place of TB suspect (Option B) and refers to individuals who show symptoms suggestive of TB but have not yet been confirmed with a diagnosis. This term is crucial for early identification and screening of TB cases to initiate timely diagnosis and treatment. The new NTEP changes in terminologies are as follows: Category Description Criteria/Features Presumptive TB Case Used in place of TB suspect . Individuals showing symptoms suggestive of TB but not yet confirmed. Cough, Fever, Night sweats +- Weight loss > 2 weeks Clinically Diagnosed TB Case (Option A) Sputum negative but with high clinical suspicion of TB. Used in place of Sputum negative TB case. (Option C) Persistent symptoms despite negative sputum smear High clinical suspicion based on symptoms, radiological and histological features Bacteriologically Confirmed TB Case Biological specimen is positive for sputum AFB and/or CBNAAT. Used in place of Sputum positive TB case. Positive sputum smear for AFB Positive CBNAAT test confirming the presence of TB bacteria Treatment outcomes: Category Definition Cured Treatment completed with sputum negative report at the end of treatment. Treatment complete Treatment completed but no sputum report available Recurrent TB Sputum positive anytime after completing treatment Loss to follow up Started on ATT but discontinue treatment for >1 month Treatment failure Sputum positive even at 5th month of t/t or any time sputum positive after previous sputum negative report

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pages 210-211

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: According to the latest NTEP guidelines, which of the following statements is TRUE regarding the new 6 month BPaLM regimen for MDR-TB treatment? (Q840538)

A. It includes Bedaquiline, Pretomanid, Linezolid, and Moxifloxacin

B. It is contraindicated in patients with drug-resistant TB

C. The regimen duration has been extended to 12 months

D. It is recommended only for extensively drug-resistant (XDR) TB

Correct Answer: A. It includes Bedaquiline, Pretomanid, Linezolid, and Moxifloxacin

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: It includes Bedaquiline, Pretomanid, Linezolid, and Moxifloxacin The 6-month BPaLM regimen indeed comprises Bedaquiline + Pretomanid + Linezolid + Moxifloxacin . It is not contraindicated in all drug-resistant TB – it is actually recommended for MDR/RR-TB in eligible patients The regimen duration is 6 months (26 weeks) . It's not only for XDR-TB — the WHO guidance includes MDR/RR-TB, even pre-XDR (if fluoroquinolone resistance, the moxifloxacin may be dropped).

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 220-227

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Match the following: a. Active case Detection i) Hospital reports are used for case detection b. Intensified case finding ii) ASHA workers receive incentive of Rs. 500 for finding a presumptive case c. Community based screening iii) Initiates screening of TB symptoms d. Passive case detection iv) ASHA workers collect details of risk factors of TB and diabetes. (Q840537)

A. a-ii, b-iii, c-iv, d-i

B. a-iii, b-ii, c-i, d-iv

C. a-iv, b-iii, c-ii, d-i

D. a-i, b-iii, c-ii, d-iv

Correct Answer: A. a-ii, b-iii, c-iv, d-i

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Active case Detection: House-to-house search for TB cases in prisons, slums, and tribal areas. ASHA workers are involved. ASHA workers receive an incentive of Rs. 500 for finding a presumptive case. Any member in the community helping in the identification of presumptive TB cases gets an incentive of Rs. 500. Intensified case finding: Provider initiated screening for TB symptoms in OPD. TB screening of patients presenting to health facilities with other comorbidities. Community based screening: ASHA workers fill a community based assessment checklist (CBAC) form, asking the risk factors for diabetes and other non communicable diseases along with TB. She gets Rs. 10 per form filled. Passive case detection: Passive surveillance from the hospital reports.

References:

https://ntep.in/node/383/CP-tb-case-finding

https://ntep.in/node/4746/CP-community-based-assessment-checklist-cbac-form-early-detection-ncds-and-tuberculosis

https://nhsrcindia.org/sites/default/files/2021-03/CBAC%20Form%20Incentives%20%28NCDs%29%20for%20ASHA-19th%20July-17.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Which of the following is the main component of the JEET strategy to control TB ? (Q840536)

A. To increase the notification rates of TB by private practitioners.

B. To open various testing centers for TB

C. Latest pharmaceutical innovation for early detection

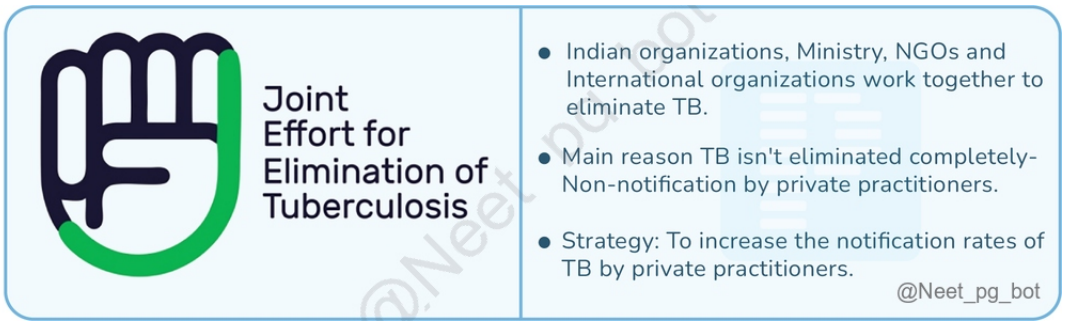
D. Improved infrastructure for better isolation facilities to control TB

Correct Answer: A. To increase the notification rates of TB by private practitioners.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: {{caption_text}} Indian organisations, Ministries, NGOs, and International Organizations work together to eliminate TB. The main reason for incomplete TB elimination: Non-notification by private practitioners. Strategy: To increase private practitioners' notification rates of TB.



References:

https://www.projectjeet.in/wp-content/uploads/2022/01/JEET-report-2018-2020

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Which of the following is not the strategy of NTEP ? (Q840535)

A. CB-NAAT done for Anyone with cough > 2 weeks

B. TRUENAT gives result of rifampicin resistance within 1 hour

C. Shorter & Longer oral MDR/XDR regimens are introduced.

D. Aim is to Prevent, Detect and Treat

Correct Answer: D. Aim is to Prevent, Detect and Treat

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: National Strategic Plan for TB Elimination : Detect-Treat-Prevent . Universalization of CB-NAAT - Anyone with cough > 2 weeks (presumptive TB case): CB-NAAT is done at baseline. TRUENAT developed by ICMR - Indian version of CB-NAAT (gives result of rifampicin resistance within 1 hour). New drug regimens - Bedaquiline & Delamanid are introduced. Shorter & Longer oral MDR/XDR regimens are introduced.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 489-493
https://ntep.in/node/364/CP-national-strategic-plan-nsp-tb-elimination-2017-25

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Which of the following statements is true? (Q840534)

A. To eliminate TB by 2025 under National Tuberculosis Elimination Programme

B. Eliminate malaria throughout the entire country by 2050 under National Framework for Malaria Elimination in India

C. To achieve zero new infection and AIDS-related deaths by 2035

D. None of the above

Correct Answer: A. To eliminate TB by 2025 under National Tuberculosis Elimination Programme

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Targets of NTEP: Elimination of TB by 2025 To reduce mortality of TB by 90% To reduce incidence of TB by 80% Zero catastrophic cost for treatment The 2035 targets are a 95% reduction in TB deaths and a 90% reduction in TB incidence. Vision of NTEP: TB free India 0 death, 0 disease, 0 poverty Malaria elimination is aimed by 2030 under the National Framework for Malaria Elimination in India. (Option B) 80% reduction in new HIV infections under the National AIDS Control Programme by 2024 (Option C)

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 493, 474

https://naco.gov.in/sites/default/files/Paving%20the%20Way%20for%20an%20AIDS%2015122017.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

• [06_National Health Programs] 027 Nvbdcp

« Back to Folder Directory

[06_National Health Programs] 027 Nvbdcp — Quick Jump

Q1 (p. 1179) *Q2 (p. 1180)* *Q3 (p. 1181)* *Q4 (p. 1182)* *Q5 (p. 1183)* *Q6 (p. 1184)*
Q7 (p. 1184) *Q8 (p. 1185)* *Q9 (p. 1186)* *Q10 (p. 1187)* *Q11 (p. 1188)* *Q12 (p. 1188)*
Q13 (p. 1189) *Q14 (p. 1190)* *Q15 (p. 1191)*

Q1: Which of the following diseases is not included under the program mentioned in the logo? (Q841223)

A. Malaria

B. Japanese Encephalitis

C. Kala-azar

D. Leprosy



Correct Answer: D. Leprosy

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This image shows the National Vector-Born Disease Control Program (NVBDCP). Leprosy is included under the National Leprosy Eradication Programme (NLEP). National vector-borne disease control program (NVBDCP): Launched: 2002. Includes all vector-borne diseases: Vector Disease Anopheles Malaria Aedes Dengue & chikungunya Culex Japanese encephalitis: Culex quinquefasciatus/ Culex fatigans Filariasis: Culex tritaeniorhynchus, Culex vishnui Sandfly Kala-azar



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg: 472-479

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: All of the following are objectives of the National Vector Borne Disease Control Programme (NVBDCP) except? (Q841224)

A. To reduce annual parasite incidence < 1/1000 population

B. To reduce annual blood examination rate < 10%

C. To control and prevent outbreaks of dengue and chikungunya.

D. To eliminate kala-azar, lymphatic filariasis and Malaria

Correct Answer: B. To reduce annual blood examination rate < 10%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Primary objectives of NVBDCP include: To reduce annual parasite incidence (API) < 1/1000 population - to check effectiveness of preventive interventions (Option A) To increase annual blood examination rate > 10% - to check operational efficiency(Option B) To eliminate malaria by 2030 To eliminate kala-azar and lymphatic filariasis as soon as possible (Option D) Reduce morbidity and mortality due to dengue and chikungunya. (Option C) Treatment, prevention, control and surveillance of the six vector-borne diseases.

References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 472-473

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following methods are classified as anti-larval techniques for mosquito control? Malathion Bacillus thuringiensis Temephos Gambusia affinis (Q841225)

A. 1,2,3

B. 2,3,4

C. Only 3,4

D. Only 4

Correct Answer: B. 2,3,4

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Bacillus thuringiensis, Temephos, and Gambusia affinis all act directly on mosquito larvae, making them standard anti-larval control methods. Anti-larval measures Environmental measures Chemical control Biological control Yield permanent results and source reduction. E.g. Filling drains and ditches. Levelling of ground. Proper drainage of breeding areas. Intermittent irrigation. Changing water alkalinity. Using larvicides E.g. 1. Physical: MLO (Mosquito larvicidal oil): 200L/hectare 2. Chemical: Paris green (stomach poison) Temephos (Abate) (3) : 200L/hectare 3. IGR (insect growth regulators): Inhibit chitin formation, moulding and adult maturation. Pyriproxyfen and Diflubenzuron Larvivorous Fishes: 1. Gambusia (4) and Poecilia fish 2. Bacillus

thuringiensis (2) (used in polluted waters) 3. Toxorhynchites splendens (predator mosquito for Aedes and Anopheles) Malathion (1) : Not an anti-larval method. It is an adulticide used in ULV fogging and space spray operations. Targets adult mosquitoes, not larvae.

References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 477-479

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A state has an Annual Parasite Incidence (API) of less than 1, but some of its districts have an API greater than 1. Which of the following options correctly matches its categorisation? 1. Category 0 a. Prevention of re-establishment phase. 2. Category 1 b. Pre-elimination phase 3. Category 2 c. Intensified control phase 4. Category 3 d. Elimination phase (Q841226)

A. 3 and b

B. 4 and c

C. 3 and d

D. 1 and a

Correct Answer: A. 3 and b

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Classification of states based on API (per 1000 population) Category Phase Definition Category 0 Prevention of re establishment phase States/UTs with zero indigenous cases of malaria. Category 1 Elimination phase States/UTs (15) including their districts reporting an API of less than 1 case per 1000 population at risk Category 2 Pre-elimination phase States/UTs (11) with an API of less than 1 case per 1000 population at risk, but some of their districts are reporting an API of 1 case per 1000 population at risk or above. Category 3 Intensified control phase States/UTs (10) with an API of 1 case per 1000 population at risk or above. National framework for malaria elimination in India (2016-2030): Targets: Elimination of malaria (zero indigenous cases) by 2030 Prevention of re-establishment of malaria in states who have achieved elimination level (API value is based on NFME)

References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 474-479

https://cdn.who.int/media/docs/default-source/searo/india/publications/national-framework-malaria-elimination-india-2016-2030.pdf?sfvrsn=c3e0ee29_4&download=true

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: In areas with an API greater than 2, what is the spray of choice for vector control if the vector is refractory to DDT? (Q841227)

A. Two rounds of DDT six weekly during the transmission season

B. Three rounds of malathion six weekly during the transmission season

C. A single round of deltamethrin during the transmission season

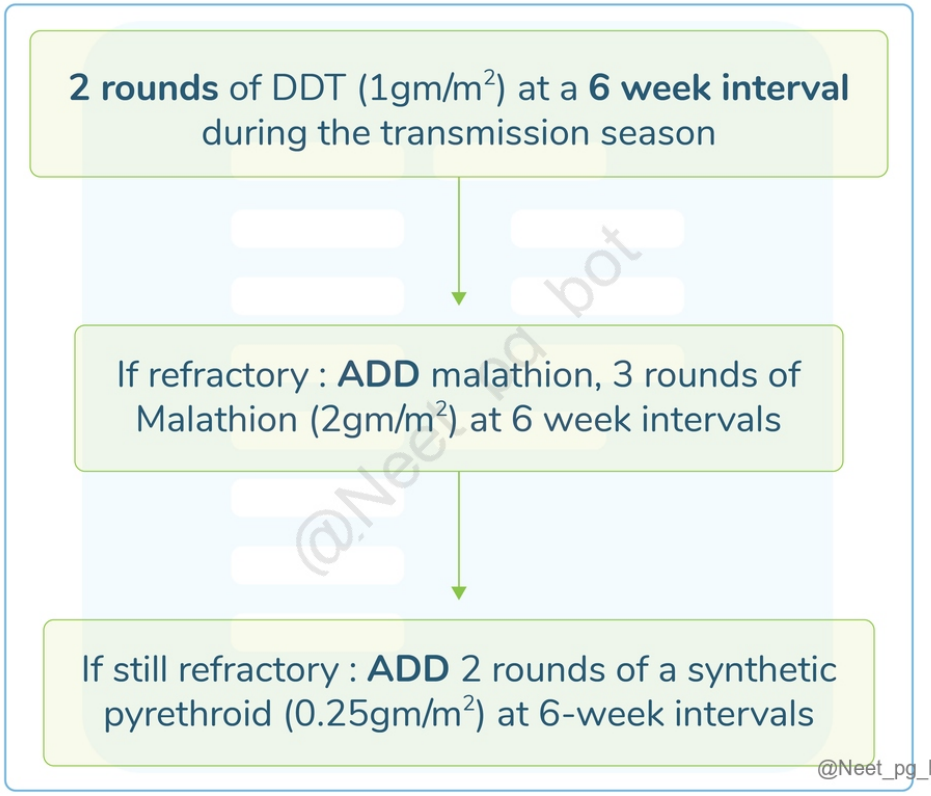
D. All of the above

Correct Answer: B. Three rounds of malathion six weekly during the transmission season

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Indoor residual spray (IRS): Chemicals used: DDT 50% WP: Insecticide of choice, but the vector is refractory to DDT (Option A). Malathion 25% Synthetic pyrethroids: Deltamethrin and Cyfluthrin IRS with insecticides is recommended when API >2 : Note: Long-lasting insecticidal nets (LLIN) covers the population living in areas where API > 5.



References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 474-479

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following statements is true about Long-Lasting Insecticidal Nets (LLINs)? (Q841228)

A. Need to be re-treated with insecticide every six months to remain effective.

B. Provide insecticidal action against mosquitoes only.

C. Insecticide used is ‘N,N-Diethyl-meta-toluamide’

D. Can be washed without losing their insecticidal properties for up to 3 years.

Correct Answer: D. Can be washed without losing their insecticidal properties for up to 3 years.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Long-Lasting Insecticidal Nets (LLINs) are mosquito nets treated with insecticides that are designed to retain their effectiveness for an extended period, typically up to 3 years , even after repeated washing. They are a critical tool in NVBDCP to fight against mosquito-borne diseases. Purpose Dual action provides a physical barrier against mosquito bites while also delivering insecticidal action. Insecticides Used Typically synthetic pyrethroids: Permethrin Deltamethrin Durability Effective for up to 3 years Material and Mesh Size Made from polyester or polyethene. Mesh size: around 156 holes per square inch. Benefits Protection Against Mosquito Bites Reduction in Malaria Incidence Cost-Effective Easy to Use Long-lasting activity Low toxicity to humans and animals Challenges Insecticide Resistance Distribution and Coverage Maintenance

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.475

https://ncvbdc.mohfw.gov.in/WriteReadData/l892s/Guidelines-for-ITNS-LLINS.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9562956/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following are a part of the organization of NVBDCP? 1. Multipurpose Workers (MPWs) 2. District Malaria Officer 3. Directorate General of Health Services 4. ASHA (Accredited Social Health Activist) (Q841229)

A. 1, 2 and 4

B. 2, 3 and 4

C. 1, 2 and 3

D. 1, 2, 3 and 4

Correct Answer: D. 1, 2, 3 and 4

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The National Vector Borne Disease Control Programme (NVBDCP) is a comprehensive program under the Ministry of Health and Family Welfare, Government of India. Organisational structure of NVBDCP National Level Directorate General of Health Services (DGHS): Director General: Oversees all health programs, including NVBDCP. State Level State Health Department: State Program Officer (SPO) State Surveillance Officer (SSO) District Level: (District Health Department) District Malaria Officer (DMO) or District Vector Borne Disease Control Officer (DVBDCO). Primary Health Center (PHC) Level Medical Officer In-Charge Multipurpose Workers (MPWs): Conducting field activities such as spraying insecticides and distributing LLINs. ASHA (Accredited Social Health Activist) Workers: Engaging in community outreach, education, and basic healthcare services.

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.472,473

https://ncvbdc.mohfw.gov.in/WriteReadData/l892s/2163560901531913328.pdf

https://ncvbdc.mohfw.gov.in/index1.php?lang=1&level=1&sublinkid=5885&lid=3964

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following statements about the Enhanced Malaria Control programme is incorrect? (Q841231)

A. Aims to completely eradicate malaria globally by 2025.

B. The programme integrates vector control measures such as insecticide-treated nets and indoor residual spraying.

C. The programme is being aided by the World Bank.

D. Primarily targets rural and urban areas where malaria transmission rates are highest.

Correct Answer: A. Aims to completely eradicate malaria globally by 2025.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The enhanced malaria control project aims to eradicate malaria globally by 2030. Enhanced Malaria Control (EMC) Project: Refers to a comprehensive approach to combating malaria through various strategies and interventions. Initiated by National governments collaborating with international organisations (e.g., WHO, NGOs like Malaria Consortium) and donor agencies (e.g., Global Fund). Indian Scenario: The World Bank-aided Enhanced Malaria Control Project (EMCP) was implemented in the tribal areas of 100 high malaria burden districts of 8 states , viz., Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Orissa and Rajasthan. The programme focuses on both rural and urban areas where malaria transmission occurs. Objectives and Goals: Reduce Malaria Transmission: This strategy focuses on both rural and urban areas where malaria transmission occurs by implementing effective vector control (e.g., bed nets and indoor spraying). Improve Case Management: Ensure prompt diagnosis and treatment. Enhance Surveillance and Monitoring: Strengthen systems to track cases. Community Engagement: Educate and involve communities in prevention and treatment. Achieve Sustainable Results: Work towards sustained reduction and, where possible, elimination of malaria.

References:

https://ncvbdc.mohfw.gov.in/WriteReadData/l892s/Strategic-Action-Plan-Malaria-2012-17-Co.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A 28-year-old traveller returning from a malaria-endemic region presents with high fever, chills, and sweating. A physician orders thick and thin blood smears as part of the diagnostic workup for malaria. What is the primary purpose of the thin smear in malaria diagnosis? (Q841232)

A. To detect the presence of malaria parasites.

B. To determine the species of malaria parasite.

C. To assess the degree of anaemia.

D. To measure the parasite load.

Correct Answer: B. To determine the species of malaria parasite.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Jaswantsingh Bhattacharya (J.B.) stain is a modified Romanowsky stain used as an alternative to Giemsa stain for preparing thick and thin blood smears in malaria diagnosis. Thin Smear is used primarily to identify and differentiate the species of Plasmodium. It allows for better visualisation of the malaria parasites and their stages, aiding in accurate species identification. This information is crucial for appropriate treatment and management of the patient. Thick smear used for Detection of Parasites: Thick smear microscopy is particularly useful for detecting the presence of malaria parasites in a sample. Thick smears involve a higher concentration of blood cells and are more sensitive in detecting low levels of parasitemia. Acridine orange staining for malaria detection JSB stain is used for preparation of thick and thin smears Quantification of Parasites: Thick smears allow for the estimation of the parasite load or density, which is crucial in determining the severity of the infection and monitoring the response to treatment.

References:

Paniker's Textbook of Parasitology, 8th Edition, Page 81

https://pmc.ncbi.nlm.nih.gov/articles/PMC2688806/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which principle is utilised in the Optimal test within the NVBDCP? (Q841233)

A. Detects the HRP2 antigen produced by Plasmodium falciparum.

B. Detects the aldolase enzyme.

C. Detects the pLDH enzyme produced by live parasites.

D. All of the above

Correct Answer: C. Detects the pLDH enzyme produced by live parasites.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The pLDH (Plasmodium Lactate Dehydrogenase) test is used as the Optimal test among other Rapid Diagnostics Test (RDT) available for several reasons: Detection of all Plasmodium species and the ability to differentiate between species like P. falciparum and P. vivax. Indicator of Active Infection. Rapid and efficient diagnosis; provides results within 15-20 minutes. Non-Invasiveness and Ease of Use. Cost-Effectiveness. Type of RDT Target Principle Use Limitations HRP2 Test P. falciparum Detects the HRP2 antigen produced by Plasmodium falciparum Commonly used in areas with predominant Plasmodium falciparum 1. Does not detect non-falciparum species. 2. HRP-2 can persist in blood for weeks after the infection, which may lead to false-positives. pLDH Test All Plasmodium species (species-specific variations) Detects the pLDH enzyme produced by live parasites 1. Identifies active infections 2. Can differentiate between species like P. falciparum and P. vivax pLDH degrades rapidly, possibly missing low-level or early-stage infections Aldolase Test All

Plasmodium species Detects the aldolase enzyme common to all Plasmodium species Identifies infections caused by any malaria parasite Less sensitive and specific compared to HRP2 and pLDH tests

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC124834/

Park's Textbook of Preventive and Social Medicine (27th edition) Page.306

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following is true regarding “link workers” in malaria control? (Q841234)

A. 1 per 500 people involved in the active detection of P. vivax

B. 1 per 2000 people involved in the active detection of P. falciparum

C. 1 per 500 people involved in active detection of P. falciparum

D. 1 per 2000 people involved in active detection of P. vivax

Correct Answer: B. 1 per 2000 people involved in the active detection of P. falciparum

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: “Link workers” are those involved in actively detecting P. falciparum infections in high-risk areas. There will be 1 link worker per 2000 people. Other active detection strategies: Preparing malarial smears once every 2 weeks at sub-centers by multipurpose male workers.

References:

.https://ncvbdc.mohfw.gov.in/WriteReadData/l892s/Malaria%20Surveillance%20-%203.doc

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: A 30-year-old male presents with intermittent fever, chills, and sweats. He recently returned from a trip to a malaria-endemic region. Laboratory tests confirm the diagnosis of Plasmodium vivax malaria. What is the drug of choice for the treatment of Plasmodium vivax malaria? (Q841235)

A. Chloroquine

B. Artesunate

C. Mefloquine

D. Quinine

Correct Answer: A. Chloroquine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Chloroquine is the drug of choice for treating P. vivax infection. Treatment of vivax malaria: Chloroquine (25 mg/kg) divided dose for 3 days. Day 1: 10 mg/kg. Day 2: 10 mg/kg. Day 3: 5 mg/kg. Primaquine 0.25 mg/kg for 14 days. Note: Primaquine is contraindicated in G6PD deficiency Pregnancy Infants

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pages 307,308

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: A 10-year-old child from Assam who weighs 32 kg is diagnosed with falciparum malaria. What is the recommended dose of Artemether and Lumefantrine for this child respectively? (Q841236)

A. 20mg; 120 mg

B. 40 mg; 240 mg

C. 60 mg; 360 mg

D. 80 mg; 480 mg

Correct Answer: C. 60 mg; 360 mg

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In northeastern states like Assam, two lines of treatment are followed for falciparum malarial infection. 1) ACT-AL: The combination of ACT-AL (artemether & lumefantrine) is recommended according to the patient's age and weight. The child given in this scenario falls in the third category (60 mg/360 mg). 5-14 kg/5 months to 3 years 15-24 kg/3 to 8 years 25-34 kg/9 to 14 years > 34 kg/> 14 years Total dose of ACT-AL 20mg/120mg BD x 3 days 40mg/240mg BD x 3 days 60mg/360mg BD for 3 days 80mg/480mg BD x 3 days Pack

size No. of tablets in the packing 6 12 18 24 Give 1 tablet BD x 3 days 2 tablets BD x 3 days 3 tablets BD x 3 days 4 tablets BD x 3 days Colour of the pack Yellow Green Red White 2) Primaquine : 0.75mg/kg on day 2. Contraindications about ACT-AL therapy: 1st trimester of pregnancy. Children of age < 5 years. Body weight < 5kg.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 310

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A patient was admitted with severe fever, neck stiffness, photophobia and confusion. Lumbar puncture done was unremarkable but rapid diagnostic test done shows falciparum malarial infection. All of the following drugs can be used in this patient except? (Q841238)

A. Mefloquine

B. Arteether

C. Quinine

D. Clindamycin

Correct Answer: A. Mefloquine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The above scenario is suggestive of cerebral malaria due to P. falciparum infection and mefloquine should not be used in the same because of the neuropsychiatric complications associated with it, which is termed CNS toxicity syndrome. Treatment of severe/complicated malaria Initial parenteral treatment (48 hours) Follow-up treatment Quinine Loading dose: 20 mg/kg Maintenance dose : 10 mg/kg TDS Quinine 10 mg/kg TDS + Doxycycline 3 mg/kg (or) Clindamycin 10 mg/kg (if pregnant / children < 8 years) Total treatment duration: 7 days Artesunate : 2.4 mg/kg loading dose, then at 12th and 24th hour followed by once a day. Artemether : Loading dose of 3.2 mg/kg; maintenance dose of 1.6 mg/kg per day. Arteether : 150 mg per day for 3 days. ACT therapy North-eastern states: Age & weight adjusted ACT-AL for 3 days + primaquine on second day. Other states: ACT-SP (sulfadoxine-pyrimethamine) for 3 days + primaquine on second day. Contraindications of mefloquine: History of Convulsions. Neuropsychiatric illness. Cardiac pathologies.

References:

Park's Textbook of Preventive and Social Medicine 27th edition, Pages 311,312,313

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A 30-year-old man is planning a 3-month trip to a malaria-endemic area in Sub-Saharan Africa. He visits his healthcare provider to discuss options for malaria prophylaxis. Considering the need for long-term prophylaxis, which of the following is the most appropriate drug of choice? (Q841239)

A. Chloroquine 300 mg once a week, on the same day each week

B. Proguanil 100 mg, 2 tablets once a day

C. Mefloquine 250 mg, one tablet once a week, on the same day each week

D. Mefloquine 250 mg, one tablet once a day each week

Correct Answer: C. Mefloquine 250 mg, one tablet once a week, on the same day each week

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The most appropriate drug for long-term malaria prophylaxis is mefloquine 250 mg, one tablet once a week, on the same day each week. Chemoprophylaxis of malaria Short-term prophylaxis Long-term prophylaxis Duration of Rx < 6 weeks > 6 weeks DOC Doxycycline 100 mg daily Mefloquine 250 mg weekly Prophylaxis period Before travel 1-2 days 2-3 weeks After travel 4 weeks 4 weeks Contraindications of mefloquine: History of convulsions Neuropsychiatric illness Cardiac conditions Other drugs for short-term prophylaxis: Chloroquine: 100 mg or 150 mg tablets. 300 mg (3 tablets of 100 mg or 2 tablets of 150 mg), once a week, on the same day each week (Or) One tablet of 100 mg daily for 6 days per week. Proguanil: 200 mg, 2 tablets once a day

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 312,313

↑ *Back to this question in Part A*

@Neet_pg_bot

• [06_National Health Programs] 028 Endgame Strategy And National Polio Surveillance Program

« Back to Folder Directory

[06_National Health Programs] 028 Endgame Strategy And National Polio Surveillance Program — Quick Jump

Q1 (p. 1192) *Q2 (p. 1192)* *Q3 (p. 1193)* *Q4 (p. 1194)* *Q5 (p. 1195)* *Q6 (p. 1196)*

Q1: Which statement best describes the necessity of switching from trivalent oral polio vaccine (tOPV) to bivalent oral polio vaccine (bOPV) as part of the Polio Eradication and Endgame Strategic Plan? (Q841240)

A. tOPV was associated with a high incidence of wild poliovirus type 2 (WPV2).

B. bOPV was more cost-effective than tOPV for routine immunisation systems.

C. The risk of cVDPV-circulatory vaccine derived polio virus linked to the type 2 component of OPV outweighed its benefits.

D. bOPV was more effective in providing immunity against all three poliovirus types than tOPV.

Correct Answer: C. The risk of cVDPV-circulatory vaccine derived polio virus linked to the type 2 component of OPV outweighed its benefits.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Benefits of the tOPV to bOPV Switch: Risk Mitigation: No wild poliovirus type 2 (WPV2) has been detected since 1999, making the continued use of type 2 in tOPV unnecessary and potentially risky due to vaccine-associated paralytic poliomyelitis (VAPP) and circulating vaccine-derived poliovirus (cVDPV) associated with type 2 OPV, which resulted in outbreaks. IPV Introduction: Provides additional protection against type 2 poliovirus and boosts immunity to types 1 and 3, thereby reducing the risk of paralysis in case of an outbreak. Preparation for OPV Withdrawal: Sets the stage for the eventual withdrawal of all OPV types

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pages 240-241

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following is NOT an objective of The Polio Eradication Strategy 2022-2026? (Q841241)

A. Permanent interruption of polio transmission in Pakistan and Afghanistan

B. Preventing outbreaks in non-endemic countries

C. Stop circulation of vaccine-derived poliovirus

D. Rehabilitation of the ones affected

Correct Answer: D. Rehabilitation of the ones affected

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Objectives of The Polio Eradication Strategy Plan 2022-2026 are: Permanent interruption of polio transmission in Pakistan and Afghanistan Preventing outbreaks in non-endemic countries Stop circulation of vaccine-derived poliovirus

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 240

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A 10-year-old boy presented with sudden onset paralysis of the right leg for 2 weeks with loss of tone and deep tendon reflexes; the leg appeared floppy with no sensory loss. Which of the following is NOT a diagnosis? (Q841242)

A. Guillian-Barre Syndrome

B. Transverse myelitis

C. Poliomyelitis

D. Duchenne Muscular Dystrophy

Correct Answer: D. Duchenne Muscular Dystrophy

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The scenario given is that of Acute Flaccid Paralysis (AFP). Duchenne Muscular Dystrophy is a genetic disorder with progressive muscle degeneration and weakness, not a sudden onset paralysis. Acute flaccid paralysis is sudden-onset, 4-week-long flaccid paralysis of the limb in a child under 15 years of age. The limb will not have any sensory loss. It will be floppy with a loss of deep tendon reflexes and tone. Diseases causing acute flaccid paralysis: Poliomyelitis (Option C) Guillian-Barre Syndrome (Option A) Transverse myelitis (Option B) Traumatic neuritis. Botulism (in newborns)



References:

Suryakantha 3rd edition, page 838

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: The stool specimen for investigation of an acute flaccid paralysis case is transported using which method? (Q841243)

A. Ambient temperature chain

B. Reverse cold chain

C. Traditional cold chain

D. Real-time temperature monitoring

Correct Answer: B. Reverse cold chain

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In the cases of acute flaccid paralysis, the stool samples are collected and transported in a reverse cold chain mainly to investigate for polio. Acute Flaccid Paralysis [AFP] surveillance: Samples: Two stool specimens collected at least 24-48 hours apart within 14 days of paralysis onset (but can also be collected till 2 months) and sent to a WHO-accredited laboratory. Specimens must be transported in special screw-capped bottles under a reverse cold chain without preservatives. Specimens should reach the laboratory within 72 hours of collection. If the poliovirus is not isolated the case is termed "compatible" and reviewed by an expert committee for further classification. Line Listing: Records data of each AFP case. Reporting: AFP cases must be reported promptly to the District Immunity Officer, who informs the State Surveillance Officer and, subsequently, the National Surveillance Centre.

References:

Suryakantha 3rd edition, pages 839-840

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following statements regarding polio surveillance indicators is correct? At least 80% of expected routine AFP surveillance reports should be received on time, including zero reports where no AFP cases are seen. The sensitivity of surveillance requires detecting at least two cases of non-polio AFP annually per 100,000 population aged less than 15 years in endemic regions. Completeness of case investigation mandates that all AFP cases must have three stool specimens collected within 7 days of paralysis onset. Laboratory performance standards dictate that AFP case specimens must be processed in any accredited clinical laboratory within the country. (Q841244)

A. All are wrong

B. All are correct

C. 1 and 2 are correct

D. 1 and 4 are correct

Correct Answer: C. 1 and 2 are correct

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Indicator Description Completeness of reporting At least 80% of expected routine AFP surveillance reports are to be received on time, including zero reports(no AFP cases seen). Sensitivity of surveillance Detect at least one case of non-polio AFP annually per 100,000 population aged <15 years (two per 100,000 in endemic regions).(operational efficiency-non polio AFP rate) Completeness of case investigation All AFP cases undergo full clinical and virological investigation with at least 80% of cases having adequate stool specimens collected and transported properly. Completeness of follow-up At least 80% of AFP cases receive a follow-up examination for residual paralysis at 60 days post-onset. Laboratory performance AFP case specimens are processed in WHO-accredited laboratories within the Global Polio Laboratory Network (GPLN).

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pages 241-242

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: What best describes the "mopping up" strategy in polio eradication efforts? (Q841245)

A. It involves routine immunization activities in all districts to maintain high population immunity.

B. It focuses on mass vaccination campaigns conducted in areas where wild poliovirus is known or suspected to be circulating.

C. It refers to surveillance activities aimed at detecting cases of acute flaccid paralysis (AFP) for prompt response.

D. It involves educational campaigns to raise awareness about the importance of polio vaccination among healthcare workers.

Correct Answer: B. It focuses on mass vaccination campaigns conducted in areas where wild poliovirus is known or suspected to be circulating.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Mopping-up: Final phase in polio eradication efforts. Door-to-door immunization campaigns in high-risk districts. 1 dose OPV - for upto 5 year children Done for at least 500 children in vicinity Actively implemented in India.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 247

↑ *Back to this question in Part A*

@Neet_pg_bot

• [06_National Health Programs] 029 Ncds Npcds

« Back to Folder Directory

[06_National Health Programs] 029 Ncds Npcds — Quick Jump

Q1 (p. 1198) *Q2 (p. 1199)* *Q3 (p. 1200)* *Q4 (p. 1201)* *Q5 (p. 1202)* *Q6 (p. 1204)*
Q7 (p. 1205) *Q8 (p. 1206)* *Q9 (p. 1206)* *Q10 (p. 1207)* *Q11 (p. 1209)* *Q12 (p. 1209)*

Q1: Which statement regarding non-communicable diseases (NCDs) is correct? (Q840604)

A. NCDs are responsible for the least number of deaths worldwide.

B. Primordial prevention of NCDs involves early diagnosis and treatment of disease.

C. According to the WHO, chronic NCDs have a duration of over three months

D. Cardiovascular diseases contribute the least to the global DALY.

Correct Answer: C. According to the WHO, chronic NCDs have a duration of over three months

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: According to the WHO, chronic NCDs have a duration of over three months. Non-Communicable Diseases: Disability-adjusted life years (DALYs): NCDs are responsible for maximum DALY and deaths worldwide (Option A) . Cardiovascular diseases contribute to maximum DALY (Option D). DALYs represent the total burden of disease, combining years of life lost due to premature death and years lived with disability from the condition. Best Level of Prevention: The best level of prevention for NCDs is primordial prevention. This involves preventing the development of risk factors for NCDs (Option B) . Examples of primordial prevention strategies include promoting healthy diets and physical activity from a young age to prevent obesity and associated NCDs later in life. Chronic NCD Duration: The World Health Organization (WHO) defines a chronic NCD as a disease with a duration of greater than three months (Option C) . This is in contrast to acute diseases, which have a shorter duration.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 26.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3542738/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following statements accurately reflects the healthcare services provided at various levels within the National Programme for Healthcare of the Elderly (NPHCE)? (Q840616)

A. Sub-centers manage the treatment of minor ailments and provide rehabilitation equipment.

B. Primary Health Centers (PHCs) offer dedicated health clinics for the elderly three times a week.

C. Community Health Centers (CHCs) conduct research and development in addition to providing referral treatment.

D. District hospitals are responsible for training health professionals in geriatrics.

Correct Answer: A. Sub-centers manage the treatment of minor ailments and provide rehabilitation equipment.

- *Listen (English)*
- *Listen (Hindi)*

Explanation: {{caption_text}} Center Healthcare Services Provided Geriatric Unit at District Hospitals 10-bed geriatric wards and dedicated outpatient department (OPD) services for geriatric patients. Rehabilitation Units at CHCs Dedicated health clinics for the elderly twice a week and Physiotherapy by rehabilitation workers. PHCs Weekly geriatric clinics conducted by a trained Medical Officer. Referrals to Community Health Centers or District Hospitals as needed. Monthly clinics in villages supervised by nurses from the CHC NCD clinic. Sub-centers Domiciliary visits by ANMs (Auxiliary Nurse Midwives) and Male Health Workers Treatment of minor ailments. Rehabilitation equipment. Health promotion activities like camps and interpersonal communication. Opportunistic screening of the population over 30 years old using BP measurement and capillary blood glucose. CHC NCD Clinics Diagnosis and management of common CVD, diabetes, and stroke cases (outpatient and inpatient). Home visits by nurses for bedridden cases. Referral of complicated cases to the district hospital. District Hospital NCD Clinic Screening of individuals >30 years for diabetes, hypertension, and cardiovascular diseases. Detailed investigations for high-risk individuals and referrals from CHCs. Regular management and annual assessment of patients with cancer, diabetes, and hypertension. Management of patients with established cardiovascular diseases. Home-based palliative care for chronic, debilitating, and progressive patients. Health education and counseling Health professionals in geriatrics are trained at the two National Centers of Ageing (NCAs) established at AIIMS, New Delhi, and Madras Medical College, Chennai (Option D).



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 540, 541.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is the role of an ASHA worker in the NP-NCD? (Q840627)

A. Diagnose and initiate treatment for NCDs like diabetes and hypertension at the village level.

B. Perform ECGs and other lab investigations at monthly village clinics to screen for NCDs

C. Conduct opportunistic screenings for NCDs and refer suspected cases to community health centers.

D. Provide specialized care and treatment for cancer patients and refer complicated cases to district hospitals.

Correct Answer: C. Conduct opportunistic screenings for NCDs and refer suspected cases to community health centers.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Role of ASHA in NP-NCD: Conducts opportunistic screening of the community for NCDs, including diabetes, risk factors for TB, and other NCDs Uses blood pressure measurement and strip method blood glucose testing to screen individuals over 30 years old for NCDs. Refers suspected cases of diabetes and hypertension to Community Health Centers (CHCs) or higher healthcare facilities for diagnosis and management. Makes home visits to encourage positive behavior modifications, monitor treatment compliance, and encourage patients to attend regular check-ups for blood pressure and blood glucose at sub-centers. Receives ■10 for every Community-Based Assessment Checklist (CBAC) form completed. These forms are used to screen for NCDs, including diabetes, risk factors for TB, and other NCDs. ASHA workers are not qualified to diagnose or initiate treatment for NCDs (Option A ruled out). Performing ECGs and other laboratory investigations is beyond the scope of an ASHA worker's role (Option B ruled out). They do not provide specialized cancer care or treatment (Option D ruled out).

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 542.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following is NOT a target outlined in the WHO's global monitoring framework for the prevention and control of non-communicable diseases (NCDs) in India? (Q840637)

A. A 5% relative reduction in the prevalence of insufficient physical activity by 2025.

B. A 25% relative reduction in premature mortality from NCDs by 2025.

C. A 30% relative reduction in the prevalence of current tobacco use by 2025.

D. An 80% availability of essential NCD medicines in public and private facilities by 2025.

Correct Answer: A. A 5% relative reduction in the prevalence of insufficient physical activity by 2025.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Global Initiatives to Control NCDs: Initiated by WHO Expected to be achieved by 2025. WHO framework aims for a 10% reduction in insufficient physical activity by 2025, not 15% (Option A) Targets are: Diabetes/Obesity 0% increase. Harmful use of alcohol- at least 10% reduction. Physical inactivity 10% reduction (Option A) Premature mortality from NCDs 25% reduction (Option B) Raised blood pressure by 25% reduction. S alt/ s odium intake 30% reduction. Tobacco use (Smoking) 30% reduction (Option C) During therapy and counselling - at least 50% coverage Essential NCD medicine and technologies 80% coverage (Option D)

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 542, 543.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following is the correct sequence of steps in conducting a non-communicable disease risk factor survey? (Q840644)

A. Questionnaire, biochemical investigations, physical measurements.

B. Physical measurement, biochemical investigations, questionnaire

C. Questionnaire, physical measurement, biochemical investigations.

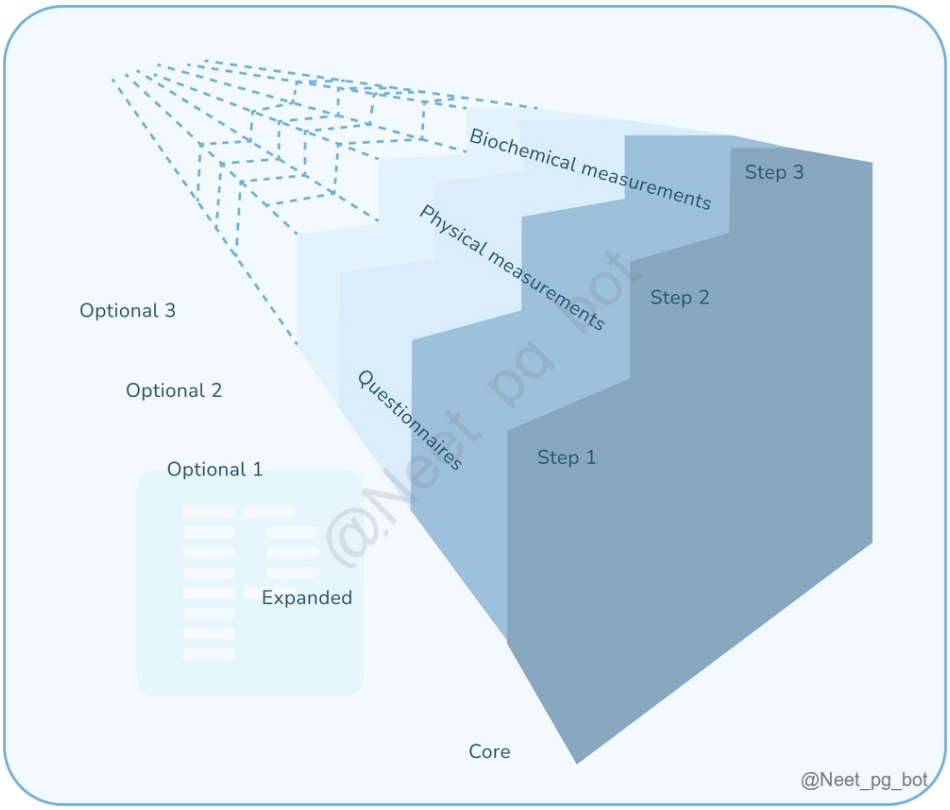
D. Biochemical investigations, physical measurements, questionnaire.

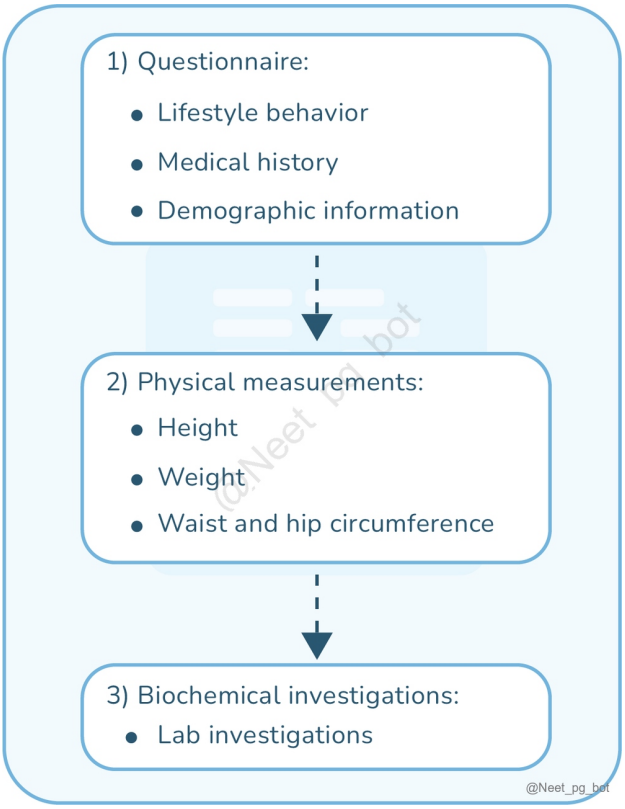
Correct Answer: C. Questionnaire, physical measurement, biochemical investigations.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Questionnaire, physical measurement, biochemical investigations are the correct sequence for conducting a non-communicable disease risk factor survey. According to the WHO, conducting Non-communicable disease (NCD) surveys requires a systematic approach to ensure accurate and reliable data collection. Steps Involved are:





References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 416

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following logos represents the Rashtriya Bal Swasthya Karyakram (RBSK)? (Q840664)

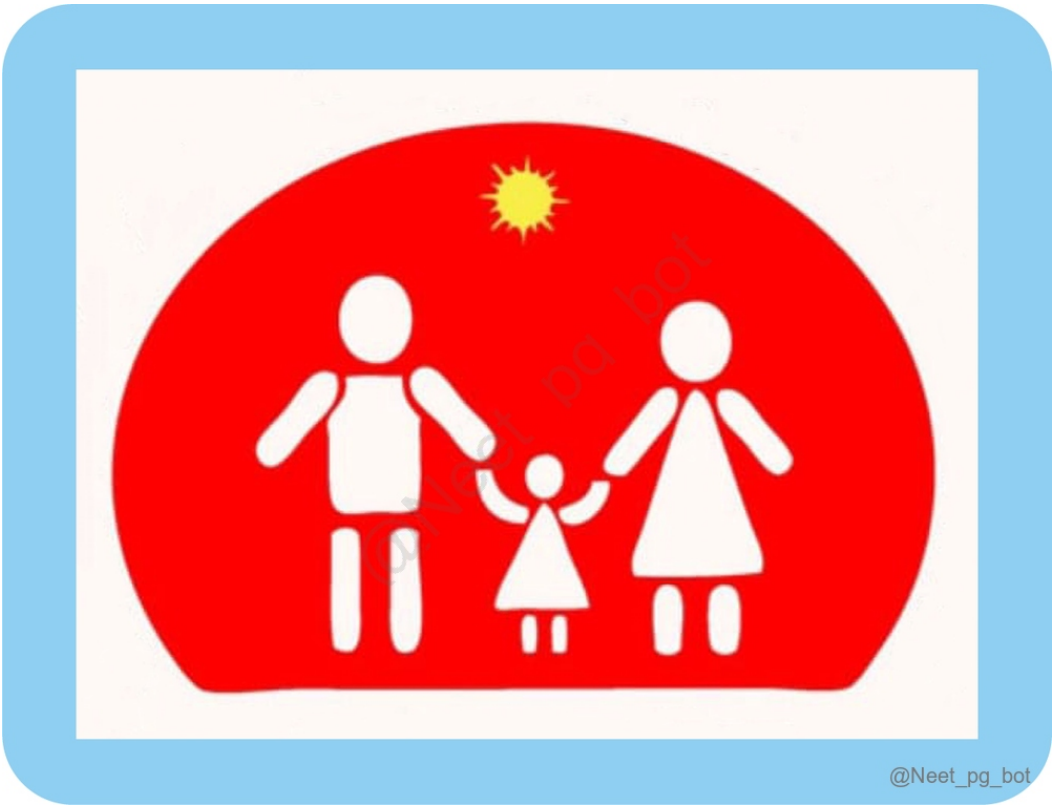
A. None of the above

Correct Answer: Unknown

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Integrated Child Development Services (ICDS) (Option A). National Programme for Health Care of the Elderly (NPHCE) logo (Option B).



References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 542, 543.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following obesity indicators is considered the most useful single measurement for assessing central obesity? (Q840670)

A. BMI

B. Skinfold thickness

C. Waist-to-hip ratio

D. Waist circumference

Correct Answer: D. Waist circumference

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Obesity can be defined as abnormal growth of adipose tissue, which may be due to an increase in fat cell size or number. Indicators of obesity Body weight: BMI (Quetele's index): weight (kg) / height (m^2) Ponderal index: height (cm)/cube root of body weight Broca's index: height (cm) -100 Corpulence index: Actual weight / desirable weight Lorentz formula: ■■ Though not accurate, body weight is the most commonly used indicator of obesity BMI is the most widely used indicator worldwide. Does not differentiate between fat and muscle mass. Also, does not provide information regarding fat distribution (Option A). Skinfold thickness: The sum of all four measurements: >40 in males and >50 in females Rapid and non-invasive method for measuring body fat. Measured with Harpenden skin callipers Measurements taken at: mid-triceps, biceps, subscapular and suprailiac regions Measures subcutaneous fat (Option B) Waist circumference: >102 cm in males and >88 cm in females In the Indian population, >90 cm in males and >80 cm in females is considered high risk. Measured at midpoint between the lower border of the rib cage and the iliac crest. Correlates closely with BMI Most commonly used to measure central obesity and its associated risk factors (Option C) Directly related to cardiovascular and other chronic diseases Waist to hip ratio >1 in men and >0.85 in females Correlates with waist circumference There may be some discrepancies as the body fat distribution may be different for each individual (Option D)

$$\text{(Height in cm - 100) - } \frac{\text{Height in cm - 150}}{\text{2 (women) or 4 (men)}}$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 454, 455

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Match the following research trials/programs with their respective objectives: i) MRFIT a. Surveillance and assessment of trends in cardiovascular events ii) Jai vigyan mission b. Decreasing serum cholesterol, diastolic BP, smoking cessation in lowering coronary heart disease mortality iii) MONICA c. Dietary approaches to stop HTN iv) MPOWER d. To control rheumatic heart disease v) DASH e. To control consumption of Tobacco (Q840808)

A. i-d, ii-a, iii-b, iv-e, v-c

B. i-c, ii-e, iii-a, iv-d, v-b

C. i-b, ii-d, iii-a, iv-e, v-c

D. i-a, ii-c, iii-b, iv-e, v-d

Correct Answer: C. i-b, ii-d, iii-a, iv-e, v-c

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Multiple risk factor intervention Trial (MRFIT) It is a randomised, primary prevention trial Its objective is to check whether decreasing high levels of serum cholesterol, DBP and smoking cessation would help in reducing coronary heart disease mortality. MPOWER M onitor tobacco use and prevention policies P rotect people from use of tobacco O ffer help for quitting tobacco use W arn about the dangers with tobacco use E nforce bans on tobacco advertising, promotion and sponsorship R aise taxes on tobacco MONICA Moni toring trends and determinants in ca rdiovascular disease Surveillance and assessment in trends of cardiovascular disease Dietary approaches to stop hypertension (DASH) Consume a diet rich in vegetables, fruits and low fat dairy products with low content of saturated and total fats Helps in decreasing around 8-14 mm hg of SBP Jai Vigyan mission Surveillance for finding out epidemiological determinants for Group A strep and sore throat. Establishment of registry of RHD/RF all over the country To promote vaccine development To promote research and studies for investigations of RHD/RF

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 429
https://jamanetwork.com/journals/jama/fullarticle/182557 https://www.who.int/initiatives/mpower
https://pubmed.ncbi.nlm.nih.gov/3335877/ https://main.icmr.nic.in/sites/default/files/reports/Jai%20Vigyan%20Mission%20Mode%20Project%20on%20Rheumatic%20Fever%20and%20Rheumatic%20Heart%20Disease%20%281%29.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following is true regarding diabetes mellitus? (Q840818)

A. Fasting plasma glucose should be ≥6 mmol/L

B. 2 hour post load capillary plasma glucose should be ≥200 mg/dL

C. Random plasma glucose should be ≥11.1 mmol/L

D. HbA1c should be >6%

Correct Answer: C. Random plasma glucose should be ≥11.1 mmol/L

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Diabetes mellitus is a metabolic disorder identified by the presence of hyperglycemia in the absence of treatment. Diabetes: 7 to 8% population is diabetic in India India is the diabetic capital of the world Glycosuria: Not used as screening test in community Not used for epidemiological purposes RBS is performed Most reliable test for screening of diabetes is glucose tolerance test WHO Diagnostic criteria for Diabetes Mellitus Measurement Diagnostic cut-off value Fasting plasma glucose ≥7 mmol/L (126 mg/dL) (Option A) 2 hour post load venous plasma glucose ≥11.1 mol/L (200 mg/dL) 2 hour post load capillary plasma glucose ≥12.2 mmol/L (220 mg/dL) (Option B) Random plasma glucose ≥11.1 mmol/L (200 mg/dL) (Option C) HbA1c ≥6.5% (Option D) Diagnostic Thresholds for Diabetes Fasting Plasma Glucose (FPG): ≥7.0 mmol/L (126 mg/dL). Fasting is defined as no caloric intake for at least 8 hours. 2-hour Plasma Glucose: ≥11.1 mmol/L (200 mg/dL) during an Oral Glucose Tolerance Test (OGTT) using a 75g anhydrous glucose load. HbA1c: ≥6.5% (48 mmol/mol). This test reflects average blood sugar over the past 2–3 months. It is recommended only if the assay is standardised to international reference values. Random Plasma Glucose: ≥11.1 mmol/L (200 mg/dL) in a patient with classic symptoms of hyperglycaemia (e.g., increased thirst, frequent urination, unexplained weight loss). Pre-diabetes: The WHO also defines states where glucose levels are elevated but do not yet meet the threshold for diabetes: Impaired Fasting Glucose (IFG): Fasting plasma glucose of 6.1 to 6.9 mmol/L (110–125 mg/dL). Impaired Glucose Tolerance (IGT): 2-hour plasma glucose of 7.8 to 11.0 mmol/L (140–199 mg/dL) during an OGTT.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 450

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following is not true regarding HTN? (Q840823)

A. A BP of 146/92 is considered a Grade I HTN.

B. On tracking of HTN, a person who is hypotensive in childhood then remains hypotensive in adulthood.

C. Only half of all hypertensive patients need lifelong medication; others manage with lifestyle changes alone.

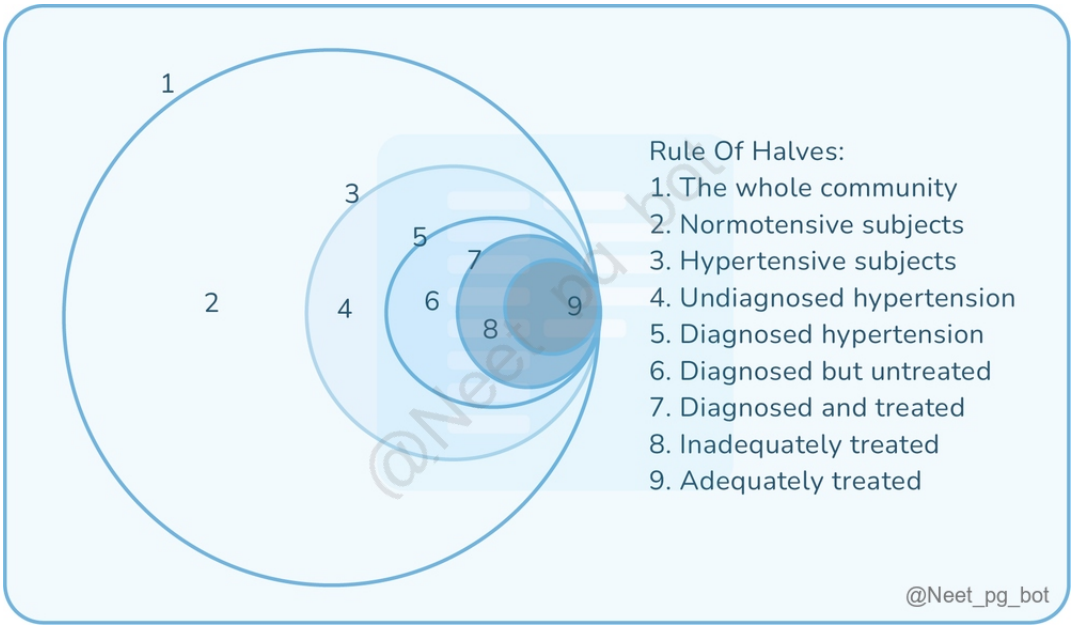
D. Weight loss is the single most beneficial lifestyle modification done to manage HTN.

Correct Answer: C. Only half of all hypertensive patients need lifelong medication; others manage with lifestyle changes alone.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Hypertension is a chronic condition defined as an increase in blood pressure. Classification of HTN Category Systolic BP (mm Hg) Diastolic BP (mm Hg) Optimal <120 <80 Normal <130 <85 High normal 130-139 85-89 Grade I 140-159 (Option A) 90-99 Grade II 160-179 100-109 Hypertensive crisis ≥180 >110 Tracking of Hypertension: If blood pressure is tracked from childhood over a period of years, then hypotensive children tend to remain hypotensive in adulthood, and hypertensive children tend to remain hypertensive in adulthood (Option B). This phenomenon is useful in identifying at-risk children and planning for adequate management of HTN. Rules of Halves (Option C): The concept of the "Rule of Halves" in hypertension management illustrates that: Approximately 50% of individuals with hypertension are aware of their condition. Among those aware, only about 50% receive treatment. Out of those receiving treatment, approximately 50% have their blood pressure adequately controlled. Lifestyle modifications Modification Approx. SBP reduction Weight loss 5-20 mmHg/10 kg weight loss (Option D) DASH diet 8-14 mmHg Dietary sodium reduction 2-8 mmHg Physical activity 4-9 mmHg Moderation of alcohol 2-4 mmHg



References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 425-429

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: According to the Global Cancer Observatory, what type of cancer is most common worldwide, and what is its designated ribbon colour? (Q840828)

A. Lung Cancer & Dark Blue Ribbon

B. Breast Cancer & Pink Ribbon

C. Lung Cancer & White Ribbon

D. Colon Cancer & Dark Blue Ribbon

Correct Answer: C. Lung Cancer & White Ribbon

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: According to the Global Cancer Observatory (GLOBOCAN), Most common cancer worldwide (Both Genders): Absolute numbers, Incidence, Both sexes, in 2022 (World Wide)- Lung Cancer. Age-Standardized Rate (World) per 100 000, Incidence, Both sexes, in 2022- Breast Cancer. Most common cancer in India in terms of absolute numbers, incidence: Lip/Oral Cancer in Males Breast cancer in females According to the National Cancer Registry, the most common cause of cancer in Males in India – Lung cancer. Females in India - Breast cancer. Ribbon colour Meaning Red HIV/AIDS Pink Breast cancer Light Blue Prostate cancer Dark Blue Colon Cancer Green Mental illness Liver cancer Orange/Yellow Suicide prevention Leukaemia Kidney cancer White Lung cancer

References:

https://ncdirindia.org/All_Reports/Report_2020/default.aspx

https://gco.iarc.who.int/media/globocan/factsheets/populations/356-india-fact-sheet.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following is correct regarding tracking phenomenon of blood pressure? (Q844346)

A. Blood pressure of an individual increases with age.

B. BP levels of individuals are followed up from early childhood to adult life.

C. Checking BP at regular intervals once hypertension is diagnosed.

D. Keeping a track of BP of a person with hypertension/hypotension from early childhood to adult life.

Correct Answer: B. BP levels of individuals are followed up from early childhood to adult life.

Explanation: The blood pressure of an individual is tracked from childhood to adulthood in the Tracking phenomenon of blood pressure. This is a very useful tool in the early diagnosis of hypertension even among adolescents/ young adults. If a person is hypotensive in childhood, he remains hypotensive in adulthood. If a person is hypertensive in childhood, he remains hypertensive in adulthood. This phenomenon of persistence of rank order of blood pressure has been described as tracking (Options A,C, and D ruled out).

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 427.

↑ *Back to this question in Part A*

@Neet_pg_bot

• [06_National Health Programs] 030 Blindness Control Program Nlep Health Programs Misc

« Back to Folder Directory

[06_National Health Programs] 030 Blindness Control Program Nlep Health Programs Misc — Quick Jump

Q1 (p. 1211) *Q2 (p. 1213)* *Q3 (p. 1215)* *Q4 (p. 1215)* *Q5 (p. 1216)* *Q6 (p. 1217)*
Q7 (p. 1217) *Q8 (p. 1219)* *Q9 (p. 1220)* *Q10 (p. 1221)* *Q11 (p. 1224)*

Q1: The logo below represents which of the following health programs? (Q840894)

A. Anemia Mukt Bharat

B. National program for control of blindness and visual impairment

C. National health mission

D. NLEP



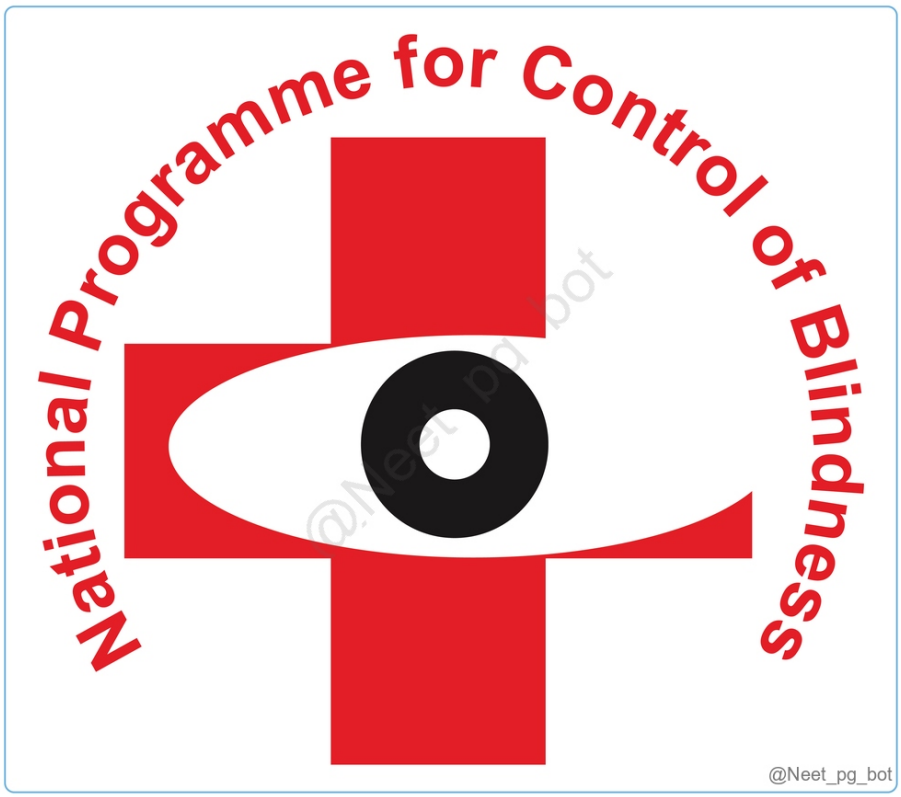
Correct Answer: D. NLEP

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This is the logo for the National Leprosy Eradication Program (NLEP) Vision: The NLEP aims for a "Leprosy-free India." Objectives: Decrease prevalence rates to <1/10,000 at sub-national and district levels. Lower Grade II disability incidence to <1% among new cases nationally. Reduce Grade II disability cases to <1 per million population nationally. Ensure zero disabilities among new child cases. Eliminate stigma and discrimination against leprosy-affected individuals. Anemia Mukt Bharat logo (Option A) Aims to reduce the prevalence of anemia among various groups such as children, adolescent girls, pregnant women, lactating women, and women of reproductive age. National program for control of Blindness (Option B) To provide eye health for all and avoid blindness by identifying and treating curable causes. Diseases covered under NPCB: Trachoma Cataract Glaucoma Childhood blindness Corneal blindness Diabetic retinopathy Refractive errors and low vision National health mission (Option C) Aims to provide universal access to quality healthcare services through national rural health mission and national urban health mission.





References:

https://dghs.gov.in/content/1349_3_NationalLeprosyEradicationProgramme.aspx#

https://anemiamuktbharat.info/

https://dghs.gov.in/content/1354_3_NationalProgrammeforControlofBlindnessVisual.aspx

https://cmokolasib.mizoram.gov.in/uploads/attachments/2022/05/41b586905e6233e72b076191f8bf9512/images.png

https://seeklogo.com/images/N/national-health-mission-logo-56CB075B4D-seeklogo.com.png

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: In the National Leprosy Eradication Programme (NLEP), which level of prevention involves early diagnosis and prompt treatment of leprosy cases to prevent disabilities and deformities? (Q840897)

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

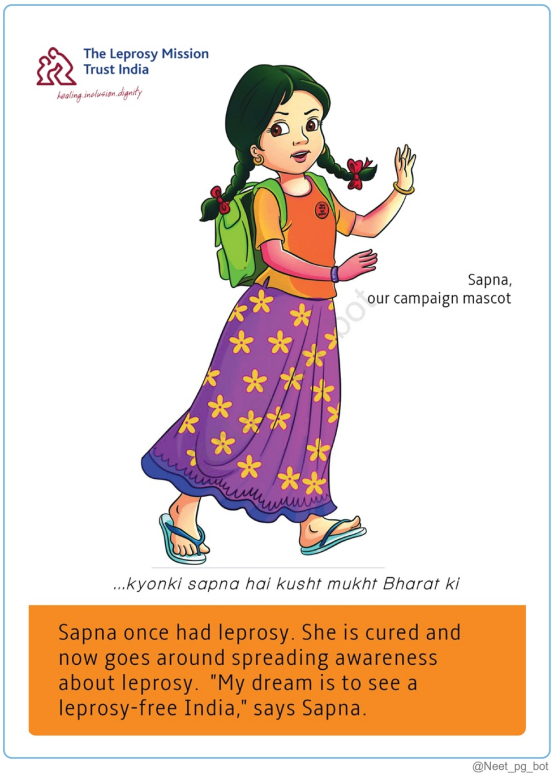
D. Quaternary prevention

Correct Answer: B. Secondary prevention

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Secondary prevention in the context of NLEP focuses on early detection through active case detection campaigns and timely treatment to prevent the progression of leprosy, thereby minimizing disabilities and deformities among affected individuals. Primary Level of Prevention Health Education SPARSH program uses a cartoon girl known as Sapna who is in a village spreading awareness on Leprosy. Secondary Level of Prevention Early diagnosis and treatment Detection is done by ASHA ASHA gets cash incentives Tertiary Prevention Treatment of drug-resistant leprosy Disability limitation and rehabilitation Reconstructive surgeries for deformities Crutches to walk Microcellular rubber footwear Self-care kits



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 481-5 https://www.who.int/docs/default-source/ntds/leprosy/global-consultation-on-global-leprosy-strategy-2021-2030/10-contact-trace-pep-who-guidance.pdf http://www.clinicalestablishments.gov.in/WriteReadData/516.pdf https://dghs.gov.in/WriteReadData/userfiles/file/Leprosy%20New/12%20SLAC%20Guidelines%202022.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is a primary indicator of leprosy cases? (Q840899)

A. Proportion of new cases correctly diagnosed

B. Treatment completion rate

C. Number of relapses during a year

D. Proportion of MB cases among new cases

Correct Answer: B. Treatment completion rate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The treatment completion rate is a primary indicator. Monitoring and evaluation of leprosy cases: Primary Indicators (Core indicator) Annual new case detection rate: Most important Epidemiological indicator. Treatment completion rate (cohort analysis). Indicators for Case Detection Proportion of new cases with Grade II disability Proportion of female cases among new cases Proportion of cases <15 years (child) among new cases. Proportion of MB cases among new cases. (Option D) Indicators for Quality of Services Proportion of defaulters Proportion of new cases correctly diagnosed (Option A) Number of relapses during a year (Option C) Proportion of cases with new disabilities Other indicators: Most important operational Indicator: Grade 2 disability Indicator Most important health awareness/ Leprosy awareness indicator: Grade 2 disability Indicator.

References:

https://cltri.gov.in/AboutLeprosy/NLEP_indicators.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following defines Grade 2 disability in leprosy according to the WHO Disability Grading System? (Q840901)

A. Grade 2 disability involves no impairment of hand or foot function.

B. Grade 2 disability includes severe visible deformities and impairment of hand or foot function.

C. Grade 2 disability refers to mild visible deformities without any functional impairment.

D. Grade 2 disability indicates moderately visible deformities with slight impairment of hand or foot function.

Correct Answer: B. Grade 2 disability includes severe visible deformities and impairment of hand or foot function.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Grades of disability in Leprosy Grade 0 Absence of disability (no anesthesia) and no visible damage or deformities on eyes, hands and feet. Muscle power is normal. Grade 1 Loss of the protective ability of the eyes, hands or feet, but no visible damage or deformities. Muscle power is normal. Grade 2 Presence of deformities or visible damage to the eyes, hands, or feet. Muscle power is weak or paralyzed, a lid gap is present in the eyes.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7058852/

http://www.clinicalestablishments.gov.in/WriteReadData/516.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: What is the primary goal of the initiative "Leprosy Mukt Bharat"? (Q840902)

A. To eradicate leprosy from India completely by 2027.

B. To reduce the prevalence of leprosy cases in India by 50% by 2025.

C. To provide free treatment and rehabilitation services to all leprosy patients in India until 2030

D. To raise awareness about leprosy and reduce the stigma associated with the disease in India before 2025.

Correct Answer: A. To eradicate leprosy from India completely by 2027.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Leprosy Mukt Bharat 2027: To eradicate leprosy by 2027. Features: Early detection (based on 2-level prevention). Free-of-cost treatment to prevent the development of disabilities and deformities. Medical rehabilitation of those with existing deformities. New additions: Welfare allowance - Raised from Rs.8000 to Rs.12000 for patients undergoing reconstructive surgeries. Enhance awareness regarding the stigma surrounding Leprosy.

References:

https://pib.gov.in/PressReleasePage.aspx?PRID=1894687/

https://dghs.gov.in/WriteReadData/userfiles/file/Leprosy%20New/NSP%20%20Roadmap%20for%20Leprosy%202023-2027.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Match the type of visual impairment with the corresponding visual acuity criteria based on the NPCB classification: Type of Visual Impairment Visual Acuity Criteria 1. Low Vision A. Visual acuity of less than 3/60 to 1/60 2. Economic Blindness B. No perception of light 3. Social Blindness C. Visual acuity of less than 6/18 to 6/60 4. Manifest Blindness D. Visual acuity of less than 6/60 to 3/60 5. Absolute Blindness E. Visual acuity of less than 1/60 to the perception of light (Q841318)

A. 1-C, 2-D, 3-A, 4-E, 5-B

B. 1-D, 2-C, 3-E, 4-F, 5-B

C. 1-C, 2-F, 3-D, 4-E, 5-B

D. 1-F, 2-D, 3-A, 4-B, 5-C

Correct Answer: A. 1-C, 2-D, 3-A, 4-E, 5-B

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: NPCB Classification of Visual Impairment The National Programme for Control of Blindness (NPCB) in India defines blindness as "visual acuity of <3/60 in a better eye with best possible correction" and central visual field <10 degrees. The NPCB further categorizes visual impairment as: Classification Visual Acuity Visual Impairment Visual acuity of less than 6/18 in the better eye with available correction Low Vision Visual acuity of less than 6/18 to 6/60 Economic Blindness Visual acuity of less than 6/60 to 3/60 Social Blindness Visual acuity of less than 3/60 to 1/60 Manifest Blindness Visual acuity of less than 1/60 to the perception of light Absolute Blindness No perception of light

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 456-457

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A 45-year-old woman presents to the ophthalmology clinic with a history of progressively worsening vision over the past few years. On examination, she is found to have significant scarring of the inner eyelids, leading to an inward turning of the eyelashes that scrapes against the cornea. What is the most likely cause of her preventable blindness? (Q841319)

A. Cataract

B. Glaucoma

C. Trachoma

D. Vitamin A deficiency

Correct Answer: C. Trachoma

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Based on the above scenario, the patient is most likely diagnosed with Trachoma. Trachoma is an infection caused by the bacterium Chlamydia trachomatis . It is the leading infectious cause of blindness worldwide. The disease progresses through distinct stages: Repeated Infection: Chronic, recurrent infections during childhood lead to inflammation of the conjunctiva. Eyelid Scarring: Over years, this inflammation causes the inner surface of the eyelid to scar and contract. Entropion and Trichiasis: The scarring pulls the eyelid margin inward (entropion), causing the eyelashes to rub against the globe of the eye (trichiasis). Corneal Opacity: The constant mechanical scraping of the lashes, combined with secondary infections, leads to corneal scarring and eventual blindness. Trachoma - WHO classification: TF - Trachomatous inflammation - follicular TI - Trachomatous inflammation - intense TS - Trachomatous scarring TT - Trachomatous trichiasis CO - Corneal Opacity M/C cause of preventable blindness in adults is Trachoma. It can be managed through the WHO-recommended SAFE strategy: S urgery to correct trichiasis. A ntibiotics (Azithromycin) to treat infection. F acial cleanliness. E nvironmental improvement (access to water and sanitation). Cataract (Option A): A cataract is the clouding of the eye's natural lens . It is the leading cause of blindness globally, but it does not involve the eyelids. Mechanism: Proteins in the lens break down and clump together, preventing light from passing clearly to the retina. Symptoms: Progressive, painless blurring of vision, "halos" around lights, and a "milky" appearance of the pupil. In cataract, the lens is located inside the eye, behind the iris. It has nothing to do with eyelashes or eyelid scarring. Glaucoma (Option B): Glaucoma is a group of eye conditions that damage the optic nerve , the vital link between the eye and the brain. Mechanism: Usually caused by abnormally high pressure inside the eye (intraocular pressure). This pressure compresses the nerve fibers. Symptoms: Often called the "silent thief of sight" because it starts with the loss of peripheral (side) vision. Glaucoma is an internal pressure and neurological issue. It does not cause physical changes to the external eyelids or the direction of eyelash growth. Vitamin A Deficiency (Option D): This is a systemic nutritional issue that manifests in the eyes, primarily affecting the retina and the ocular surface . Vitamin A is essential for producing rhodopsin (for low-light vision) and for maintaining the moisture of the conjunctiva. Vitamin A deficiency primarily affects the conjunctiva and cornea due to a lack of lubrication. Symptoms: The earliest sign is night blindness . It can progress to Xerophthalmia , where the eyes become extremely dry, leading to Bitot’s spots (foamy keratin patches) and eventually corneal melting (keratomalacia). While it can lead to corneal melting (keratomalacia) and blindness, it does not cause the specific mechanical

scarring of the inner eyelid that leads to trichiasis.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no, 456-457

https://www.who.int/health-topics/trachoma#tab=tab_1

https://pubmed.ncbi.nlm.nih.gov/12346157/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Match the following Tier against the corresponding number of units in accordance with the proposed four-tier structure under Vision 2020. Tier Number of Units A. Apex 1. 20,000 B. Centres of Excellence 2. 200 C. Training Centres 3. 2 D. Service Centres 4. 2000 E. Vision Centres 5. 20 (Q841320)

A. A-3, B-5, C-2, D-4, E-1

B. A-1, B-3, C-4, D-5, E-2

C. A-4, B-2, C-5, D-3, E-1

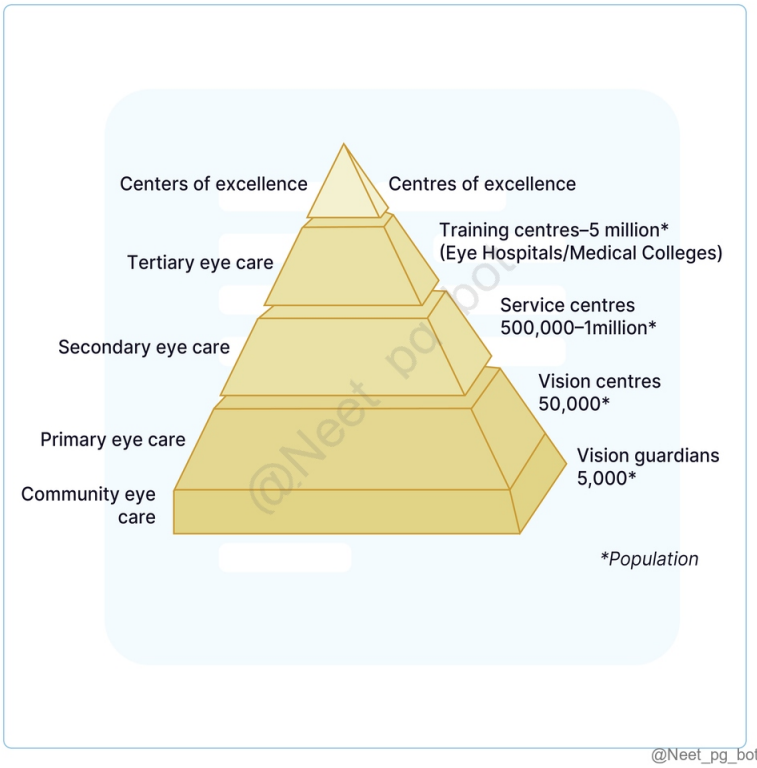
D. A-4, B-2, C-5, D-1, E-3

Correct Answer: A. A-3, B-5, C-2, D-4, E-1

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Proposed structure for Vision 2020, NPCB: Tier Number of Units Population Norms Components Centres of Excellence 20 1/50 million Professional Leadership Strategy development Continued Medical Education (CME) Laying of standards and quality assurance Research Training Centres 200 1/5 million Tertiary eye care including retinal surgery, corneal transplantation, glaucoma surgery, etc. Training and CME Service Centres 2000 1/500000 Cataract Surgery Other common eye surgeries Facilities for refraction Referral services Vision Centres 20,000 1/50000 Refraction and prescription of glasses Primary eye care School eye screening programme Screening and referral services



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References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 505

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which is true regarding the health programme in the logo below? (Q841321)

A. It provides health insurance coverage only for rural populations.

B. Benefits under PM-JAY are restricted to government hospitals.

C. PM-JAY covers up to Rs. 5,00,000 per family per year for hospitalisation.

D. The scheme primarily focuses on providing primary healthcare services.



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Correct Answer: C. PM-JAY covers up to Rs. 5,00,000 per family per year for hospitalisation.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: PM-JAY covers up to Rs. 5,00,000 PER FAMILY per year for medical expenses related to hospitalisation, treatment, and certain follow-up care. Features of the PM-JAY scheme: PM-JAY provides health insurance coverage for both rural and urban populations across India. (Option A) The scheme ensures cashless access to hospitalisation services. There are no restrictions based on family size, age, or gender. All pre-existing health conditions are included in the coverage. The benefits can be used nationwide at all hospitals in the network. (Option B) The plan covers 1685 procedures, including treatment, food, medicines, supplies, and diagnostic services. PM-JAY primarily focuses on providing coverage for secondary and tertiary care hospitalisation. (Option D) PM-JAY covers hospitalisation and treatment expenses and follow-up care up to three days before hospital admission and 15 days after discharge.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 719

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A senior physician working at a government medical college in a rural area has observed a significant lack of advanced medical facilities and infrastructure in her institution. As a result, many patients are referred to urban centres for specialised care. Which government program addresses these disparities? (Q841322)

A. Pradhan Mantri Swasthya Suraksha Yojana

B. Pradhan Mantri Jan Dhan Yojana

C. Pradhan Mantri Swasthya Suraksha Nidhi

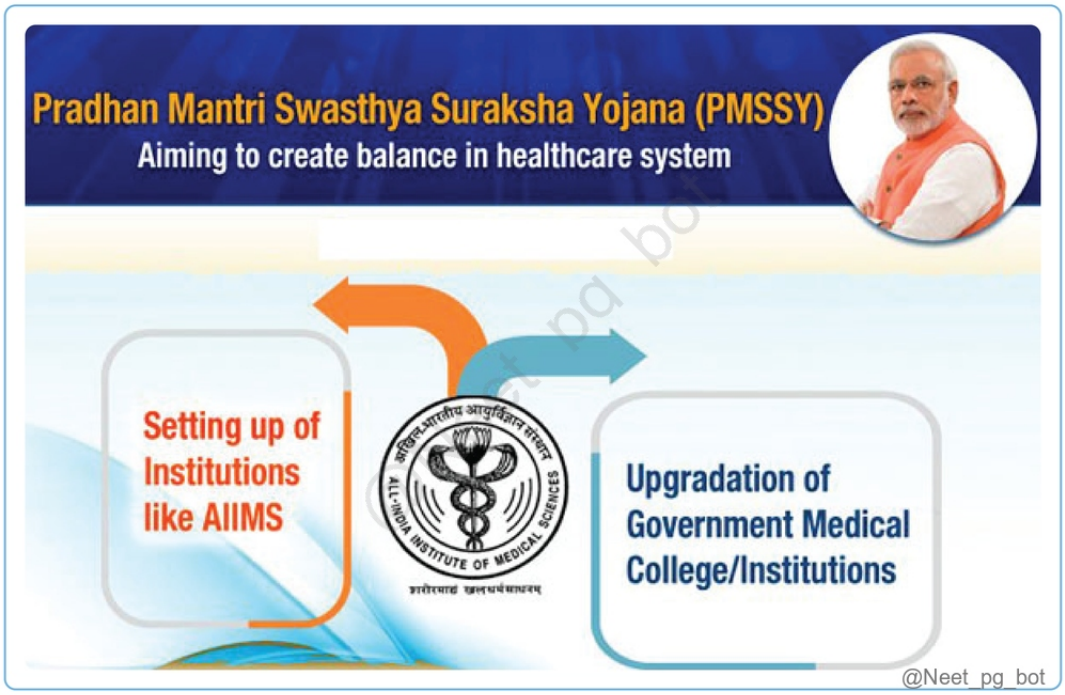
D. Jan Aushadhi scheme

Correct Answer: A. Pradhan Mantri Swasthya Suraksha Yojana

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) focuses on upgrading medical institutions in India by establishing new AIIMS and improving existing government medical colleges. It aims to address regional disparities in healthcare access and enhance medical education and research capabilities nationwide. Objectives: The goals are to address regional disparities in access to affordable and reliable tertiary healthcare services and enhance the infrastructure for high-quality medical education nationwide. Pradhan Mantri Jan Dhan Yojana(Option B): This scheme promotes financial inclusion by ensuring every household can access basic banking services and financial literacy. PMSSN (Pradhan Mantri Swasthya Suraksha Nidhi)(Option C): Dedicated to advancing access to universal and affordable healthcare by ensuring readily available additional resources. Jan Aushadhi scheme(Option D) : Provides quality generic medicines at affordable prices through dedicated Jan Aushadhi stores.


Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)
Aiming to create balance in healthcare system
Setting up of Institutions like AIIMS
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
Upgradation of Government Medical College/Institutions
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PRADHAN MANTRI JAN-DHAN YOJANA
MERA KHATA BHAGYA VIDHATA
@Neet_pg_bot





References:

https://pmssy.mohfw.gov.in/index1.php?lang=1&level=1&sublinkid=81&lid=127n

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: What level of prevention strategy does the concept of SAPNA come under in the prevention of leprosy? (Q844347)

A. Primary level of prevention

B. Secondary level of prevention

C. Tertiary level of prevention

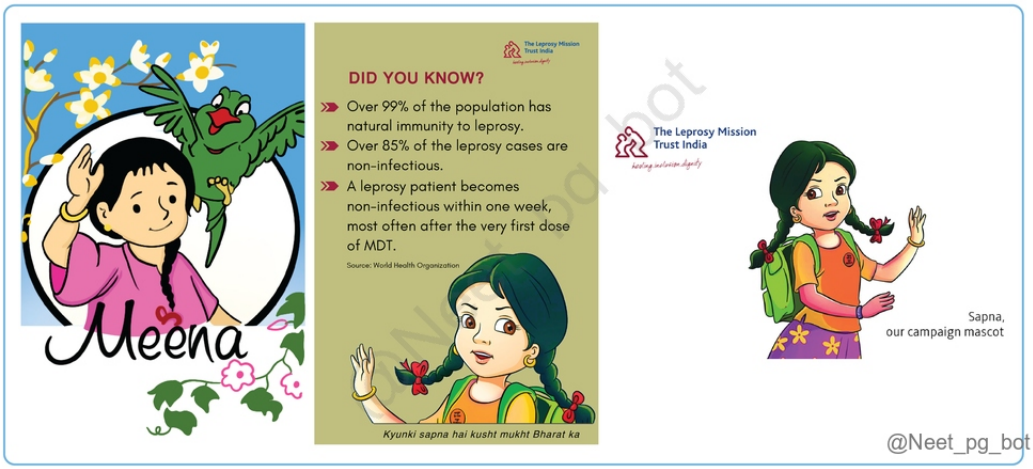
D. Quaternary level of prevention

Correct Answer: A. Primary level of prevention

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The concept of Sapna and Meena comes under the Primary level of prevention- Health Education. Sapna is a concept (mascot) designed and developed using a common girl living in a community, who spreads awareness and educates people about leprosy. This concept of Sapna is adopted from Meena, given by UNICEF for Child rights and impairment. This concept is also adopted by the Sparsh Programme to create awareness about leprosy. Primary Level of Prevention Health Education SPARSH program uses a cartoon girl known as Sapna who is in a village spreading awareness on Leprosy. Secondary Level of Prevention (Option B) Early diagnosis and treatment Detection is done by ASHA ASHA gets cash incentives Tertiary Prevention (Option C) Treatment of drug-resistant leprosy Disability limitation and rehabilitation Reconstructive surgeries for deformities Crutches to walk Microcellular rubber footwear Self-care kits Preventing overuse of diagnostic and treatment options available is quaternary prevention (Option D).



References:

https://dghs.gov.in/content/1329_1_Leprosy.aspx

↑ *Back to this question in Part A*

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• [06_National Health Programs] 031 Previous Year Questions

« Back to Folder Directory

[06_National Health Programs] 031 Previous Year Questions — Quick Jump

Q1 (p. 1226)	*Q2 (p. 1230)*	*Q3 (p. 1231)*	*Q4 (p. 1231)*	*Q5 (p. 1235)*	*Q6 (p. 1236)*
Q7 (p. 1237)	*Q8 (p. 1238)*	*Q9 (p. 1239)*	*Q10 (p. 1239)*	*Q11 (p. 1240)*	*Q12 (p. 1241)*
Q13 (p. 1242)	*Q14 (p. 1242)*	*Q15 (p. 1243)*	*Q16 (p. 1244)*	*Q17 (p. 1245)*	*Q18 (p. 1246)*
Q19 (p. 1248)	*Q20 (p. 1249)*	*Q21 (p. 1251)*	*Q22 (p. 1252)*	*Q23 (p. 1253)*	*Q24 (p. 1254)*
Q25 (p. 1254)	*Q26 (p. 1255)*	*Q27 (p. 1256)*	*Q28 (p. 1257)*	*Q29 (p. 1257)*	*Q30 (p. 1258)*
Q31 (p. 1259)	*Q32 (p. 1260)*	*Q33 (p. 1260)*	*Q34 (p. 1261)*	*Q35 (p. 1261)*	*Q36 (p. 1262)*
Q37 (p. 1264)	*Q38 (p. 1264)*	*Q39 (p. 1265)*	*Q40 (p. 1266)*	*Q41 (p. 1266)*	*Q42 (p. 1267)*
Q43 (p. 1268)	*Q44 (p. 1269)*	*Q45 (p. 1270)*	*Q46 (p. 1270)*	*Q47 (p. 1271)*	*Q48 (p. 1272)*
Q49 (p. 1273)	*Q50 (p. 1274)*	*Q51 (p. 1274)*	*Q52 (p. 1275)*	*Q53 (p. 1276)*	*Q54 (p. 1276)*
Q55 (p. 1277)	*Q56 (p. 1278)*				

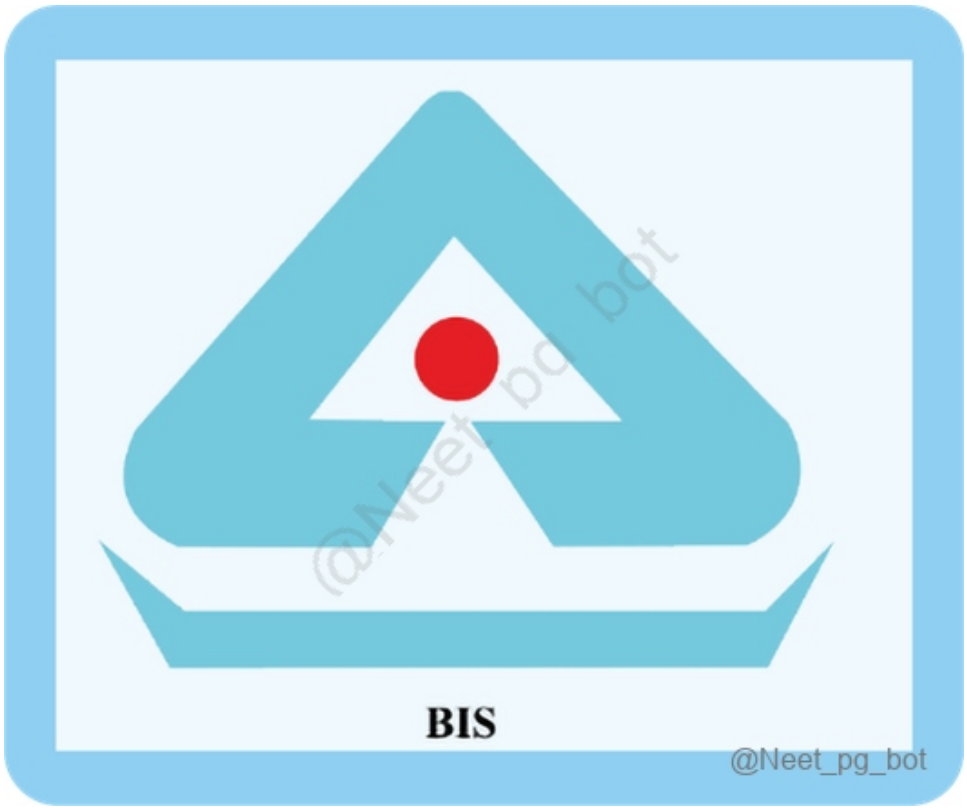
Q1: Identify the given logo below? (Q859448)

A. AGMARK

B. Bureau of Indian standards

C. Food corporation of India

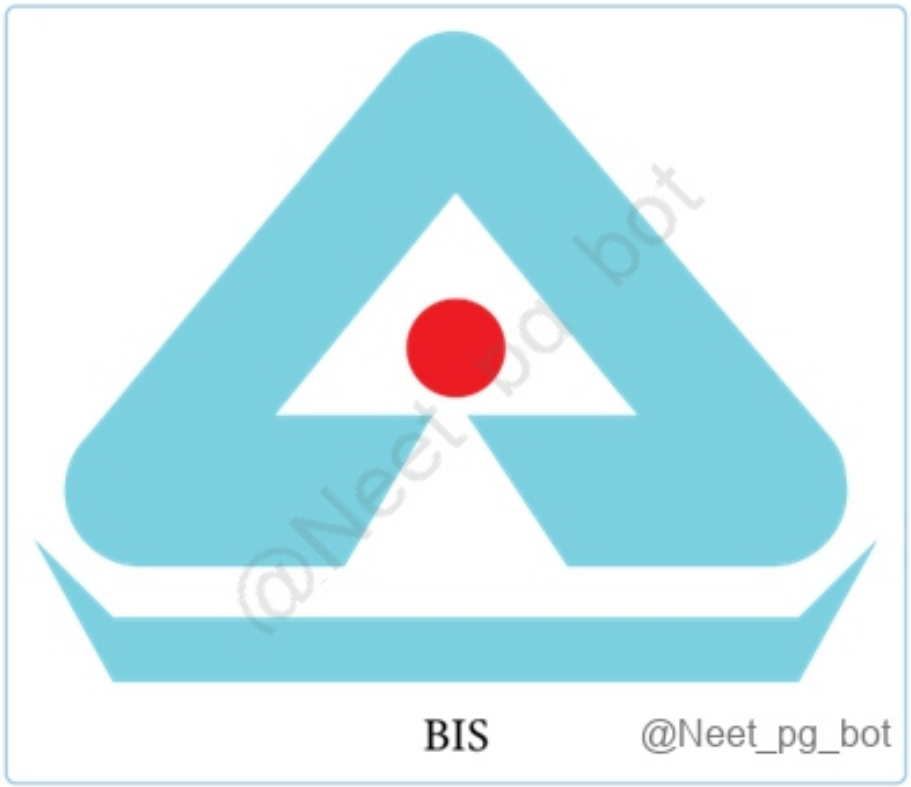
D. GST



Correct Answer: B. Bureau of Indian standards

Explanation: The Bureau of Indian Standards is the national standards body of India. It operates under the Ministry of Consumer Affairs, Food and Public Distribution, Government of India. The logo represents the organization's commitment to setting and promoting standards for products, processes, and services in India. LOGO DESCRIPTION {{caption_text}} (A) Food Safety and Standards Authority of India (FSSAI) Headquarters: New Delhi Ministry: Health and Family Welfare Provides national food standards for products Adopts standards from CODEX ALIMENTARIUS by WHO and FAO (WHO Headquarters: Geneva; FAO Headquarters: Rome) Recently launched the Eat Right Campaign {{caption_text}} (B) Bureau of Indian Standards Ministry: Ministry of Consumer affairs PFA (Prevention of Food Adulteration) provides the Minimum quality of food products. BIS provides quality above the minimum standards of food products. {{caption_text}} (C) Fruit Product/Process Order. The Ministry of Food Processing Industries has created an online system for licensing and monitoring all activities related to the enforcement and administration of FPO. Regulates the quality of tinned fruit juices and tinned fruit cans. {{caption_text}} (D) This is administered by the Directorate of Marketing and Inspection (DMI) under the Ministry of Agriculture and Farmers Welfare for agricultural products. AGMARK is a certification mark indicating that agricultural produce meets a grade standard specified by DMI


fssai
CODEX
International Food Standards
World Health Organization
Food and Agriculture Organization of the United Nations


BIS

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References:

https://fssai.gov.in/knowledge-hub-logos.php?pages=2

https://www.bis.gov.in/the-bureau/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: As part of the Anemia Mukt Bharat program, pregnant women with mild to moderate anemia who are less than 34 weeks pregnant are managed with the following treatment approach: (Q855129)

A. 2 iron and folic acid (IFA) tablets OD

B. IV iron sucrose for noncompliance with oral tablets

C. 2 iron and folic acid tablets OD + IV iron sucrose

D. IM ferric carboxy maltose (FCM)

Correct Answer: A. 2 iron and folic acid (IFA) tablets OD

Explanation: As part of the Anemia Mukt Bharat program, pregnant women with mild to moderate anemia who are less than 34 weeks pregnant are generally managed with oral iron and folic acid (IFA) tablets . The typical treatment involves 2 IFA tablets OD (once a day) . IV iron sucrose is usually considered for noncompliant patients who are unable to take oral supplements effectively or when oral supplementation does not improve the condition, but it is not the first-line treatment in cases of mild to moderate anemia. IM ferric carboxy maltose (FCM) is also an alternative but is typically reserved for more severe cases of anemia or in cases where intravenous iron is needed. Therefore, for mild to moderate anemia in pregnant women less than 34 weeks , oral IFA tablets are the standard first-line treatment. The 6x6x6 strategy is related to anemia mukt Bharat. It stands for 6 beneficiaries, 6 interventions, and 6 institutional mechanisms. 6 INTERVENTIONS 6 STRATEGIES Prophylactic iron-folic acid supplementation. Deworming. Intensified year-round behaviour change communication campaign (solid body, smart mind), including ensured delayed cord clamping. Testing of anaemia using digital methods and point-of-care treatment. Mandatory provision of iron folic acid fortified foods in public health programmes. Addressing non-nutritional causes of anaemia in endemic pockets with a special focus on malaria, hemoglobinopathies, and fluorosis. National Anaemia Mukt Bharat Unit. Intra-ministerial coordination. Strengthening supply chain and logistics. Convergence with other ministries. National Centre of Excellence and Advanced Research on Anaemia Control. Anaemia Mukt Bharat dashboard and digital portal- One-stop shop for anaemia. 6 BENEFICIARIES Children, 6-59 months of age (Bi-weekly Administer 1 ml of Iron and Folic Acid syrup containing 20 mg elemental iron and 100 mcg folic acid per dose) Children, 5-9 years of age- pink tablets (Weekly administer one sugar-coated pink tablet of Iron and Folic Acid containing 45 mg elemental iron and 400 mcg folic acid) Adolescent girls & boys (10-19 years of age)- blue tablets (Weekly administer one sugar-coated blue tablet of Iron and Folic Acid containing 60 mg elemental iron and 500 mcg folic acid) Women of reproductive age group (20-24 years of age).(Weekly, administer one sugar-coated red tablet of Iron and Folic Acid containing 60 mg elemental iron and 500 mcg folic acid) Pregnant women- Red tablets (180 tablets) Daily, 1 Iron and Folic Acid tablet should be taken starting from the fourth month of pregnancy (second trimester) and continued throughout the pregnancy (for at least 180 days). Each tablet contains 60 mg elemental iron and 500 mcg folic acid , is sugar-coated, and red

in color. Lactating mothers (of 0-6 months child)- Red tablets .The tablet should also be continued for 180 days post-partum. Each tablet contains 60 mg elemental iron and 500 mcg folic acid , is sugar-coated, and red in color.

References:

https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797

https://pmposhan.education.gov.in/aboutus.html

https://nhm.gov.in/images/pdf/programmes/maternal-health/guidelines/5x5_matrix_2502.pdf

https://wcd.nic.in/kishori-shakti-yojana

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: According to the guidelines of the National Tuberculosis Elimination Program (NTEP), what would be the criteria to designate a district as a high priority district based on the prevalence of HIV TB? (Q855132)

A. >10%

B. >12%

C. >15%

D. >20%

Correct Answer: A. >10%

Explanation: According to the guidelines of the National Tuberculosis Elimination Program (NTEP), a district is designated as a high-priority district based on the prevalence of HIV among tuberculosis (TB) patients. Specifically, if more than 10% of TB patients are found to be HIV-positive, the district is categorized as a high-priority area for intensified TB-HIV collaborative activities.

References:

https://naco.gov.in/sites/default/files/Sankalak_Report_1.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which disease is targeted under the National Vector Borne Disease Control Program, with the insect depicted below acting as the vector? (Q857081)

A. Chikungunya

B. Visceral leishmaniasis

C. Malayan filariasis

D. Japanese encephalitis



Correct Answer: D. Japanese encephalitis

Explanation: - Japanese encephalitis: The insect shown in the figure above is Culex mosquito which is the vector for Japanese encephalitis. Japanese encephalitis is a viral disease that affects the brain and is transmitted by infected mosquitoes, primarily Culex species. It is targeted under the National vector-borne disease control programs in regions where the disease is endemic. National vector-borne disease control program (NVBDCP): Launched: 2002. Includes all vector-borne diseases: Vector Disease Anopheles Malaria Aedes Dengue & chikungunya Culex Filariasis: Culex quinquefasciatus/ Culex fatigans Japanese encephalitis: Culex tritaeniorhynchus, Culex vishnui Sandfly Kala-azar Images for adult mosquitoes: {{caption_text}} Anopheles {{caption_text}} Aedes {{caption_text}} Culex {{caption_text}} Mansonoides

राष्ट्रीय वैक्टर जनित
रोग नियंत्रण कार्यक्रम
NVBDCP

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References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 472-479

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: In the Ayushman Bharat scheme, what is the annual health insurance coverage offered to a qualifying family? (Q857099)

A. 5 lakhs per family per year

B. 4 lakhs per family per year

C. 6 lakhs per family per year

D. 3 lakhs per family per year

Correct Answer: A. 5 lakhs per family per year

Explanation: - 5 lakhs per family per year: In the Ayushman Bharat scheme , also known as Pradhan Mantri Jan Arogya Yojana (PMJAY), the health insurance package provided for an eligible family is 5 lakhs per family per

year . This means that eligible families can avail medical treatment and hospitalization services up to a maximum coverage of 5 lakhs (Indian Rupees) per year. Pradhan Mantri Jan Arogya Yojana. Launched in 2018 Aim: To achieve Universal Health Coverage in India. It is a flexible scheme. It is not rigid or mandatory for all states to follow. The States can opt to choose. Private Hospitals that have up to 10 beds can provide services under Ayushman Bharat Scheme. It comes under the National Health Protection Scheme Modi Care. Provides insurance coverage - 5 lakh per family, per year. There is no restriction on number of family members.



References:

https://nha.gov.in/PM-JAY

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which organization is not involved in providing funding for India's national TB program? (Q857145)

A. Government of India

B. World Bank

C. Global Fund

D. UNICEF

Correct Answer: D. UNICEF

Explanation: G : To reach 90% of all people with TB. To reach 90% of all key populations (Slum dwellers, prisoners, difficult to reach, occupational exposures-silicosis). To achieve 90% treatment. End TB Launched by WHO in 2015. Frameline- 2015- 2035 Aim- Eliminate TB by 2035. (Option A) Target- 95-90-0 Reduce mortality of TB by 95% Reduce incidence of TB by 90% Zero out of pocket expenditure - Government should look after the treatment. Stop TB It was in alignment with Millennium development goals. Target: To reduce mortality & incidence of TB by 50%. (Option C) And Eliminate TB by 2050.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition page 237-238

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which antigen is present in the Hepatitis B subunit vaccine? (Q855336)

A. HbeAg

B. HbsAg

C. HbcAg

D. HBV DNA

Correct Answer: B. HbsAg

Explanation: Hepatitis B subunit vaccine contains the surface antigen of the hepatitis B virus (HBV), which is known as HBsAg (Hepatitis B surface antigen). This antigen is a protein component of the viral envelope and is produced using recombinant DNA technology. It is the major antigen responsible for inducing an immune response against HBV. Incorrect Options: HbeAg (Hepatitis B e antigen) (Option A): This antigen is a marker of active viral replication in individuals infected with hepatitis B virus (HBV). It is not a component of the hepatitis B subunit vaccine. HbcAg (Hepatitis B core antigen) (Option C): This antigen is the inner core protein of the hepatitis B virus. It is not included in the hepatitis B subunit vaccine. HBV DNA (Hepatitis B virus DNA) (Option D): HBV DNA is the genetic material of the hepatitis B virus. It is not a component of the hepatitis B subunit vaccine.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following is included in the Pentavalent vaccine? (Q856593)

A. Diphtheria, Pertussis, Tetanus, HBV, Injectable Polio

B. Diphtheria, Pertussis, Typhoid, HBV, Hib

C. Diphtheria, Pertussis, Tetanus, Haemophilus influenza B, Pneumococcal vaccine

D. Diphtheria, Tetanus, HBV, Haemophilus influenza B, Pertussis

Correct Answer: D. Diphtheria, Tetanus, HBV, Haemophilus influenza B, Pertussis

Explanation: The pentavalent vaccine includes the following components: Diphtheria Tetanus HBV (Hepatitis B Virus) Haemophilus influenza B (Hib) Pertussis (Whooping Cough) The pentavalent vaccine combines these five components into a single formulation to provide protection against these diseases. Incorrect Options: Option A - Diphtheria, Pertussis, Tetanus, HBV, Injectable Polio: This option is incorrect because it includes "Injectable Polio" as one of the components of the pentavalent vaccine. Option B - Diphtheria, Pertussis, Typhoid, HBV, Hib: This option is incorrect because it includes "Typhoid" as one of the components of the pentavalent vaccine. Option C - Diphtheria, Pertussis, Tetanus, Haemophilus influenza B, Pneumococcal vaccine: This option is incorrect because it includes the "Pneumococcal vaccine" as one of the components of the pentavalent vaccine.

References:

Bairwa M, Pilania M, Rajput M, Khanna P, Kumar N, Nagar M, Chawla S. Pentavalent vaccine: a major breakthrough in India's Universal Immunization Program. Hum Vaccin Immunother. 2012 Sep;8(9):1314-6. doi: 10.4161/hv.20651. Epub 2012 Aug 16. PMID: 22894968; PMCID: PMC3579914.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which vaccine is linked to the risk of intussusception when administered? (Q856596)

A. Rotavirus vaccine

B. Oral Polio vaccine

C. Adenovirus vaccine

D. Measles vaccine

Correct Answer: A. Rotavirus vaccine

Explanation: The administration of the Rotavirus vaccine is associated with a small risk of intussusception. The association between the Rotavirus vaccine and intussusception was first observed with an earlier version of the vaccine called RotaShield, which was withdrawn from the market in 1999. Subsequent studies on newer rotavirus vaccines, such as RotaTeq and Rotarix, have found a small increased risk of intussusception following vaccination. Incorrect Options: Oral Polio vaccine (Option B): OPV is used to protect against polio and has not been found to have a significant association with intussusception. Adenovirus vaccine (Option C): Intussusception is not a known side effect or risk associated with the administration of Adenovirus vaccines. Measles vaccine (Option D): The Measles vaccine is not associated with an increased risk of intussusception.

References:

Park’s textbook of preventive medicine, edition: 25, page no: 213,222, 235, 239,250

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following diseases is not included in the RBSK screening? (Q856872)

A. Congenital cataract

B. Congenital glaucoma

C. ROP

D. Vitamin A deficiency

Correct Answer: B. Congenital glaucoma

Explanation: spect Details Program Rashtriya Bal Swasthya Karyakram (RBSK) Launched 2013 under the National Health Mission Objective Improve child health through early identification, screening, and management of health conditions among children aged 0 to 18 years Target Conditions (4Ds) Defects at Birth : Examples include cleft lip/palate, Down syndrome Diseases : Examples include rheumatic heart disease Deficiencies : Examples include anemia, Vitamin A deficiency Developmental Delays including Disabilities Screening Teams Mobile health teams comprising a medical officer, staff nurse, and pharmacist Screening Locations Schools, Anganwadi centers, and homes Referral System District Early Intervention Centers (DEICs) for further management Significance Improves early detection and management of child health issues, reducing morbidity and enhancing quality of life Congenital cataract (Option A) : This condition is included in the RBSK screening, as it is an important cause of preventable blindness in children. Retinopathy of Prematurity (ROP) (Option C) : ROP is included in the screening, as it is a major cause of visual impairment in premature infants. Vitamin A deficiency (Option D) : This is also part of the RBSK screening, as it can lead to blindness and other health complications.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC11155784/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following populations is not included in the HIV sentinel surveillance? (Q856885)

A. Single male migrants

B. Truck drivers

C. STD clinic attendees

D. Antenatal woman

Correct Answer: C. STD clinic attendees

Explanation: ategory Details Objective Monitor trends in HIV prevalence, guide public health interventions, and identify high-risk populations. Sentinel Sites Specific locations for surveillance, including antenatal clinics, STD clinics, and high-risk community settings. Populations Included Antenatal Women : To estimate HIV prevalence in the general population. High-Risk Groups : Female sex workers (FSWs), men who have sex with men (MSM), injecting drug users (IDUs). Bridge Populations : Truck drivers, single male migrants. Data Collected HIV

Prevalence : Percentage of individuals in the group who are HIV-positive. Demographic Information : Age, gender, occupation, etc. Risk Behavior : Sexual behavior, drug use, and other HIV transmission risk factors. Key Features Regular blood sample collection. HIV testing conducted in sentinel sites. Exclusions STD clinic attendees may not be included as their data overlaps with other high-risk groups. Importance Tracks HIV trends over time. Guides the allocation of resources. Helps design targeted prevention programs for at-risk populations. Single male migrants (Option A) : They are often at higher risk due to mobility and exposure to multiple sexual partners. Truck drivers (Option B) : A high-risk group due to frequent travel and potential for high-risk sexual behavior. Antenatal women (Option D) : Provide important data on the general population and mother-to-child transmission.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC2629522/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which statement accurately describes the Nikshay Poshan Yojana program? (Q856444)

A. Rs 500 is given per week

B. Rs 1000 is given per month

C. Mid day meals are given

D. Dietary advice is given

Correct Answer: B. Rs 1000 is given per month

Explanation: The Nikshay Poshan Yojana is a government initiative launched by the Ministry of Health and Family Welfare to provide nutritional support to individuals undergoing treatment for Tuberculosis (TB) . The program aims to improve the nutritional status of TB patients, as proper nutrition is essential for effective treatment and recovery. Under this scheme: Rs 1000 is provided monthly to TB patients as nutritional support to help them adhere to their treatment and improve overall health. Rs 1000 is given per week (Option A) : This is incorrect because the scheme provides Rs 1000 per month , not weekly. Mid-day meals are given (Option C) : This is not part of the Nikshay Poshan Yojana. The program provides financial support for nutrition, but not direct meal distribution. Dietary advice is given (Option D) : While nutrition is a component, the primary focus of the scheme is financial support for food, not direct dietary counseling.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC11265306/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: As a medical officer at a Primary Health Center (PHC), what would be your recommendation for mass prophylaxis/treatment of anemia? (Q856463)

A. FeS04 + Vit C + Folate + Vit B12

B. Iron (Ill) hydroxide polymaltose

C. Ferrous fumarate

D. Inj. iron sucrose

Correct Answer: A. FeS04 + Vit C + Folate + Vit B12

Explanation: As a medical officer at a Primary Health Center (PHC) , for mass prophylaxis or treatment of anemia , the most common approach would include a combination of iron (to treat iron deficiency anemia), along with vitamin C (to enhance iron absorption), folate (for folate deficiency), and vitamin B12 (for vitamin B12 deficiency). This combination is effective for treating nutritional anemia and anemia due to multiple deficiencies in populations, particularly in rural or underserved areas. FeSO4 (Ferrous sulfate) is a commonly used form of oral iron . Vitamin C enhances the absorption of iron. Folate and Vitamin B12 address deficiencies that can contribute to anemia, particularly megaloblastic anemia Iron (III) hydroxide polymaltose (Option B) : This is an oral iron preparation , but it's typically used when iron sulfate is not tolerated due to gastrointestinal side effects. However, it may not be the first choice for mass prophylaxis. Ferrous fumarate (Option C) : Another form of oral iron , but the inclusion of vitamins C, B12, and folate in Option A makes it a more comprehensive approach. Inj. iron sucrose (Option D) : This is an injectable iron preparation used for patients who cannot tolerate oral iron or have severe iron deficiency anemia. However, it is not typically used for mass prophylaxis at the PHC level due to its cost and the need for trained personnel to administer injections.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 710, 732, 733

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: The World Health Organization (WHO) has defined blindness as a condition where the level of visual acuity is below (Q859426)

A. 6/60

B. 3/60

C. 1/60

D. 6/18

Correct Answer: B. 3/60

Explanation: WHO (World Health Organization) defines blindness as visual acuity less than 3/60. It indicates severe impairment of vision, where the person can only see at a distance of 3 meters or less what a person with normal vision can see clearly at 60 meters. WHO Classification of Visual Impairment The World Health Organization (WHO) defines blindness as "visual acuity of less than 3/60 (Snellen) or its equivalent". The International Classification of Disease 11 (2018) classifies vision impairment into distance and near-presenting vision impairment Classification Visual Acuity Mild Distance Vision Impairment Presenting visual acuity worse than 6/12 Moderate Distance Vision Impairment Presenting visual acuity worse than 6/18 (Option D ruled out) Severe Distance Vision Impairment Presenting visual acuity worse than 6/60 (Option A ruled out) Blindness Presenting visual acuity worse than 3/60 (Option B) Near Vision Impairment Presenting near vision acuity worse than N6 or M0.8 at 40 cm with existing correction (Option C ruled out)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg no-456-457

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: The RMNCH+A strategy by the Ministry of Health and Family Welfare, Government of India, aims to provide comprehensive healthcare across various life stages. Which of the following population groups is not a target of the RMNCAH+N strategy? (Q865258)

A. Infant population

B. Family planning services

C. Geriatric population

D. Adolescent population

Correct Answer: C. Geriatric population

Explanation: The geriatric population is not included as a target group under the Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCAH+N) initiative, which is a component of the National Health Mission launched in 2013. Components of RMNCAH+N:



References:

5 X 5 Matrix for High Impact RMNCH+A Interventions

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A researcher who was studying on plasmodium species decided to visit the malaria-endemic place in Odisha after 2 days to do his clinical study for 5 weeks. Which of the following drugs need to be taken as prophylaxis before visiting the malaria-endemic place? (Q859451)

A. Artesunate

B. Mefloquine

C. Doxycycline

D. Chloramphenicol

Correct Answer: C. Doxycycline

Explanation: The most appropriate drug for short-term malaria prophylaxis is Doxycycline 100mg daily. Chemoprophylaxis of malaria: Short-term prophylaxis Long-term prophylaxis Duration of Rx < 6 weeks > 6 weeks DOC Doxycycline 100 mg daily (Option C) Mefloquine 250 mg weekly (Option B ruled out) Prophylaxis period Before travel 1-2 days 2-3 weeks After travel 4 weeks 4 weeks Contraindications of mefloquine: History of

convulsions. Neuropsychiatric illness. Cardiac conditions. Other drugs for short-term prophylaxis: Chloroquine: 100 mg or 150 mg tablets. 300 mg (3 tablets of 100 mg or 2 tablets of 150 mg), once a week, on the same day each week. (Or) One tablet of 100 mg daily for 6 days per week. Proguanil: 200 mg, 2 tablets once a day. Artesunate (Option A): It is typically used to treat malaria. This option is incorrect. Chloramphenicol (Option D): It is an antibiotic that is not typically used for malaria prophylaxis.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pages 312,313

Diagnosis and Treatment of Malaria

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: What is the quickest method for laboratory diagnosis of pulmonary tuberculosis? (Q859453)

A. CB-NAAT

B. Sputum microscopy

C. Sputum culture

D. Radiometric BACTEC method

Correct Answer: A. CB-NAAT

Explanation: CB-NAAT is a molecular diagnostic test that can detect the genetic material (DNA) of Mycobacterium tuberculosis, the bacterium that causes TB. It is a highly sensitive and specific test that can provide rapid results. Diagnostic Modality Description Usage Sputum Smear Microscopy (Option B ruled out) Microscopic examination of sputum samples to detect acid-fast bacilli (AFB). Used for initial screening and diagnosis, especially in resource-limited settings. Chest X-ray Imaging done to identify abnormalities suggestive of TB. Used to support diagnosis when clinical suspicion is high; not definitive for TB diagnosis. TruNAAT/CBNAAT (Option A) Molecular tests that detect Mycobacterial DNA and rifampicin resistance. Recommended for initial diagnosis due to high sensitivity and specificity; rapid results. Line Probe Assay (LPA) Molecular test to detect specific genetic mutations associated with drug resistance (e.g., rifampicin, isoniazid). Used for detecting drug resistance in confirmed TB cases, not for initial diagnosis. Tuberculin Skin Test (TST) A skin test to measure immune response to injected tuberculin protein. Primarily used for screening latent TB infection; not specific for active TB diagnosis. Interferon-Gamma Release Assays (IGRAs) Blood cytokine analysis test that measures immune response to TB antigens. Used for detecting latent TB infection Sputum Culture (Option C ruled out) Growing Mycobacteria from sputum samples to confirm TB and test for drug susceptibility. Gold standard for TB diagnosis; takes several weeks to obtain results. Drug Susceptibility Testing (DST) Testing TB bacteria from patient samples to determine resistance to TB drugs. Used to guide treatment by identifying drug-resistant strains in confirmed TB cases. Radiometric BACTEC method (Option D): It offers faster

detection compared to conventional culture methods but still requires several weeks to obtain results. This option is incorrect.

References:

Park's Textbook of Preventive Medicine 27th edition Pg 214-230

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: As a medical officer posted in rural service, you have been asked to supervise the various preventive measures being taken in your region against malaria. According to the program whose logo is shown below, you would be correct to advise all of the following except: (Q859460)

A. Two rounds of spraying with DDT should be done to provide protection during the entire transmission season.

B. Long lasting insecticide nest (LLIN) should be provided in areas with annual parasite Index 25.

C. Indoor residual sprays are not suitable for vector control in rural areas.

D. In case of DDT resistance, 3 rounds of spraying with Malathion should be done to provide protection during the entire transmission season.



Correct Answer: C. Indoor residual sprays are not suitable for vector control in rural areas.

Explanation: This image shows the National Vector-Born Disease Control Program (NVBDCP). Indoor residual spraying (IRS) is considered an effective vector control measure, including in rural areas. IRS involves spraying insecticides on the interior walls of houses to kill mosquitoes and reduce their population. It is an important component of integrated malaria control programs. National vector-borne disease control program (NVBDCP): {{caption_text}} Launched: 2002. Includes all vector-borne diseases: Vector Disease Anopheles Malaria Aedes Dengue & chikungunya Culex Japanese encephalitis: Culex quinquefasciatus/ Culex fatigans Filariasis: Culex tritaeniorhynchus, Culex vishnui Sandfly Kala-azar Indoor residual spray (IRS): Chemicals used: DDT 50% WP: Insecticide of choice Malathion 25% Synthetic pyrethroids: Deltamethrin and Cyfluthrin IRS with insecticides when API >2 : 2 rounds of DDT (1gm/m 2) at a 6-week interval during the transmission season (Option A ruled out) ↓ If refractory: ADD malathion, 3 rounds of Malathion (2gm/m 2) at 6-week intervals. (Option D ruled out) ↓ If still refractory: ADD 2 rounds of a synthetic pyrethroid (0.25gm/m 2) at 6-week intervals. Note: Long-lasting insecticidal nets (LLIN) covers the population living in areas where API > 5. Long-Lasting Insecticidal Nets (LLINs) are mosquito nets treated with insecticides that are designed to retain their effectiveness for an extended period, typically up to 3 years , even after repeated washing. They are a critical tool in NVBDCP to fight against mosquito-borne diseases. (Option B ruled out) Purpose: Dual action provides a physical barrier against mosquito bites while also delivering insecticidal action. Material and Mesh Size: Made from polyester or polyethene. Mesh size: around 156 holes per square inch.



References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 472-479

↑ *Back to this question in Part A*

Q19: Which of the following diseases are included in the scheme, which has the logo as given below? (Q859933)

A. CVD, Diabetes, Bronchial asthma

B. Diabetes, Hypertension, Bronchial asthma

C. CVD, Cancer, Diabetes, Stroke

D. Bronchial asthma, Hypertension, CVD



Correct Answer: C. CVD, Cancer, Diabetes, Stroke

Explanation: The logo given in the image is of the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). Under this programme, the included diseases are CVD, Cancer, Diabetes, and Stroke. The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) is explicitly described as an integrated program. It combines efforts to address cancer, diabetes, cardiovascular diseases, and stroke, making it the most suitable program with a logo reflecting this integrated approach. Component Initiatives New Initiatives under NPCDCS Intervention for prevention and control of Rheumatic Heart Disease under NPCDCS and Rashtriya Bal Swasthya Karyakram (RBSK). Integration of AYUSH with NPCDCS. Integration of RNTCP with NPCDCS to articulate a national

strategy for management of TB and diabetes comorbidities in India. Cancer Component under NPCDCS Cancer Services under NPCDCS: Providing common diagnostic services, basic surgery, chemotherapy, and palliative care for cancer patients at 100 district hospitals. Supporting each district with chemotherapy drugs for 100 patients, establishing day-care chemotherapy facilities, and providing facilities for laboratory investigations, including mammography. Offering home-based palliative care for chronic and progressive cancer patients in 100 districts. Designating State Cancer Institutes (SCIs) as apex institutions for comprehensive cancer diagnosis, treatment, and care. Strengthening 45 centres as Tertiary Cancer Centres (TCCs) to deliver comprehensive cancer care services.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 542-3.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Which organization is involved in intersectoral coordination in the integrated child development services (ICDS)? (Q859971)

A. NHM

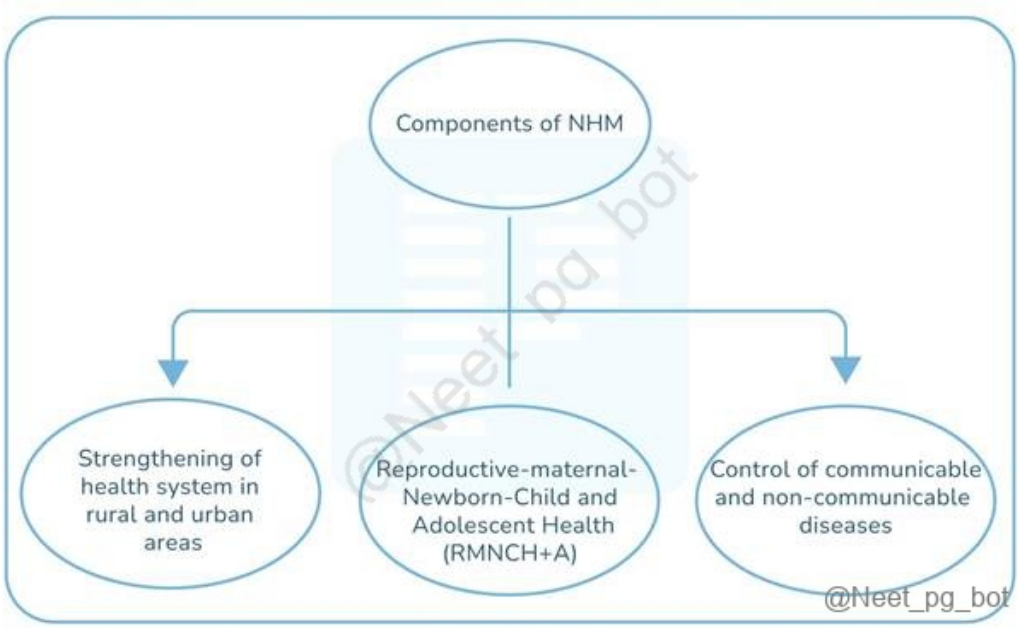
B. NACO

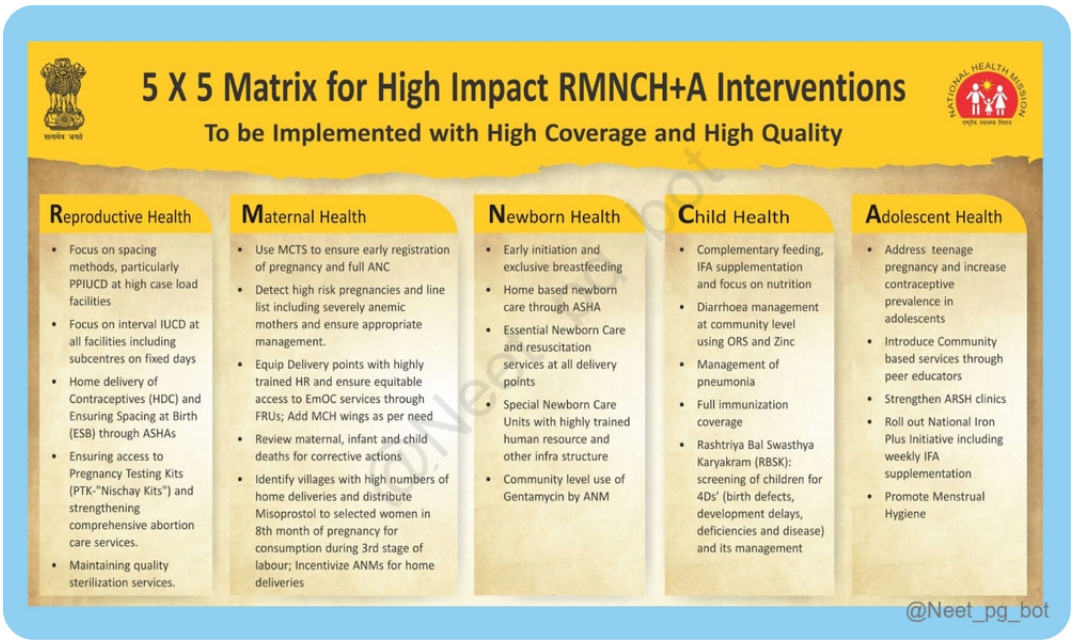
C. NLEP

D. UNDP

Correct Answer: A. NHM

Explanation: NHM is the National Health Mission. There is inter-sectorial coordination between the ICDS and the NHM. Their coordination is focused on the nutrition of the child and the child's health care. The components of NHM: Goals of NHM: Reduce Infant Mortality Rate to 25/1000 live births Reduce Maternal Mortality Rate to 1/1000 live births Reduce Total Fertility Rate to 2.1 Reduce annual incidence and mortality from TB by half. Reduce prevalence of Leprosy to <1/10000 population and incidence to zero in all districts Annual malaria incidence to < 1/1000. <1% microfilaria prevalence in all districts. Eliminate kala-azar by 2015 Components of RMNCAH+N: NACO (Option B): NACO is the National AIDS Control organization and it does not work in coordination with ICDS. NLEP (Option C): NLEP is the National Leprosy Eradication Program and it does not work in coordination with ICDS. UNDP (Option D): UNDP is the United Nations development program and it does not work in coordination with ICDS.





References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg no 481, 501, 512

https://nhm.gov.in/images/pdf/programmes/maternal-health/guidelines/5x5_matrix_2502.pdf

https://en.wikipedia.org/wiki/United_Nations_Development_Programme

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: The full form of the Urban HEART programme is: (Q859978)

A. Urban health equity assessment and response tool

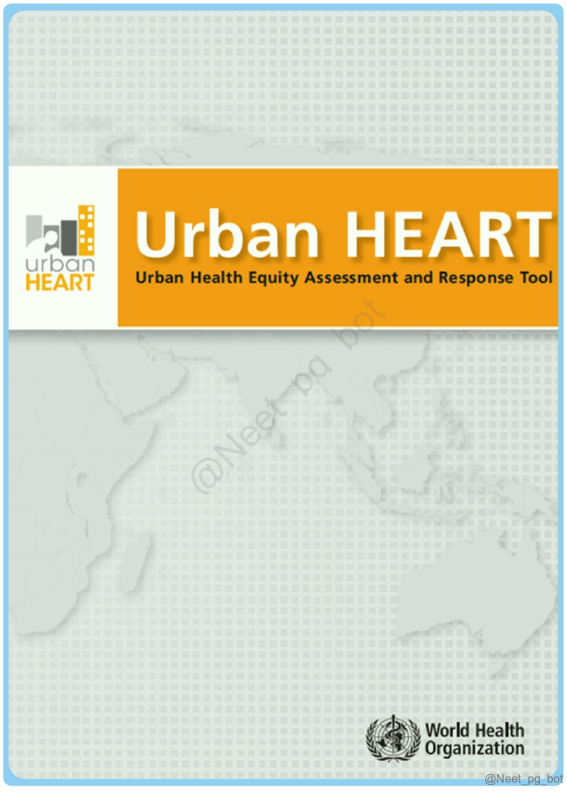
B. Urban health evaluation assessment and response tool

C. Urban health equity assessment and response technique

D. Urban health evaluation assessment and response technique

Correct Answer: A. Urban health equity assessment and response tool

Explanation: Urban HEART is a tool developed by WHO that is designed to address health inequities in urban areas. It helps policymakers identify disparities, assess their causes, and implement strategies to improve health outcomes for disadvantaged populations. Health of individuals varies due to variation in genetic and constitutional variations. Older people tend to be sicker than younger people, because of the natural ageing process. These turn difference in health into an inequity in health.



References:

https://www.who.int/publications/i/item/9789241500142

↑ *Back to this question in Part A*

@Neet_pg_bot

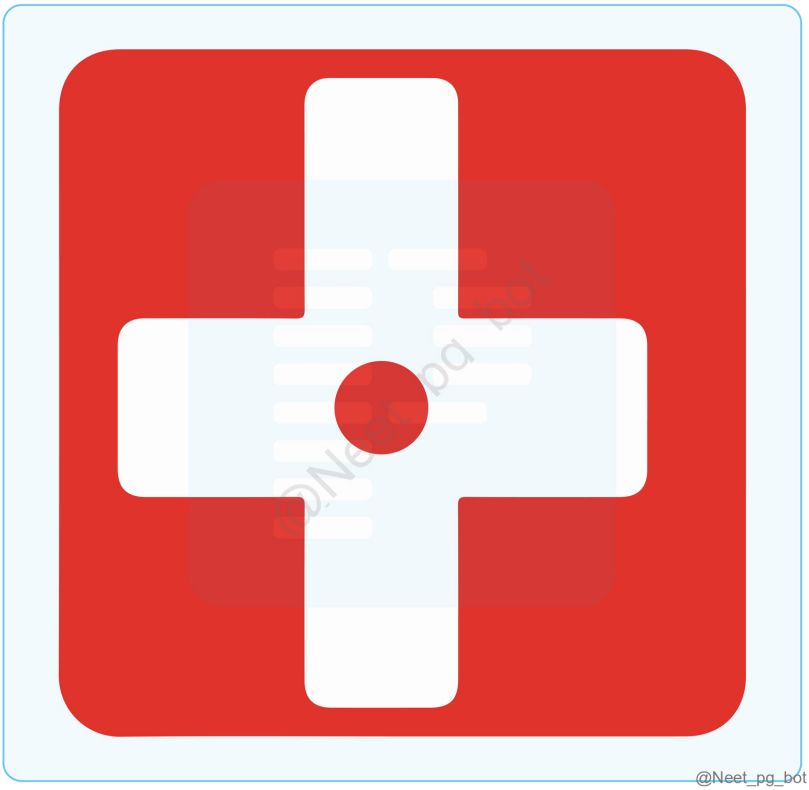
Q22: Please recognize the logo displayed in the provided image (Q860027)

A. International red cross

B. Suraksha Clinic

C. National AIDS control programme

D. Family planning campaign



Correct Answer: B. Suraksha Clinic

Explanation: The given logo is the logo of Suraksha Clinic which is under the National AIDS Control Programme. Suraksha Clinic (previously Designated STI/RTI Clinics) is an STI/RTI clinic chain. The National AIDS Control Organisation founded these clinics to provide improved healthcare and to combat HIV/AIDS in India.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg 501

https://naco.gov.in/sti-rti-services

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: Which of the following is true for DOTS? (Q860033)

A. Treatment under supervision

B. Every patient is given the same treatment

C. Streptomycin is given to all the patients

D. Dots stands for dosage

Correct Answer: A. Treatment under supervision

Explanation: DOTS is a globally recommended strategy for the treatment of tuberculosis (TB). One of the key principles of DOTS is that treatment is administered under direct supervision by a healthcare provider or trained observer. This ensures that patients adhere to the prescribed treatment regimen and complete the full course of treatment, which is essential for successful TB treatment and prevention of drug resistance. 99DOTS: A cost-effective method to monitor and improve adherence to TB medication. Anti-TB blister packs are wrapped in envelopes with hidden toll free phone numbers revealed only when doses are dispensed. Patients make a call to the hidden number after taking their medication, confirming dose intake.

References:

99DOTS Deployments

99 DOTS and MERM boxes | Knowledge Base

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: A' Bacteriologically Confirmed Case' in TB is defined as: (Q860035)

A. X-ray positive

B. Sputum positive

C. Mantoux positive

D. History of cough

Correct Answer: B. Sputum positive

Explanation: A "sputum positive" case in TB refers to a person who has been diagnosed with TB based on the presence of Mycobacterium tuberculosis (the bacteria that causes TB) in their sputum sample. A positive sputum test confirms the presence of TB bacteria, making it an important diagnostic criterion for identifying TB cases. The new NTEP changes in terminologies are as follows:- Category Description Criteria/Features Presumptive TB Case Used in place of TB suspect . Individuals showing symptoms suggestive of TB but not yet confirmed. -Cough, Fever, Night sweats +- Weight loss > 2 weeks (Option D ruled out) Clinically Diagnosed TB Case Sputum negative but with high clinical suspicion of TB. Used in place of Sputum negative TB case. -Persistent symptoms despite negative sputum smear - High clinical suspicion based on symptoms, radiological and histological features (Option A ruled out) Bacteriologically Confirmed TB Case (Option B) Biological specimen is positive for sputum AFB and/or CBNAAT. Used in place of Sputum positive TB case. - Positive sputum smear for AFB - Positive CBNAAT test confirming the presence of TB bacteria

References:

Park’s Textbook of Preventive Medicine 27th edition Pg 210-211

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: A patient diagnosed with HIV presents with cough and fever for the past 3 months and later diagnosed with miliary TB. What is the next best step in management? (Q879033)

A. ATT followed by ART 2 weeks later with an increased dose of dolutegravir with dexamethasone

B. ART followed by ATT 2 weeks later with an increased dose of dolutegravir

C. Increased dose of dolutegravir stat

D. ART followed by ATT 2 weeks later with dexamethasone and increased dose of dolutegravir

Correct Answer: A. ATT followed by ART 2 weeks later with an increased dose of dolutegravir with dexamethasone

Explanation: In HIV–TB co-infection, the order and timing of therapy are essential to prevent severe immune complications and drug interactions. Start ATT first: All patients with active TB should begin Anti-Tubercular Therapy (ATT) before ART. Start ART after 2 weeks: Early ART (after 2 weeks of ATT) reduces mortality in miliary or disseminated TB. Dolutegravir dose adjustment: Rifampicin in ATT induces hepatic enzymes, lowering dolutegravir levels. Therefore, the dose must be increased to 50 mg twice daily . Dexamethasone use: Indicated in miliary or CNS TB to reduce inflammation and risk of complications. Incorrect Options: ART followed by ATT 2 weeks later with increased dose of dolutegravir (Option B): Starting ART before ATT can cause severe Immune Reconstitution Inflammatory Syndrome (IRIS) and significant drug–drug interactions with rifampicin; hence, not recommended . Increased dose of dolutegravir stat (Option C): Dolutegravir adjustment alone is inadequate without initiating ATT; underlying TB remains untreated. ART followed by ATT 2 weeks later with dexamethasone and increased dose of dolutegravir (Option D): Incorrect sequence — ART before ATT increases risk of IRIS; steroids cannot prevent this reaction.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 235, 236.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: A previously vaccinated healthcare worker (HCW) sustains a needle stick injury from a hepatitis B surface antigen (HBsAg) positive patient. The HCW is a known non-responder. What is the next step in management? (Q879037)

A. Give 2 doses of Hepatitis B immunoglobulin (HBIG) immediately at separate sites

B. Give 2 doses of HBIG – one immediately and another after 4 weeks

C. Give 1 dose of HBIG + start a complete hepatitis B vaccination series

D. No further action is required

Correct Answer: B. Give 2 doses of HBIG – one immediately and another after 4 weeks

Explanation: A healthcare worker who is a non-responder (fails to develop protective anti-HBs levels even after completing two full Hepatitis B vaccination series) and is exposed to HBsAg-positive blood is at significant risk of infection. Such individuals should receive two doses of Hepatitis B Immunoglobulin (HBIG) : First dose: As soon as possible after exposure (preferably within 24 hours). Second dose: After 1 month (4 weeks) . Additional vaccination is not beneficial since the person is a confirmed non-responder. Incorrect Options: Give 2 doses of HBIG immediately at separate sites (Option A): Incorrect; the second dose must be given after 4 weeks, not simultaneously. Give 1 dose of HBIG + start a complete hepatitis B vaccination series (Option C): Appropriate for unvaccinated or incomplete responders, not confirmed non-responders. No further action is required (Option D): Incorrect; non-responders remain unprotected and require passive immunization.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 254, 255.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: According to NP- NCD which out of the following screening are not done: (Q879042)

A. VIA for cervical cancer screening

B. Visual inspection for oral cancer

C. Mammography for screening at primary level

D. Screening starts beyond 30 years

Correct Answer: C. Mammography for screening at primary level

Explanation: Mammography is done minimum at level of secondary level of health system in district hospital Under the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD) , screening for common cancers (oral, breast, and cervical) is conducted at the primary health-care level through Health and Wellness Centres (HWCs) . Cervical cancer: Visual Inspection with Acetic Acid (VIA). Oral cancer: Visual inspection using a torch. Breast cancer: Clinical Breast Examination (CBE), not mammography. Screening is initiated for individuals aged 30 years and above . Incorrect Options: VIA for cervical cancer screening (Option A): VIA is used at the primary level. Visual inspection for oral cancer (Option B): done under NP-NCD screening. Screening starts beyond 30 years (Option D): applies to all target groups.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 439

Mahajan & Gupta Textbook of Preventive and Social Medicine, 4th Edition, Page 359

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: What is the WHO definition of blindness? (Q860000)

A. 6/60

B. 3/60

C. 6/18

D. 1/60

Correct Answer: B. 3/60

Explanation: The World Health Organization (WHO) defines blindness as a visual acuity of less than 3/60 in the better eye with the best possible correction. Distance vision impairment (WHO): Mild – visual acuity worse than 6/12 Moderate – visual acuity worse than 6/18 (Option C) Severe – visual acuity worse than 6/60 (Option A) Blindness – visual acuity worse than 3/60 (Option B) 1/60 (Option D): 1/60 is not the specific cut-off point defined by the WHO for blindness.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

https://www.paho.org/en/topics/visual-health#:~:text=Distance%20vision%20impairment%3A,acuity%20worse%20than%203%2F60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: What is the name of the technical platform developed under India's National Tele Mental Health Programme (NTMHP) to deliver mental healthcare services through a multi-tiered system via telephone, digital platforms, and online portals? (Q866797)

A. NIKSHAY

B. Tele-MANAS

C. Quinidine

D. e-Sanjeevani

Correct Answer: B. Tele-MANAS

Explanation: The technical platform under India's National Tele Mental Health Programme (NTMHP) designed specifically for delivering mental healthcare services through telephone, digital platforms, and online portals in a multi-tiered system is Tele-MANAS (Mental Health Assistance and Networking Across States). Tele-MANAS: Launched by: Ministry of Health and Family Welfare, Government of India. Objective: Provide accessible, affordable, and quality mental health services across India. Reduce stigma and bridge the treatment gap for mental illnesses. Structure: Tier 1: State Tele-MANAS cells with trained counsellors and mental health professionals answering calls via a toll-free helpline. Tier 2: District-level mental health facilities for in-person follow-up and advanced care. Key Features: Toll-free 24×7 helpline. Multi-language support. Integration with digital platforms and online portals for follow-up care. NIKSHAY (Option A): Web-enabled application for TB surveillance, monitoring, and patient management under the National TB Elimination Programme. Quinidine (Option C): An antiarrhythmic and antimalarial drug; unrelated to healthcare IT platforms. e-Sanjeevani (Option D) : National telemedicine service providing online OPD and doctor consultations; not specific to mental health.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: According to the World Health Organization (WHO), which of the following best defines blindness? (Q865264)

A. Best corrected visual acuity <6/60 in the better eye

B. Best corrected visual acuity <3/60 in the better eye

C. Uncorrected visual acuity <6/60 in any eye

D. Uncorrected visual acuity <3/60 in any eye

Correct Answer: B. Best corrected visual acuity <3/60 in the better eye

Explanation: The World Health Organization (WHO) defines blindness as having a best corrected visual acuity of less than 3/60 in the better eye WHO Classification of Visual Impairment The World Health Organization (WHO) defines blindness as "visual acuity of less than 3/60 (Snellen) or its equivalent". (Option B) The International Classification of Disease 11 (2018) classifies vision impairment into distance and near-presenting vision impairment Classification Visual Acuity Mild Distance Vision Impairment Presenting visual acuity worse than 6/12 Moderate Distance Vision Impairment Presenting visual acuity worse than 6/18 Severe Distance Vision Impairment Presenting visual acuity worse than 6/60 Blindness Presenting visual acuity worse than 3/60 Near Vision Impairment Presenting near vision acuity worse than N6 or M0.8 at 40 cm with existing correction NPCB Classification of Visual Impairment The National Programme for Control of Blindness (NPCB) in India defines blindness as "visual acuity of <3/60 in a better eye with best possible correction" and central visual field <10 degrees. The NPCB further categorizes visual impairment as: Classification Visual Acuity Visual Impairment Visual acuity of less than 6/18 in the better eye with available correction Low Vision Visual acuity of less than 6/18 to 6/60 Economic Blindness Visual acuity of less than 6/60 to 3/60 Social Blindness Visual acuity of less than 3/60 to 1/60 Manifest Blindness Visual acuity of less than 1/60 to the perception of light Absolute Blindness No

perception of light

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 456-457.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: According to recent NACO guidelines, which of the following groups is no longer classified as a high-risk group (HRG) for HIV transmission? (Q865337)

A. Men who have sex with men (MSM)

B. Female sex workers (FSWs)

C. Truck drivers

D. Intravenous drug users (IDUs)

Correct Answer: C. Truck drivers

Explanation: As per the latest guidelines from the National AIDS Control Organisation (NACO) , truck drivers are no longer classified as a high-risk group (HRG) for HIV transmission. Sentinel Surveillance for HIV: HIV Sentinel Surveillance HIV sentinel surveillance tracks missing cases and monitors HIV infection trends in specific groups and regions to understand epidemic dynamics and guide public health interventions. Objectives Monitor HIV infection trends & emerging pockets of HIV infection. Estimate HIV prevalence in general population as well as high-risk groups and burden in the country and high-risk groups across states. Provide data for program evaluation and improvement. Key Features Focus on High-Risk Groups: Commercial sex workers (CSW), men who have sex with men (MSM), injecting drug users, and transgender individuals. (Option A, B, D ruled out) Antenatal Women as Proxies: Includes data from antenatal women to estimate HIV prevalence in the general population. Key Uses Resource Allocation: Helps direct resources and interventions to the most affected areas and populations. Program Evaluation: Tracks trends to evaluate the effectiveness of HIV/AIDS control programs. Early Warning System: Acts as an early warning for emerging outbreaks or changes in transmission patterns. Frequency and Timing Conducted biennially, with the most recent surveillance in India done in 2021

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 496.

Under NACP III - Targeted Interventions

↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: A 3-year-old child presents with difficulty in walking, bowing of legs, is underweight, and has minimal sun exposure. Which of the following government schemes addresses nutritional deficiencies in children under 6 years of age? (Q866448)

A. Mid-Day Meal Scheme

B. Anemia Mukt Bharat

C. Integrated Child Development Services (ICDS)

D. National Nutritional Deficiency Control Programme

Correct Answer: C. Integrated Child Development Services (ICDS)

Explanation: ICDS focuses on nutritional supplementation, health, and preschool education for children under 6 years, addressing malnutrition and micronutrient deficiencies. Incorrect Options: Option A: Mid-Day Meal Scheme targets school-age children, typically 6–14 years. Option B: Anemia Mukt Bharat focuses broadly on anemia control across ages but is not specifically for under-6 children nutrition. Option D : National Nutritional Deficiency Control Programme is outdated and subsumed under newer schemes.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q33: Under the Weekly Iron and Folic Acid Supplementation (WIFS) scheme, what is the composition of IFA tablets given to children aged 10–19 years? (Q866455)

A. 60 mg elemental iron + 100 µg folic acid

B. 100 mg elemental iron + 500 µg folic acid

C. 100 mg elemental iron + 100 µg folic acid

D. 60 mg elemental iron + 500 µg folic acid

Correct Answer: D. 60 mg elemental iron + 500 µg folic acid

Explanation: The WIFS program recommends weekly supplementation to adolescents with 60 mg of elemental iron and 500 µg (0.5 mg) of folic acid to prevent and control anemia effectively in this age group. Lower folic acid doses (Option A) are insufficient; higher iron doses (Options B and C) are typically used in therapeutic daily supplementation, not weekly prophylaxis.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q34: What does JSSK stand for? (Q844073)

A. Janani Shishu Suraksha Karyakram

B. Janani Shishu Swasthya Karyakram

C. Janani Shishu Suraksha Kendra]

D. Janani Shishu Swasthya Kendra

Correct Answer: A. Janani Shishu Suraksha Karyakram

Explanation: Correct Option A - Janani Shishu Suraksha Karyakram: The Janani Shishu Suraksha Karyakram (JSSK) is a scheme launched by the Government of India to provide free and cashless healthcare services to pregnant women, mothers, and newborns. The program aims to reduce maternal and infant mortality rates by ensuring that all pregnant women and newborns have access to essential healthcare services without financial constraints. Incorrect Options: Options B, C, and D are incorrect as given above.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q35: Identify the logo? (Q844075)

A. Leprosy

B. TB

C. Malaria

D. HIV



Correct Answer: A. Leprosy

Explanation: Correct Option A - Leprosy: The above given logo refers to Leprosy/Hansen's Disease. Incorrect Options: Options B, C and D are incorrect as given above.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q36: Identify the image given? (Q844094)

A. Arohi from HIV

B. Sapna Leprosy

C. Meena Unicef

D. None of the above



Correct Answer: B. Sapna Leprosy

Explanation: Correct Option B - Sapna Leprosy: This is the correct answer. The "Sapna" campaign is linked to leprosy awareness in India, symbolizing hope and the possibility of a future free from leprosy-related stigma and disease. Incorrect Options: Option A - Arohi from HIV: This option may refer to a character or campaign related to HIV awareness, but it is not the correct association for the image related to leprosy. Option C - Meena UNICEF : The Meena campaign, supported by UNICEF, focuses on gender equality and education for girls in South Asia. It is not related to leprosy or the image in question.



↑ *Back to this question in Part A*

@Neet_pg_bot

Q37: Which one of the following is included in Ayushman Bharat under school health services? (Q844120)

A. Providing sanitary pads

B. Health check-up/screening

C. Albendazole provision

D. All the above

Correct Answer: D. All the above

Explanation: Correct Option D - All the above Option A - Providing sanitary pads : This is included under the Ayushman Bharat School Health Program, which aims to promote menstrual hygiene among adolescent girls by providing sanitary pads. Option B - Health check-up/screening : Regular health check-ups and screenings are part of the school health services under Ayushman Bharat to identify and address health issues among school children. Option C - Albendazole provision : Albendazole is provided for deworming under the school health services, targeting the prevention of parasitic infections in children.

References:

https://nhm.gov.in/images/pdf/programmes/SH&WP/IEC/Advocacy-Material/Services_provided_under_SH&WP.pdf

https://nhm.hp.gov.in/storage/app/media/uploaded-files/Operational_guidelines_on_School_Health_Programme_under_Ayushman_Bharat.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q38: How much mg of iron and mcg of folic acid should a pregnant woman be given? (Q860521)

A. 60mg/500mcg biweekly

B. 60mg/500mcg weekly

C. 60mg/500mcg daily

D. 60mg/500mcg once a month

Correct Answer: C. 60mg/500mcg daily

Explanation: According to Anemia Mukt Bharat, 60 mg iron and 500 mcg of folic acid daily is provided to pregnant and lactating women Age Group Iron Dose & Frequency Folic Acid Dose & Frequency Infants (6-59 months) 1 ml IFA syrup (20 mg elemental iron, 100 mcg folic acid) biweekly Included in syrup (100 mcg) biweekly Preschool Children (5-9 years) 45 mg elemental iron + 400 mcg folic acid weekly Included in tablet (400 mcg) weekly Adolescents (10-19 years) 60 mg elemental iron + 500 mcg folic acid weekly Included in tablet (500 mcg) weekly Pregnant & Lactating Women 60 mg elemental iron + 500 mcg folic acid daily Included in tablet (500 mcg) daily Women of Reproductive Age (15-49 years) 60 mg elemental iron + 500 mcg folic acid weekly Included in tablet (500 mcg) weekly Incorrect Options: Option A, B & D are incorrect

References:

Anemia Mukt Bharat (AMB) | National Health Mission Tamil Nadu, Department of Health & Family Welfare Govt. of Tamil Nadu, India

Operational Guidelines for Weekly IFA Supplementation Programme for the Community Based Intervention Guidelines for Anganwadi Workers

↑ *Back to this question in Part A*

@Neet_pg_bot

Q39: The biological method for Mosquito Larva control is done by? (Q860592)

A. Spray 3 times a month

B. Nets to be distributed

C. Gambusia fish

D. Repellents

Correct Answer: C. Gambusia fish

Explanation: Gambusia fish are voracious feeders and consume mosquito larvae, thus helping to reduce the mosquito population in water bodies where they are introduced. They are particularly effective in controlling mosquito larvae in stagnant or slow-moving water bodies like ponds, ditches, and water tanks. This method of biological control is environmentally friendly and sustainable. Additionally, Gambusia fish are easy to rear and maintain, making them a practical and cost-effective solution for mosquito larva control in certain habitats. Anti-larval measures against mosquito larvae: Environmental measures Chemical control Biological control Yield permanent results and source reduction. E.g. Filling drains and ditches. Levelling of ground. Proper drainage of breeding areas. Intermittent irrigation. Changing water alkalinity. Using larvicides E.g. 1. Physical: MLO (Mosquito larvicidal oil): 200L/hectare 2. Chemical: Paris green Temephos (Abate): 200L/hectare 3. IGR (insect growth regulators): Inhibit chitin formation, moulding and adult maturation. Pyriproxyfen and Diflubenzuron Larvivorous Fishes: 1. Gambusia and Poecilia fish 2. Bacillus thuringiensis (used in polluted waters) 3. Toxorhynchites splendens (predator mosquito for Aedes and Anopheles) Incorrect Options: Options A, B, and D are incorrect

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 477-9

↑ *Back to this question in Part A*

@Neet_pg_bot

Q40: What is the primary objective of the Rashtriya Bal Swasthya Karyakram (RBSK)? (Q860594)

A. Prophylactic Iron and folic acid Supplementation

B. Healthful School Environment

C. Immunization

D. Screening for child health issues

Correct Answer: D. Screening for child health issues

Explanation: RBSK Rashtriya Bal Swasthya Karyakram: RBSK Launched in 2013. Relies on early childhood screening and interventional services. Age group 0-6 years- urban or rural slums 6-18 years- government school-going children Screening Secondary level of prevention Screening done for 4Ds: Diseases Defects Deficiencies Developmental delays Screened by Mobile teams and this includes: Medical officers Ayush officers Pharmacists Lab technicians Incorrect Options: Option A, B & C are incorrect

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 529

https://nhm.gov.in/index4.php?lang=1&level=0&linkid=499&lid=773

↑ *Back to this question in Part A*

@Neet_pg_bot

Q41: A 49-year-old man came for a follow-up after recently receiving a new diagnosis and treatment initiation. He is counseled about the Axshya project. Which of the following diseases was this patient diagnosed with? (Q860599)

A. Tuberculosis

B. Diabetes

C. Malaria

D. Zika infection

Correct Answer: A. Tuberculosis

Explanation: Correct Option: A) Tuberculosis Project Axshya is a collaborative initiative aimed at improving TB control efforts in India. It focuses on strengthening TB care and control services, including early detection, diagnosis, and treatment of TB cases. The project includes strategies such as community mobilization, awareness campaigns, and active case finding to reach vulnerable populations and reduce the TB burden. Incorrect Options: Options B, C, and D: Project Axshya does not deal with any of these diseases.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q42: The Anemia Mukt Bharat program aims to address anemia across India through targeted interventions. Which statement accurately describes its administration of Iron and Folic Acid (IFA) supplementation? (Q859994)

A. IFA is provided during the 2nd trimester of pregnancy and continues during lactation for up to 6 months

B. IFA supplementation is administered solely during pregnancy

C. A 100-day course of IFA supplementation is sufficient

D. Administering IFA during the 1st trimester is adequate.

Correct Answer: A. IFA is provided during the 2nd trimester of pregnancy and continues during lactation for up to 6 months

Explanation: Correct Option A- IFA is provided during the 2nd trimester of pregnancy and continues during lactation for up to 6 months The Anemia Mukt Bharat program includes comprehensive IFA supplementation that begins during the 2nd trimester of pregnancy and continues through lactation for up to 6 months. Weekly Iron Folic Acid Supplementation: 5-9 year children: Weekly 1 IFA - 45 mg. of Fe + 400 mcg. of folic acid, sugar coated - pink color. Biannual deworming with one tablet of Albendazole tablet 400 mg done during the National Deworming days once in 6 months (10 of Aug and 10 of Feb of every year) Adolescent boys and girls - weekly 1 IFA - containing 100 mg Fe and 500 mcg of folic acid and biannual deworming with 1 tablet of 400 mg Albendazole. Pregnant women: starts in 2nd trimester of pregnancy and continues through lactation for up to 6 months. Incorrect Options: Options B, C, and D are incorrect as IFA is provided during the 2nd trimester of pregnancy and continues during lactation for up to 6 months.



References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

Anemia Mukt Bharat (AMB) | National Health Mission Tamil Nadu, Department of Health & Family Welfare Govt. of Tamil Nadu, India

Operational Guidelines for Weekly IFA Supplementation Programme for the Community Based Intervention Guidelines for Anganwadi Workers

↑ *Back to this question in Part A*

@Neet_pg_bot

Q43: A 10-year-old school-going girl came for a health checkup. Her Hb is 9 g/dL. Which of the following government programs is likely to provide significant benefit to her health? (Q858103)

A. Rashtriya bal swasthya karyakram

B. Janani suraksha Yojana

C. Pradhan Mantri Matru Vandana Yojana

D. Navjat Shishu Karyakram Yojana

Correct Answer: A. Rashtriya bal swasthya karyakram

Explanation: RBSK is a comprehensive program under the National Health Mission that focuses on early identification and intervention for children aged 0-18 years, targeting deficiencies such as anemia, developmental delays, and diseases. It supports the health and well-being of school-going children like the one described. Janani Suraksha Yojana (Option B) : is incorrect because this scheme focuses on promoting institutional deliveries and maternal health benefits rather than addressing child health and anemia in school-going children. Pradhan Mantri Matru Vandana Yojana (Option C) : is incorrect because it primarily provides financial support to pregnant and lactating mothers for better nutrition and postnatal care, not directly targeting school children. Navjat Shishu Karyakram Yojana (Option D) : is incorrect because it emphasizes newborn care and resuscitation in healthcare settings, not for health checkups of school-going children.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 506, 507

↑ *Back to this question in Part A*

@Neet_pg_bot

Q44: Paris green dust is commonly used to kill which of the following? (Q860038)

A. Anopheles larva

B. Houseflies

C. Bedbugs

D. Cockroaches

Correct Answer: A. Anopheles larva

Explanation: Paris green dust is a type of pesticide primarily used for its larvicidal properties. It is particularly effective in controlling the larvae of mosquitoes, such as Anopheles larvae. Anti-larval measures against mosquito larvae: Environmental measures Chemical control Biological control Yield permanent results and source reduction. E.g. Filling drains and ditches. Levelling of ground. Proper drainage of breeding areas. Intermittent irrigation. Changing water alkalinity. Using larvicides E.g. 1. Physical: MLO (Mosquito larvicidal oil): 200L/hectare 2. Chemical: Paris green Temephos (Abate): 200L/hectare 3. IGR (insect growth regulators): Inhibit chitin formation, moulding and adult maturation. Pyriproxyfen and Diflubenzuron Larvivorous Fishes: 1. Gambusia and Poecilia fish 2. Bacillus thuringiensis (used in polluted waters) 3. Toxorhynchites splendens (predator mosquito for Aedes and Anopheles) Incorrect Options: Options B, C, and D : Paris green is not effective against houseflies, bedbugs, and cockroaches.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 477-479

↑ *Back to this question in Part A*

@Neet_pg_bot

Q45: Which of the following is correct regarding Ayushman Bharat scheme? (Q820571)

A. Rs 5 lakh/per family per year is given

B. Rs 10 lakh/per family per year is given

C. Rs 6 lakh/per family per year is given

D. Rs 2 lakh/per family per year is given

Correct Answer: A. Rs 5 lakh/per family per year is given

Explanation: Correct Option A - Rs 5 lakh/per family per year is given: Ayushman Bharat, also known as the Pradhan Mantri Jan Arogya Yojana (PMJAY), is a health insurance scheme launched by the Government of India. The scheme aims to provide financial protection to economically vulnerable families by offering health insurance coverage for secondary and tertiary care hospitalization. Incorrect Options: Option B - Rs 10 lakh/per family per year: It is not the correct amount provided by the Ayushman Bharat scheme. The correct amount is Rs 5 lakh. Option C - Rs 6 lakh/per family per year: It is not the correct amount provided by the Ayushman Bharat scheme. The correct amount is Rs 5 lakh. Option D - Rs 2 lakh/per family per year: It is not the correct amount provided by the Ayushman Bharat scheme. The correct amount is Rs 5 lakh.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q46: Which of the following is not true about the National Program for Control Blindness and Visual Impairment (NPCB and VI)? (Q854775)

A. Patients requiring cataract surgeries are selected and asked to report to the base hospital

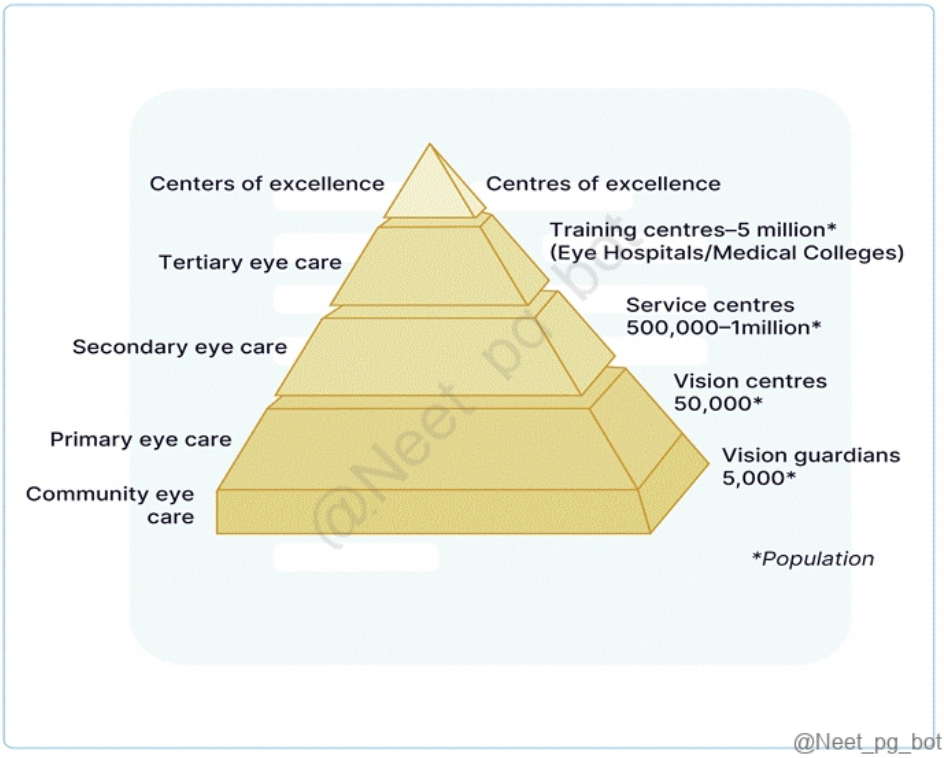
B. To perform more small incision cataract surgeries

C. To perform surgeries in rural areas with makeshift hospitals/OTs

D. To perform surgeries in fixed facilities by shifting patients from rural areas.

Correct Answer: C. To perform surgeries in rural areas with makeshift hospitals/OTs

Explanation: Performing surgeries in rural areas with makeshift hospitals/OTs is not a recommendation made by the National Program for Control Blindness and Visual Impairment (NPCB and VI) due to concerns related to follow-up issues. Proposed structure for Vision 2020, NPCB: Tier Number of Units Population Norms Components Centres of Excellence 20 1/50 million Professional Leadership Strategy development Continued Medical Education (CME) Laying of standards and quality assurance Research Training Centres 200 1/5 million Tertiary eye care including retinal surgery, corneal transplantation, glaucoma surgery, etc. Training and CME Service Centres 2000 1/500000 Cataract Surgery Other common eye surgeries Facilities for refraction Referral services Vision Centres 20,000 1/50000 Refraction and prescription of glasses Primary eye care School eye screening programme Screening and referral services



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 505

↑ *Back to this question in Part A*

@Neet_pg_bot

Q47: School health program is under: (Q857987)

A. PHC

B. CHC

C. DH

D. Health and wellness centres

Correct Answer: A. PHC

Explanation: The School Health Program in India is typically managed and implemented under Primary Health Centres (PHCs) . These centers provide basic healthcare services to communities, including children in schools, through regular health check-ups, immunizations, and health education. The PHCs serve as the main hub for delivering health services to the school-aged population. CHC (Option B): is incorrect because Community Health Centres (CHCs) focus on more specialized and advanced healthcare services than PHCs. They are not the primary location for managing the School Health Program. DH (Option C): is incorrect because District Hospitals (DH) focus on providing specialized healthcare and emergency services rather than delivering primary health services in schools. Health and Wellness Centres (Option D): While Health and Wellness Centres are part of the National Health Mission and offer comprehensive healthcare services, the School Health Program is more closely associated with PHCs for primary healthcare services in the school setting.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 663- 667.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q48: In the context of a national public health initiative aimed at addressing anemia, which of the following programs follows the "6x6x6 strategy"? (Q857997)

A. Anemia mukt bharat

B. Poshan Abhiyan

C. Kishori Shakti Yojana

D. None of these

Correct Answer: A. Anemia mukt bharat

Explanation: The Anemia Mukt Bharat (AMB) program, launched by the Government of India, aims to reduce anemia among women, children, and adolescents. The "6x6x6 strategy" refers to a set of actions designed to address anemia, focusing on: 6 target age groups (children aged 6-59 months, adolescent girls, pregnant women, lactating mothers, women of reproductive age, and men) 6 interventions (Iron and Folic Acid supplementation, deworming, malaria control, nutrition improvement, managing hemorrhage during childbirth, and controlling hookworm) 6 delivery platforms (school-based programs, anganwadis, health centers, etc.) Poshan Abhiyan (Option B): is incorrect because the Poshan Abhiyan (National Nutrition Mission) focuses on improving the nutritional status of children, pregnant women, and lactating mothers but does not specifically follow the "6x6x6 strategy" related to anemia. Kishori Shakti Yojana (Option C): is incorrect because the Kishori Shakti Yojana

focuses on the empowerment of adolescent girls, providing them with life skills training, but it does not follow the "6x6x6 strategy" for addressing anemia. None of these (Option D): is incorrect because Anemia Mukt Bharat (Option A) clearly follows the "6x6x6 strategy" for anemia control.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 281

↑ *Back to this question in Part A*

@Neet_pg_bot

Q49: Which government program aims to provide health checkups and services for children aged 0-18, including a focus on those not attending school? (Q858057)

A. Rashtriya Bal Swasthya Karyakaram

B. Janani Suraksha Yojna

C. Navjaat Shishu Suraksha Karyakaram

D. Mid day meal program

Correct Answer: A. Rashtriya Bal Swasthya Karyakaram

Explanation: The Rashtriya Bal Swasthya Karyakaram (RBSK) is a government initiative aimed at providing health checkups and services to children aged 0-18 years , including those who are not attending school . The program focuses on identifying and addressing health issues, such as congenital abnormalities, disabilities, and malnutrition, ensuring early intervention and appropriate treatment. Janani Suraksha Yojna (Option B): is incorrect because Janani Suraksha Yojna primarily focuses on providing safe motherhood, promoting institutional deliveries, and reducing maternal and neonatal mortality, rather than addressing the health needs of children aged 0-18 years. Navjaat Shishu Suraksha Karyakaram (Option C): is incorrect because Navjaat Shishu Suraksha Karyakaram focuses on ensuring newborn survival by providing immediate care at the time of birth and focusing on newborn health rather than a comprehensive child health program for the 0-18 age group. Mid Day Meal Program (Option D): is incorrect because the Mid Day Meal Program focuses on providing nutritious meals to children in schools, particularly to promote enrollment and retention, and does not cover comprehensive health checkups and services for children outside of school.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 506, 507

https://pmc.ncbi.nlm.nih.gov/articles/PMC4586976/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q50: Which of the following is not a part of Urban health care delivery system? (Q820575)

A. PHC

B. CHC

C. Swasthya chowki

D. Subcenter

Correct Answer: D. Subcenter

Explanation: Correct Option D - Subcenter: In the context of the healthcare delivery system in urban areas, a subcenter is not a part of it. Subcenters are primarily a component of rural healthcare infrastructure. They are the first level of contact between the rural population and the medical officer, providing essential healthcare services at the grassroots level. Incorrect Options: Option A - PHC (Primary Health Center): These are health facilities designed to provide basic healthcare services to the population in urban as well as rural areas.. Option B - CHC (Community Health Center): CHCs are higher-level health facilities that are responsible for providing comprehensive healthcare services to a larger population, typically covering a group of PHCs. Option C - Swasthya chowki: Swasthya chowki is a part of the urban health care system at the primary level.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q51: A 10-year-old school-going girl came for a health checkup. Her Hb is 9 g/dL. Which of the following government programs is likely to provide significant benefit to her health? (Q820604)

A. Rashtriya bal swasthya karyakram

B. Janani suraksha yojana

C. Pradhan Mantri Matru Vandana Yojana

D. Navjat Shishu Karyakram yojna

Correct Answer: A. Rashtriya bal swasthya karyakram

Explanation: Correct Option A - Rashtriya Bal Swasthya Karyakram: Rashtriya Bal Swasthya Karyakram (RBSK) is a key government initiative in India focusing on children's health (0-18 years). It conducts health screenings at schools and anganwadi centers to detect issues like anemia, malnutrition, and developmental delays early. The program offers interventions, referrals, and health education to ensure children receive timely care and support, promoting their overall well-being. Incorrect Options: Option B - Janani Suraksha Yojana: It is a program that focuses on promoting institutional deliveries and providing financial assistance to pregnant women for giving birth in health facilities. Option C - Pradhan Mantri Matru Vandana Yojana: PMMVY is a maternity benefit program providing partial compensation for the wage loss in terms of cash incentives so that the pregnant woman can take adequate rest before and after delivery. It targets pregnant and lactating mothers, not school-aged children. Option D - Navjat Shishu Karyakram Yojna: (Newborn and Child Health Program) focuses on the health and well-being of newborns and infants. It includes services like immunization, growth monitoring, and counseling for mothers. While it's relevant for young children, it may not directly address the presented situation of a 10-year-old girl with low hemoglobin levels.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q52: In the context of a national public health initiative aimed at addressing anemia, which of the following program follows the "6x6x6 strategy" ? (Q820674)

A. Anemia mukt bharat

B. Poshan Abhiyan

C. Kishori Shakti Yojana

D. None of these

Correct Answer: A. Anemia mukt bharat

Explanation: Correct Option A - Anemia Mukt Bharat: he "6x6x6 strategy" is associated with the Anemia Mukt Bharat (AMB) initiative. This initiative is a national public health program in India aimed at combating anemia. The "6x6x6 strategy" focuses on six interventions in six target beneficiary groups over six years to reduce anemia prevalence by three percentage points per year. Incorrect Options: Option B - Poshan Abhiyan (National Nutrition Mission): It is a multi-ministerial convergence mission that aims to address malnutrition, including anemia,. While it addresses anemia, it does not specifically follow the "6x6x6 strategy." Option C - Kishori Shakti Yojana: It addresses various issues faced by adolescent girls but does not directly relate to the "6x6x6 strategy."

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q53: School health program is under (Q820686)

A. PHC

B. CHC

C. DH

D. Health and wellness centres

Correct Answer: A. PHC

Explanation: Correct Option A - PHC (Primary Health Centre): School health programs are typically under the purview of Primary Health Centres. PHCs are the most basic units of the public health system in many countries and they focus on providing primary healthcare services to the community. School health programs fall within their scope as they address the health needs of school-age children, ensuring their well-being and promoting healthy habits. Incorrect Options: Option B - CHC (Community Health Centre): CHCs are a step above PHCs and offer more comprehensive healthcare services to a larger catchment area. Option C - DH (District Hospital): While they might have a role in coordinating and overseeing certain public health initiatives, school health programs are usually implemented at a more grassroots level. Option D - Health and Wellness Centres: While they promote a comprehensive approach to healthcare, school health programs might not always be directly managed by these centers

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q54: Which government program aims to provide health checkups and services for children aged 0-18, including a focus on those not attending school? (Q830809)

A. Rashtriya Bal Swasthya Karyakaram

B. Janani Suraksha Yojna

C. Navjaat Shishu Suraksha Karyakaram

D. Mid day meal program

Correct Answer: A. Rashtriya Bal Swasthya Karyakaram

Explanation: Correct Option A - Rashtriya Bal Swasthya Karyakaram: Rashtriya Bal Swasthya Karyakram (RBSK) involves screening of children from birth to 18 years of age for 4 Ds- Defects at birth, Diseases, Deficiencies and Development delays, spanning 32 common health conditions for early detection and free treatment and management, including surgeries at tertiary level Incorrect Options: Option B - Janani Suraksha Yojna: Janani Suraksha Yojana (JSY) is a government program that focuses on promoting institutional deliveries by providing financial assistance to pregnant women. Option C - Navjaat Shishu Suraksha Karyakaram: Navjaat Shishu Suraksha Karyakaram (NSSK) is another program that aims to provide care to newborns and ensure their survival during the first 28 days of life. Option D - Mid day meal program: The Mid Day Meal Program is a school-based initiative that provides nutritious meals to schoolchildren to enhance their nutritional status and encourage school attendance.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q55: A baby presents for a routine examination in the outpatient department. A growth chart is utilized to record the baby's weight, which falls within the 85th - 95th percentile range. What is the present condition of the child? (Q793839)

A. Obesity

B. SAM

C. Overweight

D. Interpretation cannot be made without BMI

Correct Answer: C. Overweight

Explanation: Answer Option C - Overweight: Growth charts are used to monitor a child's growth and development over time. These charts provide a range of values called percentiles, which indicate how a child's measurements compare to those of other children of the same age and sex. The 85th-95th percentile range is considered overweight, indicating that the child is heavier than 85-95% of children of the same age and sex. Incorrect Options: Option A - Obesity: While being overweight is a risk factor for obesity, it is not the same as obesity. Option B - SAM: Severe acute malnutrition (SAM) is typically diagnosed based on clinical criteria, including a low weight-for-height ratio and nutritional edema. Option D - Interpretation cannot be made without BMI: This option is irrelavent. As Body mass index (BMI) better indicates body fat percentage than growth charts alone.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

Q56: Which of the following healthcare providers is not working at the village level ? (Q793787)

A. ANM

B. AWW

C. TBA

D. ASHA

Correct Answer: A. ANM

Explanation: Correct Option A - ANM: ANM (Auxiliary Nurse Midwife) is a healthcare provider works at the sub-centre level to provide basic healthcare services to the community. Incorrect Options: Option B - AWW: AWW (Anganwadi Worker) is a community-level healthcare worker under the Integrated Child Development Services (ICDS) Scheme. Option C - TBA: TBA (Traditional Birth Attendant) is a community-level healthcare provider who provides basic maternal healthcare services and attends to normal deliveries. Option D - ASHA: ASHA (Accredited Social Health Activist) is a community-level healthcare provider who works under the National Health Mission (NHM) to provide basic healthcare services.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

• [07_Demography and Health] 032 Demography And Health

« Back to Folder Directory

[07_Demography and Health] 032 Demography And Health — Quick Jump

Q1 (p. 1279)	*Q2 (p. 1280)*	*Q3 (p. 1281)*	*Q4 (p. 1282)*	*Q5 (p. 1283)*	*Q6 (p. 1284)*
Q7 (p. 1285)	*Q8 (p. 1286)*	*Q9 (p. 1287)*	*Q10 (p. 1288)*	*Q11 (p. 1289)*	*Q12 (p. 1290)*
Q13 (p. 1291)	*Q14 (p. 1292)*	*Q15 (p. 1294)*	*Q16 (p. 1295)*	*Q17 (p. 1297)*	*Q18 (p. 1297)*
Q19 (p. 1298)	*Q20 (p. 1299)*	*Q21 (p. 1300)*	*Q22 (p. 1301)*	*Q23 (p. 1302)*	*Q24 (p. 1303)*
Q25 (p. 1305)	*Q26 (p. 1306)*				

Q1: Which of the following best defines the crude birth rate? (Q840776)

A. Live births per 1,000 people in mid-year population per year

B. Live births per 1,000 people in annual population per year

C. Live births and stillbirths per 100,000 people in the mid-year population per year

D. Live births and stillbirths per 100,000 people in annual population per year

Correct Answer: A. Live births per 1,000 people in mid-year population per year

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Crude birth rates Crude death rates Definition Number of live births per 1000 estimated mid-year population (taken on July 1st) in a given year. Number of deaths (from all causes) per 1000 estimated mid-year population in one year in a given place. Statistics India’s current CBR is 19.5/1000 mid-year population. (2020) India’s current CDR is 6/1000 mid-year population. (2020) Drawbacks It gives a rough measure of fertility by giving birth rates, and not everyone in the population is exposed to childbirth. Lack of comparability across communities with different age, sex, race, etc. Note: The crude birth rate does not include stillbirths.

$$\text{Crude Birth Rate} = \frac{\text{Number of live births during the year}}{\text{Estimated mid-year population}} \times 1000$$

@Neet_pg_bot

$$\text{Crude death rate} = \frac{\text{Number of death during the year}}{\text{Mid-year population}} *1000$$

@Neet_pg_bot

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 563, 65
https://data.worldbank.org/indicator/SP.DYN.CBRT.IN?locations=IN
https://data.worldbank.org/indicator/SP.DYN.CDRT.IN?locations=IN

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Late expanding stage of population in India due to ? (Q844339)

A. Birth rate stationary death rate continues to fall

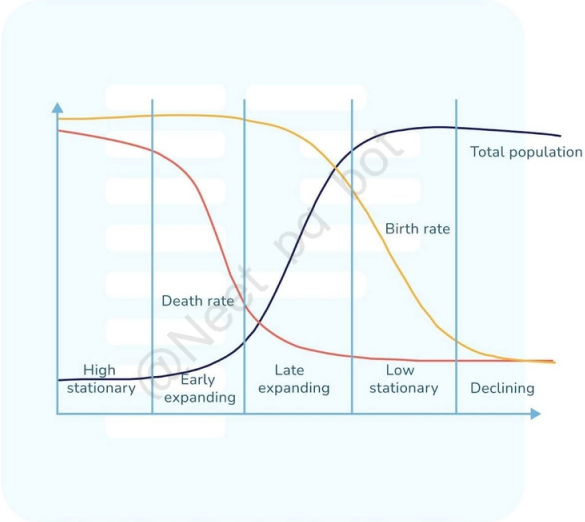
B. Death rate declines faster than birth rate

C. Birth rate declines, death rate same

D. Birth rate is less than death rate

Correct Answer: B. Death rate declines faster than birth rate

Explanation: India is currently in the late expanding phase (Stage III)of the demographic transition model as the birth rate is declining but at a slower pace than the death rate, which is also declining. Stage Countries I - High stationery India until 1920 II - Early expanding African and South Asian countries III - Late expanding India IV - Low stationary Austria, Denmark, Sweden V - Declining Germany, Italy, United Kingdom, Japan



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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 554

↑ *Back to this question in Part A*

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Q3: Which of the following topics was NOT included in the NFHS-5 conducted in 2019-21? (Q840815)

A. Blood pressure

B. Access to toilet facility

C. HIV status

D. Methods used for termination of pregnancy

Correct Answer: C. HIV status

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: HIV testing was excluded from the NFHS-5. The latest NFHS was the NFHS-5 in 2019-21, and the NFHS-6 (2023-24) is still being conducted. NFHS 5 was conducted by the International Institute for Population Sciences, Mumbai,Largest health survey system of India. Significance of NHFS Collects vital data on health and family welfare. Addresses government priorities. Captures emerging health and welfare concerns for policy development. Tracks health trends to assess intervention impacts. Identifies and addresses health disparities. Establishes baselines for future studies. Facilitates comparisons with global health standards. New topics included under NFHS-5 are: Disability Access to toilet facilities Death registration Menstrual hygiene Methods and reasons for abortion Hip and waist measurements Expansion of the age range for the measurement of Blood pressure level and blood glucose Note: HIV testing was excluded.

References:

rchiips.org/nfhs/about.shtml

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: According to the system, which has the logo below and under the Central Birth and Death Registration Act, 1969, what is the time limit for registering for birth and death events in India? (Q840811)

A. 28 days

B. 21 days

C. 30 days

D. 60 days



Correct Answer: B. 21 days

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The logo represents the Civil Registration System (Aka Vital Survey of the country) under the Central Births and Deaths Registration Act of 1969, which came into force on April 1st, 1970. The flame represents birth and the circle represents death. According to this system: Registration of birth and death is compulsory throughout the nation The public reports events occurring in their household, while heads of institutions, such as nursing homes, hotels, and jails, report events occurring in their institutes. The time limit for registering the event of birth and death in India is 21 days. For NRI, the time limit is 90 days. Default leads to a late fee. Since 2018, an Aadhaar number has been a must for registration for Death.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 968 About Us | Civil Registration System | Government of India

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following statements are true regarding the Sample registration system? (Q840805)

A. An independent survey is conducted by an investigator-supervisor every 6 months.

B. Key data components of SRS are the number of births and death

C. An enumerator continuously keeps track of the birth and death count

D. All of the above

Correct Answer: D. All of the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Due to deficient civil registration in India, the sample registration system was initiated in the mid-1960s. Sample Registration System (SRS): It is the most efficient health information collection system in India. It is a dual record system. The enumerator continuously records the birth and death count. An Independent 6-monthly survey is conducted by a supervisor. Triangulation of data: Part time enumerator collects data, and Full-time enumerator cross-match the collected data Data released every year : Annual estimates It covers the entire nation, providing more reliable estimates of national birth and death rates and age-specific fertility and mortality rates. Civil / Vital Registration System (CRS / VRS): Rising flame: Birth, Going off: Death Birth/ Death registered: Within 21 days In case of NRI: Within 90 days Works under the Office of Registrar General India Central Birth and Death Registration Act, 1969, came into force from 1 April 1970 Uses technique of lay reporting (collected by paramedical staff) Least efficient system in India Responsibility of health Centre where delivery is conducted to register births National Family Health Survey (NFHS): Developed later in 1951 into Central Statistical Organization (CSO) National Sample Survey (NSS) came into being in 1950 Work relating to finalization of sampling design, schedules of enquiries, writing of instructions, training of field staff, processing of data and writing of reports was all entrusted to all indian Statistical Institute National Sample Survey Organization (NSSO), now known as National Sample Survey Office, is organization under Ministry of Statistics of Government of India Largest organization in India conducting regular socio - economic surveys DLHS (District Level Household Survey): Ad Hoc survey at regular intervals Same data as NFHS, but at district level

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 969

censusindia.gov.in/nada/index.php/catalog/42687

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following data components are provided by the census? Population size and distribution HIV status and reproductive health status Education and employment status Nutritional status (Q840796)

A. 2, 3 and 4

B. 2 and 4

C. 1, 3 and 4

D. 1 and 3

Correct Answer: D. 1 and 3

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Census is a comprehensive process that involves collecting, compiling, and publishing demographic, economic, and social data about all individuals in a country at particular times. It started in 1881 and performed every 10-year interval; the latest census was in March 2011. Data components of the census are Population: Total count across states, districts, villages, and towns.(S tatement 1) Households: Number, size, and types (e.g., nuclear, joint families). Demographics: Age, gender, marital status, relationship to household head, migration. Economy: Employment status, income, industry. Education: Literacy rates, educational levels (primary, secondary, higher), and attendance.(S tatement 3) Housing: Type (rural, urban, slum), ownership, amenities (water, electricity), and conditions. Social: Religion, caste, tribe, languages spoken, and migration status. Health: Disability status, fertility rates (females). Geography: Administrative units (states, districts), rural/urban classification, and infrastructure details. HIV status and nutritional status are not included in the census.(S tatement 2,4) The National Family Health Surveys (NFHS) used to include HIV status in their surveys but have decided to exclude it in their latest survey. However, they continue to assess nutritional status in the NFHS.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 968 Census Division | Government of India .

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: What does the De facto method of data collection refer to? (Q840792)

A. Information is collected only from a certain subset of the population.

B. Information is based on where people are found during the census.

C. Information is based on the individual's legal proof of permanent residency.

D. Information is only from institutional households.

Correct Answer: B. Information is based on where people are found during the census.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The de facto method of data collection refers to gathering information based on the location where individuals are present at the time of the census or survey, regardless of their legal residency or registration status. De facto method De jure method Description This refers to collecting information based on the people's current location at the time of the survey. This method was used in the Indian Census only up to the 1930s This refers to the collection of information based on the individual's legal proof of permanent residency, regardless of where they stay during the survey. The Indian census survey currently uses this method. Example A legal resident of New Delhi may be living and working in Mumbai during the census; thus, if the de facto method is used, his data will be collected during the Mumbai census survey. A legal resident of New Delhi may be living and working in Mumbai during the census; thus, if the de jure method is used, his data will be collected during the New Delhi census survey.

References:

papp.iussp.org/sessions/papp102_s01/PAPP102_s01_030_070.html

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following is also known as the final impact indicator in the National family planning program? (Q840789)

A. Total Fertility Rate (TFR)

B. Net Reproductive Rate (NRR)

C. Couples protection rate (CPR)

D. Gross Reproductive Rate (GRR)

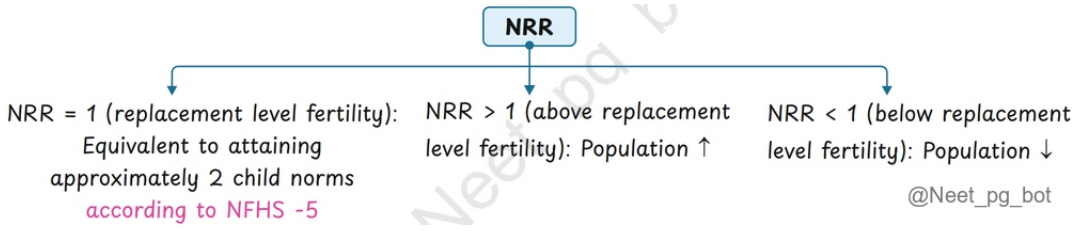
Correct Answer: B. Net Reproductive Rate (NRR)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Net Reproductive Rate (NRR) is also the final impact factor in the National family planning program. National Family Planning Program: For a country's population to stabilise, a TFR of 2.1 is required. It explains that every couple is giving birth to 2 children. TFR is the most important epidemiological indicator of family planning For TFR to be 2.1, NRR (Net Reproductive Rate) must equal 1(Final impact indicator) NRR equals 1 when the couple protection rate is >60%. The couple protection rate is >60% when females of reproductive age undergo sterilisation. Net Reproduction Rate (NRR): It is the total number of daughters a newborn will have throughout her reproductive lifespan considering current age-specific fertility rates and current age-specific death/mortality rates It is a mortality-dependent fertility indicator For a country’s population to stabilize, TFR = 2.1 (achieved when NRR = 1) NRR = 1 (replacement level fertility) achieved when CPR (Couple Protection Rate / Contraceptive Prevalence Rate) > 60% Crude Birth Rate (CBR): CBR = (Total no. of live births / Mid year population (MYP)) × 1000 Current CBR: 19.5/1000 MYP Simplest measure of fertility General Fertility Rate (GFR): GFR = Total no. of live births / Women in reproductive age group (15–49 yrs) × 1000 General Marital

Fertility Rate (GMFR): GMFR = Total no. of live births / Married women in reproductive age group (15–49 yrs) × 1000 Total Fertility Rate (TFR): Total no. of children a woman will have throughout her reproductive life span (15–49 yrs), considering current age-specific fertility rates Computed by summing age-specific fertility rates for all ages Current TFR: 2.0 Age Specific Fertility Rate (ASFR): Number of live births in a year per 1000 women in any specified age group Age Specific Marital Fertility Rate: Number of live births in a year per 1000 married women in any specified age group Gross Reproduction Rate (GRR): It is the total number of girls a woman will have throughout her reproductive lifespan considering current age-specific fertility rates GRR = TFR for girls; GRR = TFR / 2 Note: CBR = (8 × TFR) + 1 Other related indicators: Child Woman Ratio: Number of children 0-4 years of age per 1000 women of childbearing age (15-44 or 49 yrs) Pregnancy Rate: Ratio of number of pregnancies in a year to married women in ages 15-49 yrs Abortion Rate: Number of all types of abortions per 1000 women of childbearing age Abortion Ratio: Ratio of number of abortions during a particular time period to number of live births over the same period Marriage Rate: Number of marriages in the year per 1000 midyear population



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg, 567

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following indicators helps to achieve the target of the national family planning program? (Q840786)

A. Age-specific fertility rate (ASFR)

B. Total fertility rate (TFR)

C. General fertility rate (GFR)

D. Couple protection rate (CPR)

Correct Answer: D. Couple protection rate (CPR)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Couple protection rate (CPR) is a functional/ operational indicator that helps to achieve the target of the national family planning program. It is defined as the percentage of eligible couples who are effectively

protected against childbirth using approved family planning methods such as sterilisation, IUD, condoms, or oral pills. It is a grass root level indicator. Sterilisation represents over 60% of these protected couples. A Net Reproductive rate (NRR) of 1 can be achieved only if the CPR exceeds >60% Age-specific fertility rate (ASFR) (Option A) shows fertility changes over time within age groups but alone is insufficient for family planning targets. The Total Fertility Rate (TFR) (Option B) is a key family planning indicator but less critical than the couple protection rate for program goals. General fertility rate (GFR) (Option C) reflects overall fertility regardless of age but doesn't fully address family planning targets.

$$\text{Couple protection rate (CPR)} = \frac{\text{No. of couples using contraception}}{\text{Total number of eligible couples}} * 100$$

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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 567
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9067234/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following is NOT true regarding the Net reproductive rate (NRR)? (Q840783)

A. Indicator of complete family size

B. Defined as the no. of daughters or girls a newborn girl will bear or will have throughout her reproductive lifespan, considering the current age-specific fertility patterns and mortality rates

C. The most sensitive indicator to evaluate the National family planning program

D. Mortality-dependent fertility indicator

Correct Answer: A. Indicator of complete family size

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Total Fertility Rate (TFR) indicates the complete family size, not the Net reproductive rate. Net reproductive rate (NRR) Definition NRR is the number of daughters or girls a newborn will bear or have throughout her reproductive lifespan, considering the current age-specific fertility patterns and mortality rates. (Option B) Interpretation It is the most sensitive indicator to evaluate National family planning program (Option C) It is a mortality-dependent fertility indicator. (Option D) It is the best measure of growth of a population.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 564 https://unstats.un.org/unsd/demographic/products/dyb/DYBNat/NotesNatStatTab03.htm#:~:text=The%20net%20reproduction%20rate%20is,were%20also%20subjected%20to%20the

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following statements about GRR is correct? (Q840781)

A. It is the total no. of girls a woman will have throughout her reproductive lifespan, considering current age-specific fertility rates

B. It is the total no. of daughters a woman will have throughout her reproductive lifespan, considering current age-specific fertility rates and current age-specific death /mortality rates

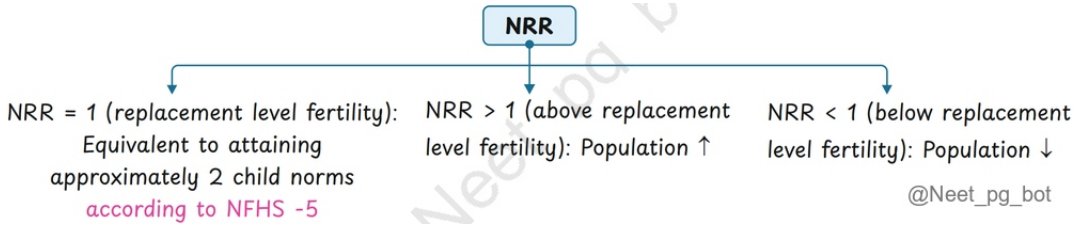
C. It is the total no.of children a woman will have throughout her reproductive life span (15-49 yrs), considering current age-specific fertility rates

D. None of the above

Correct Answer: A. It is the total no. of girls a woman will have throughout her reproductive lifespan, considering current age-specific fertility rates

Explanation: Option B) Net Reproduction Rate (NRR): It is the total no. of daughters a woman will have throughout her reproductive lifespan, considering current age-specific fertility rates and current age-specific death /mortality rates Option C) Total Fertility Rate (TFR): It is the total no. of children a woman will have throughout her reproductive life span (15-49 yrs), considering current age-specific fertility rates Fertility Indicators: Crude Birth Rate (CBR): CBR = (Total no. of live births / Mid year population (MYP)) × 1000 Current CBR: 19.5/1000 MYP Simplest measure of fertility General Fertility Rate (GFR): GFR = Total no. of live births / Women in reproductive age group (15–49 yrs) × 1000 General Marital Fertility Rate (GMFR): GMFR = Total no. of live births / Married women in reproductive age group (15–49 yrs) × 1000 Total Fertility Rate (TFR): Total no. of children a woman will have throughout her reproductive life span (15–49 yrs), considering current age-specific fertility rates Computed by summing age-specific fertility rates for all ages Current TFR: 2.0 Age Specific Fertility Rate (ASFR): Number of live births in a year per 1000 women in any specified age group Age Specific Marital Fertility Rate: Number of live births in a year per 1000 married women in any specified age group Gross Reproduction Rate (GRR): It is the total number of girls a woman will have throughout her reproductive lifespan considering current age-specific fertility rates GRR = TFR for girls; GRR = TFR / 2 Note: CBR = (8 × TFR) + 1 Net Reproduction Rate (NRR): It is the total number of daughters a newborn will have throughout her reproductive lifespan considering current age-specific fertility rates and current age-specific death/mortality rates It is a mortality-dependent fertility indicator For a country’s population to stabilize, TFR = 2.1 (achieved when NRR = 1) NRR = 1 (replacement level fertility) achieved when CPR (Couple Protection Rate / Contraceptive Prevalence Rate) > 60% Other related indicators: Child Woman Ratio: Number of children 0-4 years of age per 1000 women of childbearing age (15-44 or 49 yrs) Pregnancy Rate: Ratio of number of pregnancies in a year to married women in ages 15-49 yrs Abortion Rate: Number of all types of abortions per 1000 women of childbearing age Abortion Ratio: Ratio of number of abortions during a particular time period to number of live

births over the same period Marriage Rate: Number of marriages in the year per 1000 midyear population



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 564

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following best defines the total fertility rate (TFR)? (Q840780)

A. Total live births per 1000 women in a specific age group per year.

B. Average live births per 1000 women of reproductive age (15-49 years) per year.

C. Average number of children per woman based on current fertility rates throughout her reproductive life (15-49 years).

D. Number of live births in a given year divided by the mid-year population, multiplied by 1,000.

Correct Answer: C. Average number of children per woman based on current fertility rates throughout her reproductive life (15-49 years).

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Total Fertility rate (TFR) gives the average number of children a woman will have throughout her reproductive age group (15-49 years) . TFR indicates average family size. Family size is the number of children a woman has at a particular age within her reproductive years (15-49). Complete family size is the total number of children a woman has throughout her reproductive lifespan (until she is 49). TFR is the best indicator of complete family size. TFR is calculated by summing the age-specific fertility rates across all age groups. If 5-year age groups are used, then the sum of rates is multiplied by Total live births per 1000 women in a specific age group per year (Option A) describes the age-specific fertility rate (ASFR) The average live births per 1000 women of reproductive age (15-49 years) per year (Option B) describes the general fertility rate (GFR) The number of live births in a given year divided by the mid-year population multiplied by 1,000 (Option D) describes the crude birth rate (CBR)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 564, 536.

↑ *Back to this question in Part A*

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Q13: A research team compares fertility patterns between two urban regions. Which fertility measure gives the most detailed insight into fertility behavior? (Q840778)

A. Live births per 1000 women of childbearing age, 15-49 years

B. Live births per 1000 total population

C. Live births per 1000 women in specific age groups

D. Total number of births in the population

Correct Answer: C. Live births per 1000 women in specific age groups

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: When comparing fertility patterns between two neighbouring urban regions, age-specific fertility rates (ASFR) will provide a more detailed understanding of fertility behaviour than the general fertility rate (GFR). General Fertility Rate Age-specific fertility rate (ASFR) Definition The total number of live births in an area in a year per 1000 women in the reproductive age group (15- 44 or 49 years). (Option A) Number of live births in a year per 1000 women in any specific age group. (Option C) Disadvantages and advantages Disadvantage : Not everyone in the reproductive age group is exposed to the risk of childbirth Advantages : Unlike crude birth rate(CBR), ASFR is unaffected by differences and changes in population age composition It gives the fertility trends of a country. ASFR is more useful than GFR in comparing: Different populations Sub-groups of the same population. Measuring changes in fertility over time in the same population Live births per 1000 total population (Option B) represent the crude birth rate (CBR). Unlike CBR, ASFR is unaffected by differences and changes in population age composition.

$$\text{General fertility rate (GFR)} = \frac{\text{Number of live births inan area during the year}}{\text{Mid-year female population age 15-44 (or 49)in the same area in same year}} * 1000$$

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$$\text{Age-specific Fertility Rate (ASFR)} = \frac{\text{Number of live birth in a particular age group}}{\text{Mid-year female population of the same age-group}} \times 1000$$

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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 563 https://www.data4impactproject.org/prh/family-planning/fertility/age-specific-fertility-rates/#:~:text=Unlike%20the%20crude%20birth%20rate,in%20measuring%20changes%20over%20time.

↑ *Back to this question in Part A*

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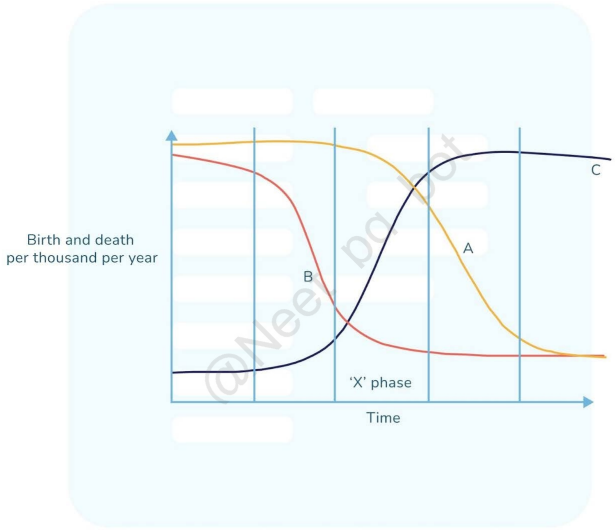
Q14: In the graph of a demographic transition model given below, identify the following. (Q840762)

A. A- Death rate, B- Population, C- Birth rate, X- Late expanding

B. A- Birth rate, B- Death rate, C- Population, X- Late expanding

C. A- Death rate, B- Birth rate, C- Population, X- Early expanding

D. A- Birth rate, B- Death rate, C- Population, X- Early expanding

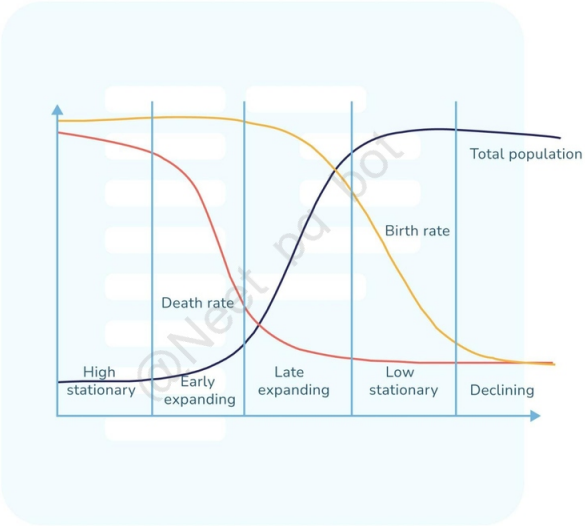


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Correct Answer: B. A- Birth rate, B- Death rate, C- Population, X- Late expanding

- *Listen (English)*
- *Listen (Hindi)*

Explanation: From the graph: A (yellow line) declines later and more gradually → this is the birth rate B (red line) shows an early sharp decline → this is the death rate C (blue line) rises over time → this is the population The marked 'X' phase shows falling birth rate with already low death rate → this corresponds to Late Expanding stage (Stage 3) . According to the demographic transition model, a country goes through 5 phases. Stages Birth rate Death rate Population High stationery High High Population is stable Early expanding High Starts declining Population grows at faster rate. Aka Demographic trap Late expanding Starts declining Keeps declining Population grows at slower rate (birth > death) Low stationery Low Low Stable population Declining Low Lower Population declines (death rate > birth rate)



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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 554

↑ *Back to this question in Part A*

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Q15: In a recent census survey conducted in a developing country, the government aims to measure the literacy levels among its population accurately. The survey team decides to calculate both the crude literacy rate and the effective literacy rate to gain a comprehensive understanding. What distinguishes the effective literacy rate from the crude literacy rate? (Q840775)

A. It provides a broad measure of literacy across all age groups.

B. It focuses on the population aged 7 years and above.

C. The literacy rate is calculated using the total population as the denominator.

D. It includes the entire population.

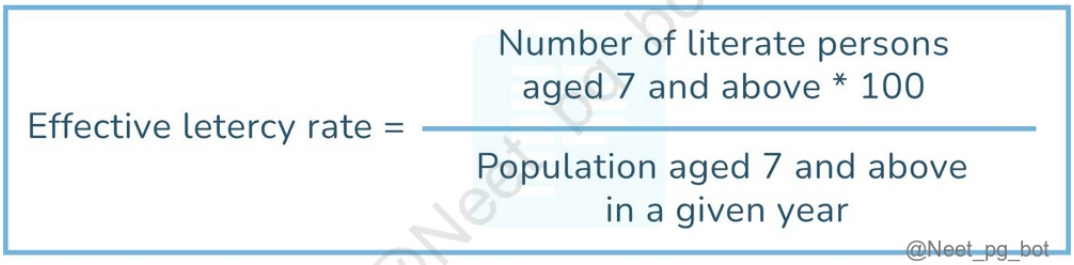
Correct Answer: B. It focuses on the population aged 7 years and above.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Effective Literacy Rate focuses on the population aged 7 years and above . Crude Literacy Rate Effective Literacy Rate Definition : The literacy rate is calculated using the total population as the denominator. (Option C) Definition : The literacy rate is calculated using the population aged 7 years and above as the denominator. Includes the entire population. (Option D) Focuses on the population aged 7 years and above. Provides a broad measure of literacy across all age groups. (Option A) Offers a more specific measure of literacy among individuals more likely to have completed basic education.





References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 560

↑ *Back to this question in Part A*

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Q16: Which of the following is a positive mortality indicator? (Q840774)

A. Life expectancy

B. Infant mortality rate

C. Crude death rate

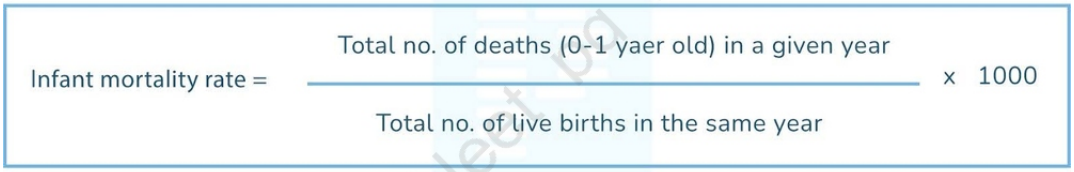
D. Under 5 mortality rate

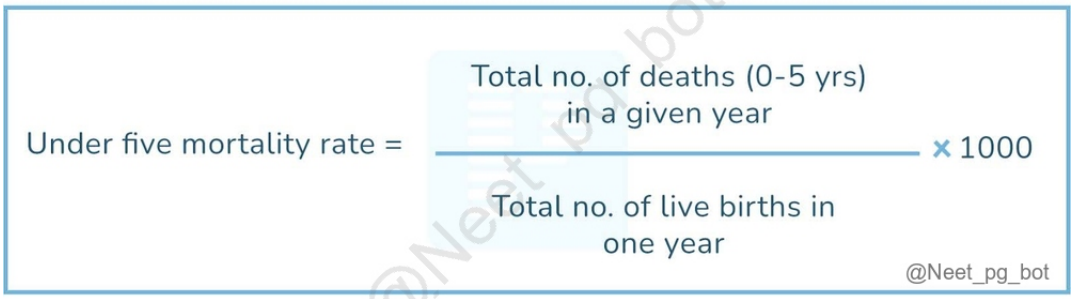
Correct Answer: A. Life expectancy

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Life expectancy is a positive mortality indicator. Mortality indicators provide critical information about the health and well-being of a population. They are typically classified into positive and negative indicators based on the outcomes they represent. 1. Positive Mortality Indicators: These indicators generally suggest improvements in health and living conditions Life expectancy at birth: The average number of years a newborn is expected to live under current age-specific mortality rates. An increase in life expectancy implies improved health status and is a good indicator of overall socio-economic progress. It is important to calculate the Human Development Index (HDI). Recognised as a key measure of long-term survival and positive health outcomes worldwide. 2. Negative Mortality Indicators: These indicators usually reflect adverse health conditions or crises within a population: High Infant Mortality Rate (IMR) : Indicates poor perinatal care, malnutrition, and inadequate health services. (Option B) {{caption_text}} High Under-5 Mortality Rate: High rates signify poor living conditions, high birth rates, and high child mortality rates. (Option D) High Crude Death Rate (CDR): Reflects the general comparative health of the people and the rate at which people are dying. (Option C)







References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 24.

↑ *Back to this question in Part A*

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Q17: A country has 40 million people under 15, 30 million aged 65 and over, and 150 million aged 15-64. What is the dependency ratio? (Q840773)

A. 46.7%

B. 50.7%

C. 56.7%

D. 60.7%

Correct Answer: A. 46.7%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The dependency ratio is the average number of economically dependent individuals per 100 economically productive individuals in a specific country, territory, or geographic area at a given time. To calculate the dependency ratio, we use the formula: No. of people under the age of 15 years = 40 million. No.of people above 65 years = 30 million. No. of people aged 15-65 years = 150 million. Calculation: (40+30)/150 x 100 = 70/150 x100 = 46.7%

$$\text{Dependency ratio} = \frac{\text{Children 0-14 years + Population >65 years age}}{\text{Population between 15-64 years age}} \times 100$$

@Neet_pg_bot

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 559

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which of the following statements about female deficit syndrome are true? (Q840772)

A. Increased maternal mortality.

B. Male-biased population ratio

C. Gender inequities in society

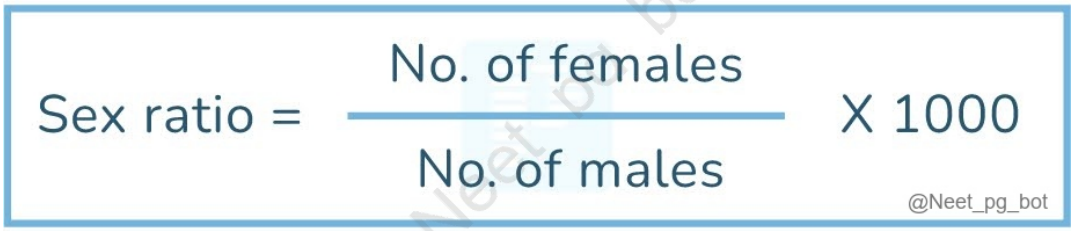
D. All of the above

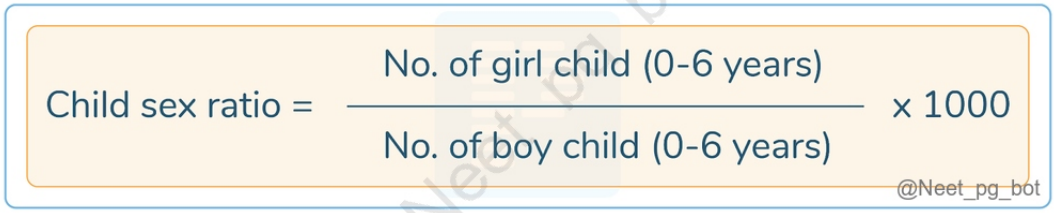
Correct Answer: D. All of the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Female Deficit Syndrome , also known as adverse sex ratio, is the adverse sequel of gender inequality, gender preferences, and poor political legislation, which leads to an unstable population. Sex Ratio : Number of females per 1000 males. Importance in Demography : Crucial for understanding population dynamics. Influencing Factors : Mortality differences between genders. Sex-selective migration. Sex ratio at birth.





References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 558

↑ *Back to this question in Part A*

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Q19: Match the following terms and definitions with Terms Definitions 1. Demographic Burden a) Period of decrease in the dependency ratio 2. Demographic Bonus b) Indicates a rise in the total dependency ratio 3. Demographic Window c) Increase in economic growth rate 4. Demographic Dividend d) Peak working-age population phase (Q840770)

A. 1-b, 2-a, 3-d, 4-c

B. 1-d, 2-a, 3-c, 4-b

C. 1-c, 2-b, 3-a, 4-d

D. 1-a, 2-c, 3-b, 4-d

Correct Answer: A. 1-b, 2-a, 3-d, 4-c

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Demographic Burden Refers to the increase in the proportion of the dependent population relative to the economically productive population. It signifies the societal challenge of supporting a larger dependent population, which typically occurs due to aging demographics. Demographic Bonus A phase in a nation's demographic evolution in which the proportion of the dependent population relative to the working-age population declines. This is often associated with economic growth opportunities as more people are in the workforce than dependents. Demographic Window: Refers to a period in a nation's demographic structure when the proportion of the population in the working-age group is at its highest. Demographic Dividend: An increase in economic growth driven by a growing proportion of working-age individuals in the population.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 559

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Which of the following is NOT true regarding demographic gifts? (Q840769)

A. It occurs when there is a significant increase in the working-age population.

B. It involves a higher proportion of elderly individuals.

C. It leads to a demographic dividend for economic development.

D. It is associated with a decline in dependency ratios.

Correct Answer: B. It involves a higher proportion of elderly individuals.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The higher proportion of elderly individuals refers to demographic liability. Demographic Gift Demographic Liability The demographic gift occurs when the working-age population is high relative to dependents. The higher proportion of elderly individuals refers to demographic liability. Represents a potential demographic dividend due to a larger workforce contributing to economic growth. Represents potential economic challenges due to increased dependency ratios and healthcare costs Contributors include higher productivity, increased savings, and economic growth Dependents include retirees, elderly individuals, and those requiring significant healthcare

$$\text{Dependency ratio} = \frac{\text{Children 0-14 years + Population >65 years age}}{\text{Population between 15-64 years age}} \times 100$$

@Neet_pg_bot

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9395952/

↑ *Back to this question in Part A*

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Q21: Population pyramid represents the age and sex composition of a population. All of the following statements about a Population Pyramid are false except? (Q840768)

A. A broad base and narrow apex indicate a high fertility rate and low life expectancy.

B. The width of the base of a population pyramid represents the elderly population.

C. They always have a symmetrical shape across all countries.

D. Population pyramids are static and do not change over time.

Correct Answer: A. A broad base and narrow apex indicate a high fertility rate and low life expectancy.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A broad base in a population pyramid typically indicates a high birth rate (high fertility), and a narrow apex indicates a lower proportion of elderly individuals (lower life expectancy). The population pyramid visually represents the age and gender distribution of a population. It displays age groups horizontally, with the youngest at the base and the oldest at the top, and divides the population by gender. (Option B) The pyramid forms a triangular shape when a population grows, indicating more births than deaths. This graphical representation allows for easy comparison between male and female populations within a region. It provides insights into the number of dependents and the overall demographic structure of the population at any given time. (Option D) The population pyramid is spindle-shaped in developed countries and triangular in developing countries. (Option C)



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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 557

↑ *Back to this question in Part A*

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Q22: Population and Vital statistics represent the demography of a population. Which of the following is not considered a vital statistic in demography? (Q840767)

A. Birth rate

B. Death rate

C. Life expectancy at birth

D. Sex ratio

Correct Answer: D. Sex ratio

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The sex ratio is a demographic indicator representing the number of females per 1,000 males in a given population. The sex ratio, while important in demographic studies, is classified under population statistics (not vital statistics). Population statistics Vital statistics Population size Sex ratio Literacy rate Dependency ratio Population density Birth rate Death rate Natural growth rate Life expectancy at birth Mortality rate Fertility rate

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page. 556

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: Assuming a population follows the Malthusian growth model and doubles in number in 20 years, what is its annual growth rate? (Q840766)

A. 2.8%

B. 3.5 %

C. 0.28

D. 35%

Correct Answer: B. 3.5 %

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Malthusian growth model is a simple exponential growth model that helps us calculate the time it takes for a population to double in number. It follows the rule of 70 : Time taken to double = 70 / Annual growth rate We know, Time = 20 years, thus, Annual growth rate = 70/20 = 3.5 Annual growth rate = 3.5% Relation between growth rate and population: Growth rate of some countries and regions: Europe: 0.3% per year Africa: 2.6% per year Latin America: 1% per year Asia: 0.9% per year India: 0.8% per year

Rating	Annual rate of growth %	Number of years required for the population to double in size
Stationary population	No growth	
Slow growth	Less than 0.5	More than 139
Moderate growth	0.5 to 1.0	139–70
Rapid growth	1.0 to 1.5	70–47
Very rapid growth	1.5 to 2.0	47–35
"Explosive" growth	2.0 to 2.5	35–28
——"——	2.5 to 3.0	28–23
——"——	3.0 to 3.5	23–20
——"——	3.5 to 4.0	20–18

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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 556

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: Demographic transition refers to a change of demographic parameters like birth rate and death rate along with the dynamic process of socio- economic scenario. Which of the following scenarios best describes the demographic trap of a country? (Q840765)

A. High birth rate (CBR) and declining death rate (CDR) lead to outpaced economic growth and resources.

B. Declining birth rate (CBR), which falls below the death rate (CDR), thus leading to shrinkage of the population.

C. High birth rate (CBR) and high death rate (CDR) leading to a stable population without growth

D. Both B and C

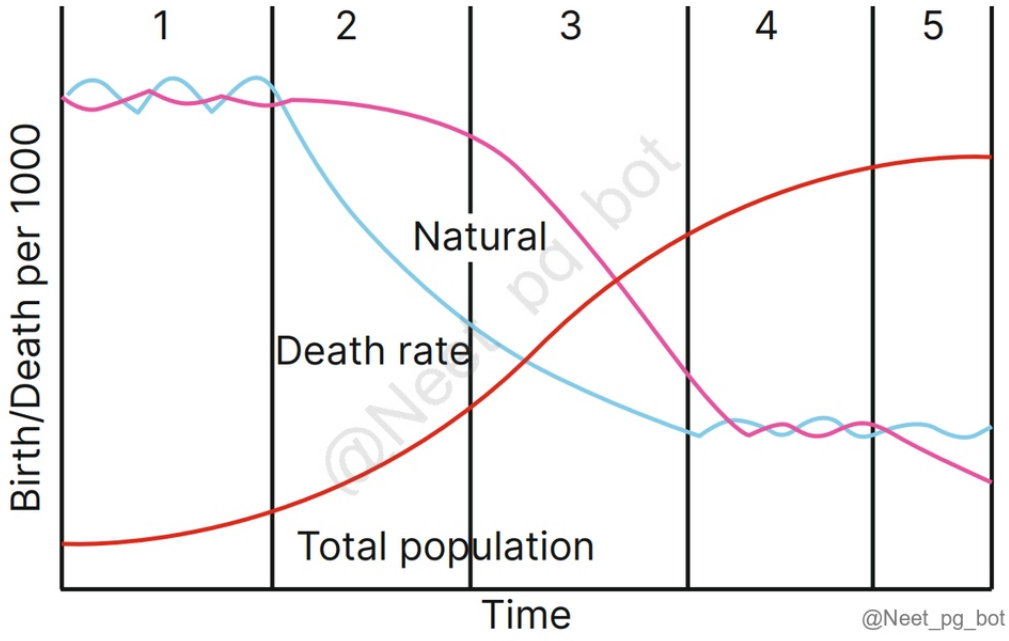
Correct Answer: A. High birth rate (CBR) and declining death rate (CDR) lead to outpaced economic growth and resources.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A demographic trap occurs when a country remains in Stage II (early expanding) of the demographic transition model, where the crude birth rate (CBR) stays high while the crude death rate (CDR) declines, leading to rapid population growth that outpaces economic development and resource availability - essentially causing exponential population growth. Demography Transition Model: Declining CBR, which falls below the CDR, thus leading to population shrinkage (Option B) refers to Stage V (Declining) of the demographic transition. High CBR and CDR leading to a stable population without growth (Option C) refers to Stage I (High stationary) of the demographic transition.

STAGES	CBR	CDR
High Stationary (Population Stable)	↑	↑
Early Expanding (Population explosion/demography trap)	↑	Starts to decline
Late Expanding (Population grow at slow rate)	Starts to decline	Continues to decline
Low Stationary (Stable)	↓	↓
Declining	↓ but CBR < CDR	↓ @Neet_pg_bot



STAGE	HIGH STATIONARY	EARLY EXPANDING	LATE EXPANDING	LOW STATIONARY	DECLINING
Birth Rate	↑	↑	Starts declining	↓	↓
Death Rate	↑	Starts declining	Continues declining	↓	Declining at a very slow rate or stable
Demographic Gap	Minimum	Maximum	Starts Contracting	Minimum	-ve
Population Growth	Stationary	Growing at a faster rate (Population explosion)	Growing at a slower rate	Stationary	Decreasing
Composition	↑ fertility (Young)	Working class (30-40 years)	Working class (30-40 years)	Mixed (50 years)	Ageing (60 years)
Example	India before 1921	India 1921-1991	India 1991-currently	UK, USA, Canada	European regions

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References:

pubmed.ncbi.nlm.nih.gov/12341670/#:~:text=PIP%3A%20The%20demographic%20trap%20is,ecological%20carrying%20capacity%20is%20exceeded .

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: Based on the demographic transition model, which transition phase does India belong to? (Q840764)

A. Early expanding

B. Late expanding

C. Low stationery

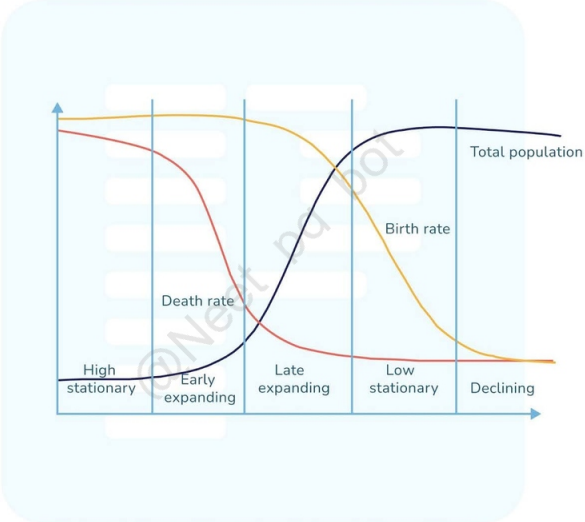
D. Declining

Correct Answer: B. Late expanding

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: India is currently in the late expanding phase (Stage III) of the demographic transition model as the birth rate is declining but at a slower pace than the death rate, which is also declining. Stage Countries I - High stationery India until 1920 II - Early expanding African and south Asian countries III - Late expanding India IV - Low stationary Austria, Denmark, Sweden V - Declining Germany, Italy, United Kingdom, Japan



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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 554

↑ *Back to this question in Part A*

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Q26: Which of the following is associated with the term demographic gap? (Q840763)

A. People entering and people leaving the country

B. Crude birth rate and crude death rate

C. Male population and female population

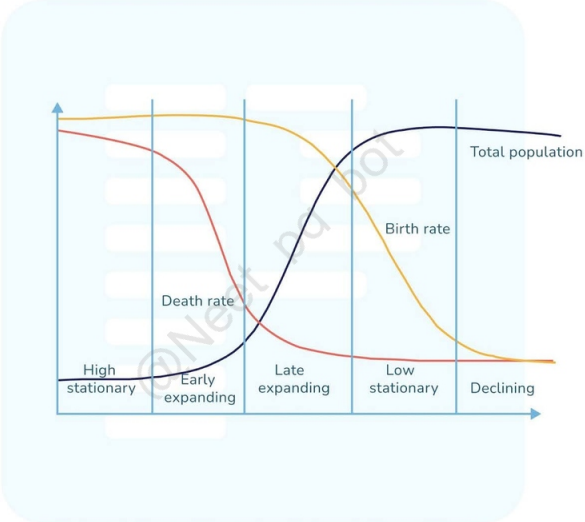
D. Age group of males and females

Correct Answer: B. Crude birth rate and crude death rate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The demographic gap, or the growth rate, refers to the difference between a given population's crude birth rate and death rate This value excludes the migration of people into and out of the population. Demographic gap = Crude birth rate - Crude death rate Demographic Gap: Demographic gap = Crude birth rate - Crude death rate. It’s minimal in Phase I and IV. Starts contracting in Early Phase III. It’s maximum in Late Phase II. Potentially negative Phase V.



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References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 556 Population growth rate Highest birth rate by country 2023 | Statista

↑ *Back to this question in Part A*

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• [07_Demography and Health] 033 Previous Year Questions

« Back to Folder Directory

[07_Demography and Health] 033 Previous Year Questions — Quick Jump

Q1 (p. 1308)	*Q2 (p. 1308)*	*Q3 (p. 1309)*	*Q4 (p. 1310)*	*Q5 (p. 1311)*	*Q6 (p. 1311)*
Q7 (p. 1312)	*Q8 (p. 1313)*	*Q9 (p. 1314)*	*Q10 (p. 1315)*	*Q11 (p. 1316)*	*Q12 (p. 1316)*
Q13 (p. 1317)	*Q14 (p. 1318)*	*Q15 (p. 1319)*	*Q16 (p. 1320)*	*Q17 (p. 1321)*	*Q18 (p. 1321)*
Q19 (p. 1322)	*Q20 (p. 1323)*	*Q21 (p. 1323)*	*Q22 (p. 1324)*	*Q23 (p. 1325)*	*Q24 (p. 1325)*
Q25 (p. 1326)	*Q26 (p. 1327)*				

Q1: In the “de facto” method of census data collection, individuals are enumerated based on which of the following? (Q866429)

A. Place of birth

B. Location at time of enumeration

C. Usual residence

D. Place of employment

Correct Answer: B. Location at time of enumeration

Explanation: De facto census method Individuals are counted where they are physically present on the day of the census Usual residence is not considered Useful for capturing: Travelers Migrant populations Temporarily displaced persons Place of birth (Option A): A demographic characteristic, not a census enumeration method Usual residence (Option C): This is the de jure method, which counts individuals at the place they normally live, regardless of their physical presence on census day. Place of employment(Option D): Refers to occupational data collection for workforce statistics, not the basis for population counting in a census.

References:

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↑ *Back to this question in Part A*

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Q2: Number of live births per 1000 women in the reproductive age group in a year refers to: (Q859826)

A. Gross reproduction rate

B. Total fertility rate

C. Net reproduction rate

D. General fertility rate

Correct Answer: D. General fertility rate

Explanation: General Fertility rate Definition The total number of live births in an area in a year per 1000 women in the reproductive age group (15- 44 or 49 years). Disadvantages and advantages Disadvantage : Not everyone in the reproductive age group is exposed to the risk of childbirth Gross Reproduction Rate (Option A): Gross Reproductive Rate is the average number of daughters a woman would have if she were to experience the current age-specific fertility rates throughout her reproductive life (15-49 years). Total Fertility Rate (Option B): Total fertility rate (TFR) estimates average children per woman over her lifetime with age-specific fertility rates. Net Reproduction Rate (Option C): NRR is the number of daughters or girls a newborn will bear or have throughout her reproductive lifespan, considering the current age-specific fertility patterns and mortality rates.

$$\text{General fertility rate (GFR)} = \frac{\text{Number of live births in an area during the year}}{\text{Mid-year female population age 15-44 (or 49) in the same area in same year}} \times 1000$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 563, 564

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following fertility indicator can change with changes in age-specific mortality rates? (Q859809)

A. General fertility rate

B. Total fertility rate

C. Gross reproduction rate

D. Net reproductive rate

Correct Answer: D. Net reproductive rate

Explanation: Net reproductive rate (NRR) Definition NRR is the number of daughters or girls a newborn will bear or have throughout her reproductive lifespan, considering the current age-specific fertility patterns and mortality rates. Interpretation It is the most sensitive indicator to evaluate National family planning program It is a mortality-dependent fertility indicator. (Option D) It is the best measure of growth of a population. General Fertility Rate (Option A): General fertility rate (GFR) measures total live births per 1,000 women in reproductive age, not affected by mortality rates. Total Fertility Rate (Option B): Total Fertility Rate (TFR) estimates average children per woman throughout reproductive age, unaffected by mortality rates. Gross Reproduction Rate (Option C): Gross Reproduction Rate (GRR) estimates average girls per woman throughout reproductive age, but doesn't consider mortality rates.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 536, 563, 564

https://unstats.un.org/unsd/demographic/products/dyb/DYBNat/NotesNatStatTab03.htm#:~:text=The%20net%20reproduction%20rate%20is,were%20also%20subjected%20to%20the

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: What is the formula of crude birth rate? (Q859789)

A. (Total number of births in a year / Estimated midyear Population) x 100

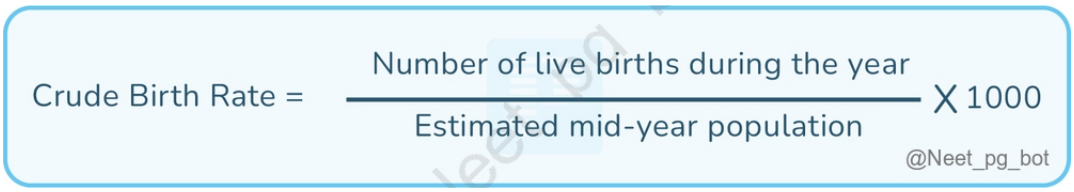
B. (Number of live births and stillbirths /Mid-year population) x 1000

C. (Number of live births in a year/ Mid-year Population) x 1000

D. (Number of live births / Estimated midyear Population) x 10000

Correct Answer: C. (Number of live births in a year/ Mid-year Population) x 1000

Explanation: Crude birth rates Definition Number of live births per 1000 estimated mid-year population in a given year. Formula Drawbacks It gives a rough measure of fertility by giving birth rates, and not everyone in the population is exposed to childbirth. Note: The crude birth rate does not include stillbirths.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 563, 65

https://data.worldbank.org/indicator/SP.DYN.CBRT.IN?locations=IN

https://data.worldbank.org/indicator/SP.DYN.CDRT.IN?locations=IN

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: When is the population evaluated to calculate the crude death rate? (Q859433)

A. 1st July

B. 1st January

C. 31st December

D. 1st may

Correct Answer: A. 1st July

Explanation: Crude death rate: CDR = (Total no. or deaths in a community/ MYP (Mid-year population) in the same area) x 100 The mid-year population is taken in July (Option A) Limitation: It does not consider the age and sex of the population Interpretation: A higher crude death rate indicates a higher overall mortality burden within a population, while a lower rate indicates a lower mortality burden. Data Sources: Vital registration systems, census data, population surveys, or administrative records may provide the necessary data for calculating the crude death rate.

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 24, 65

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following indicators is not included in the Global Hunger Index (GHI) ? (Q856076)

A. Infant mortality rate

B. Under-5 mortality rate

C. Percentage of undernourished population

D. Child wasting

Correct Answer: A. Infant mortality rate

Explanation: Infant mortality rate is not directly included in the Global Hunger Index . While it is closely related to hunger and malnutrition, it specifically refers to the death of infants under 1 year, whereas the GHI focuses on the broader effects of malnutrition, child undernourishment, and under-5 mortality. Global Hunger Index (GHI): The Global Hunger Index (GHI) is a comprehensive tool designed to assess and track hunger worldwide. It incorporates four key indicators that represent various dimensions of hunger: Components of the Global Hunger Index Undernourishment Definition : Measures the percentage of the population whose caloric intake is insufficient to meet the minimum dietary energy requirements. Significance : Reflects overall food access and availability in a population, indicating widespread nutritional insufficiency. Child Stunting Definition : The proportion of children under five years old who have low height for their age, signifying chronic undernutrition. Significance : Highlights the impact of long-term nutritional deficiencies and food insecurity, especially among children. Child Wasting Definition : The percentage of children under five who have low weight for their height, indicating acute undernutrition. Significance : Suggests a recent and severe shortage of food intake or a high incidence of disease, often due to factors like food scarcity or poor health conditions. Child Mortality Definition : The mortality rate of children under five years old. Significance : Reflects the combination of poor nutrition, inadequate healthcare, and environmental conditions, indicating the overall health and well-being of a population. Scoring System The GHI score is on a 100-point scale, with lower scores indicating better nutritional status. The classification is as follows: Low : ≤ 9.9 Moderate : 10.0 - 19.9 Serious : 20.0 - 34.9 Alarming : 35.0 - 49.9 Extremely alarming : ≥ 50.0 A higher score indicates a higher level of hunger severity, while a lower score reflects a better situation regarding food security and child nutrition. 2023 GHI Highlights Global Score : 18.3, categorized as moderate hunger. This is a marginal improvement from 19.1 in 2015. Undernourishment : The number of undernourished individuals rose from 572 million (2015) to approximately 735 million in 2023. Most Affected Regions : South Asia and Africa South of the Sahara both scored 27.0, indicating serious hunger . Alarming Hunger Levels : Seen in 9 countries , including Yemen and Burundi. Under-5 mortality rate (Option B) : This measures the number of children who die before reaching the age of 5 per 1,000 live births. It serves as an indicator of both health and hunger-related issues. Percentage of undernourished population (Option C) : This indicator measures the proportion of a population whose caloric intake is insufficient to meet daily energy requirements.

References:

https://www.globalhungerindex.org/pdf/en/2023.pdf

https://www.globalhungerindex.org/pdf/en/2024.pdf

↑ *Back to this question in Part A*

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Q7: For a population of 10,000, what does a sex ratio of more than 1000 mean? (Q857700)

A. Males are less than 500

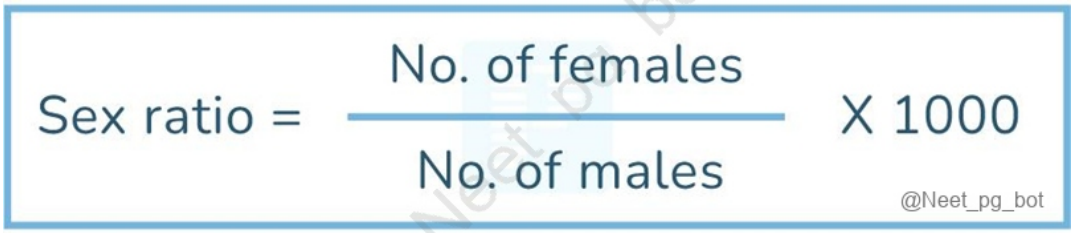
B. Females are less than 500

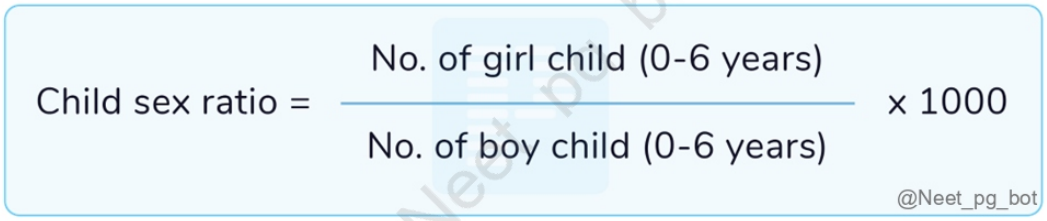
C. Males are less than 5000

D. Females are less than 5000

Correct Answer: C. Males are less than 5000

Explanation: sex ratio of more than 1000 indicates that there are more females than males in the population. For a population of 10,000: If the sex ratio is greater than 1000, it implies that the number of females exceeds the number of males. This means that the number of males must be less than half of the total population (i.e., less than 5000). Sex Ratio : Number of females per 1000 males. {{caption_text}} {{caption_text}} Importance in Demography : Crucial for understanding population dynamics. Influencing Factors : Mortality differences between genders. Sex-selective migration. Sex ratio at birth. Implications of Low Sex Ratio : Indicates a preference for male children. Results in gender inequities. This leads to neglect of girls, higher female mortality in youth, female infanticide, and foeticide. Increases maternal mortality. Bias towards males in population counts. Males are less than 500 (Option A) : This is incorrect because the male population being so low would result in an extremely skewed sex ratio, which is unrealistic in this context. Females are less than 500 (Option B) : This is incorrect because a sex ratio greater than 1000 implies there are more females, not fewer. Females are less than 5000 (Option D) : This is incorrect because for the sex ratio to exceed 1000, the number of females must be more than 5000.





References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 558

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: The number of maternal deaths per 100,000 live births is called- (Q857695)

A. Maternal mortality ratio

B. Under 5 Mortality Rate

C. Infant mortality rate

D. Perinatal mortality rate

Correct Answer: A. Maternal mortality ratio

Explanation: H Indicators Maternal death: It is the death of the mother, anytime during the pregnancy, labor/ delivery, or also 42 days post delivery. If the death of the mother occurs during any of these, it is called maternal death. The commonest cause of maternal death in India is PPH (Postpartum Haemorrhage). Indicator Formula India Value Most Common Cause Infant Mortality Rate (IMR) (Option C) Infant deaths / Live Births × 1000 33 Low Birth Weight (LBW) & Prematurity Maternal Mortality Ratio (MMR) Maternal deaths / Live Births × 100,000 122 Postpartum Hemorrhage (PPH) Under 5 Mortality Rate (U5MR) (Option B) Total Under 5 deaths / Live Births × 1000 39 Low Birth Weight (LBW) & Prematurity Neonatal Mortality Rate (NNR) Neonatal deaths / Live Births × 1000 24 Low Birth Weight (LBW) & Prematurity Perinatal Mortality Rate (PNMR) (Option D) Perinatal deaths / Live Births × 1000 23 Low Birth Weight (LBW) & Prematurity Stillbirth Rate (SBR) Total Stillbirths / Live Births × 1000 22 Maternal infections / Abruptio placentae

References:

K.Park’s Textbook of Preventive and Social Medicine 27th Edition. Pg. 635

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: The term demographic bonus is due to: (Q857136)

A. Decline in dependency ratio

B. Increase in dependency ratio

C. Increase in population

D. Decrease in population

Correct Answer: A. Decline in dependency ratio

Explanation: ependency ratio is the average number of economically dependent individuals per 100 economically productive individuals in a specific country, territory, or geographic area at a given time. To calculate the dependency ratio, we use the formula: Total dependency ratio: 48.27% Young age dependency ratio: 38.89% Old dependency ratio: 9.8% (increased due increased life expectancy, initially 8%) Demographic Gift Demographic Liability The demographic gift occurs when the working-age population is high relative to dependents. The higher proportion of elderly individuals refers to demographic liability. Represents a potential demographic dividend due to a larger workforce contributing to economic growth. Represents potential economic challenges due to increased dependency ratios and healthcare costs Contributors include higher productivity, increased savings, and economic growth Dependents include retirees, elderly individuals, and those requiring significant healthcare Demographic Burden Refers to the increase in the proportion of the dependent population relative to the economically

productive population. It signifies the societal challenge of supporting a larger dependent population, which typically occurs due to ageing demographics. Demographic Bonus A phase in a nation's demographic evolution in which the proportion of the dependent population relative to the working-age population declines. This is often associated with economic growth opportunities as more people are in the workforce than dependents. Demographic Window: Refers to a period in a nation's demographic structure when the proportion of the population in the working-age group is at its highest. Demographic Dividend: An increase in economic growth driven by a growing proportion of working-age individuals in the population Options B, C, and D are unrelated to the concept of the demographic bonus.

$$\text{Dependency ratio} = \frac{\text{Children 0-14 years + Population >65 years age}}{\text{Population between 15-64 years age}} \times 100$$

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References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 559

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: What is the current ideal total fertility rate in India? (Q857107)

A. 2.3

B. 2.2

C. 2.1

D. 2.0

Correct Answer: C. 2.1

Explanation: SFR/1000

$$TFR = 5 \times \sum_{15-19}^{45-49}$$

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg.564, 536.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: The average number of children a woman would have if she were to pass through her reproductive years bearing children at the same rates as the women in her age group is called as: (Q857092)

A. General fertility rate

B. Total fertility rate

C. Gross reproduction rate

D. Net reproduction rate

Correct Answer: B. Total fertility rate

Explanation: - Total fertility rate Total Fertility Rate (TFR) estimates the average number of children per woman during reproductive years. The Total Fertility rate (TFR): gives the average number of children a woman will have throughout her reproductive age group (15-49 years) . TFR indicates average family size. Family size is the number of children a woman has at a particular age within her reproductive years (15-49). Complete family size is the total number of children a woman has throughout her reproductive lifespan (until she is 49 years old). TFR is calculated by summing the age-specific fertility rates across all age groups. If 5-year age groups are used, then the sum of rates is multiplied by 5. TFR = 5 × 15-1945-49 ASFR/1000 General Fertility Rate (Option A) : The general fertility rate (GFR) measures live births per 1,000 women but doesn't estimate total children. Gross reproduction rate (GRR) (Option B): GRR measures daughters born to a hypothetical cohort if they experience age-specific fertility rates. Net Reproduction Rate (Option D): Net reproduction rate (NRR) estimates the daughters a woman has over her lifetime, considering mortality, not the total number of children.

$$TFR = 5 \times \sum_{15-19}^{45-49}$$

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg.564, 536.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: What phase of the demographic cycle is the low stationary phase of demographic cycle? (Q857090)

A. Phase 1

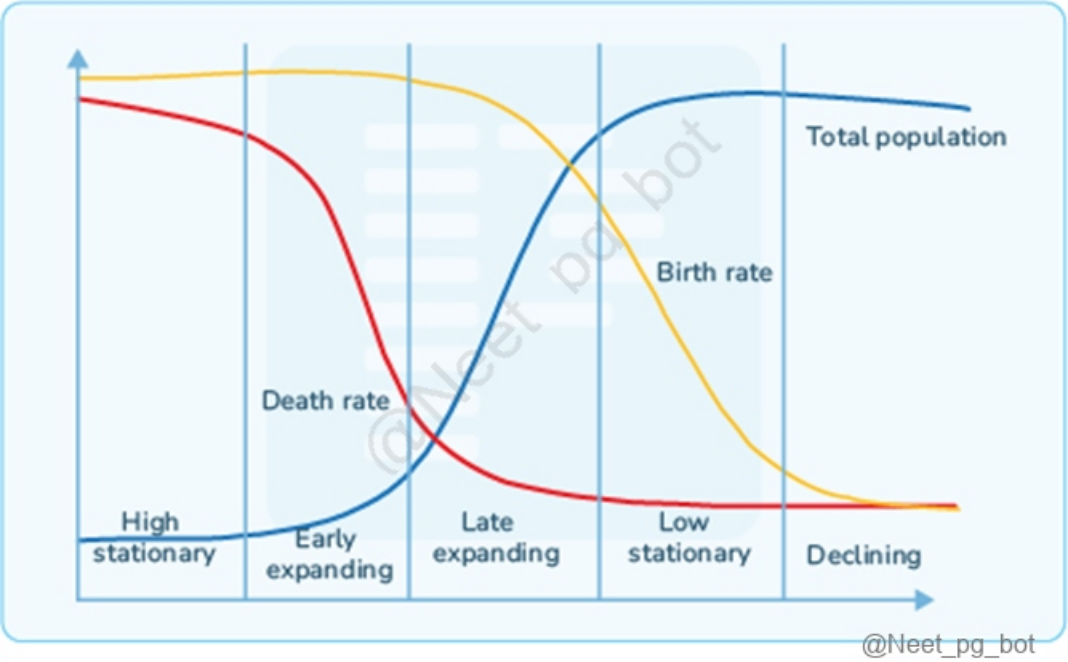
B. Phase 2

C. Phase 3

D. Phase 4

Correct Answer: D. Phase 4

Explanation: eclining Low Lower Population declines (death rate > birth rate)



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 554

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which stage of the demographic cycle has the highest birth and death rates? (Q858026)

A. Stage I

B. Stage II

C. Stage III

D. Stage IV

Correct Answer: A. Stage I

Explanation: In Stage I of the demographic transition model , both birth rates and death rates are high . This stage is typically characterized by: High birth rates due to limited access to contraception, cultural norms favoring large families, and high infant mortality. High death rates due to poor sanitation, limited medical care, and high incidences of disease and famine. Stage I is generally seen in pre-industrial societies, where population growth is slow and fluctuates due to high mortality rates. Stage II (Option B): is incorrect because, in Stage II, death rates decline significantly due to improvements in healthcare, sanitation, and nutrition, while birth rates remain high, resulting in rapid population growth. Stage III (Option C): is incorrect because, in Stage III, birth rates decline as a result of increased access to contraception, women's education, and urbanization, while death rates continue to decline, leading to a slower population growth. Stage IV (Option D): is incorrect because, in Stage IV, both birth rates and death rates are low , and the population tends to stabilize or grow slowly, as seen in many developed countries today.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 554

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Infant mortality rate is typically stated as a rate per how many live births.? (Q857970)

A. 100

B. 1000

C. 10,000

D. 1,00,000

Correct Answer: B. 1000

Explanation: Infant mortality rate (IMR) is typically expressed as the number of deaths of infants (under 1 year) per 1,000 live births in a given year. It is a key indicator of the overall health and well-being of a population, reflecting factors such as access to healthcare, nutrition, and living conditions. 100 (Option A): is incorrect because infant mortality rate is not expressed per 100 live births, but per 1,000 live births. 10,000 (Option C): is incorrect because the IMR is not expressed per 10,000 live births. The standard convention is per 1,000 live births. 1,00,000 (Option D): is incorrect because the infant mortality rate is generally not expressed per 1,00,000 live births. It is commonly presented per 1,000 live births to maintain consistency and comparability.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 25

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following is the sensitive indicator to assess the availability, utilization, and effectiveness of healthcare in a community? (Q855543)

A. Infant mortality rate

B. Maternal mortality rate

C. Immunization coverage

D. Disability-adjusted life years

Correct Answer: A. Infant mortality rate

Explanation: IMR is the most sensitive and reliable indicator of community health status. It responds quickly to changes in healthcare services such as antenatal care, skilled delivery, and neonatal care. Infants are highly vulnerable; even minor deficiencies in healthcare immediately affect mortality. IMR reflects the effectiveness of preventive, promotive, and curative services. It also correlates with nutrition, sanitation, socioeconomic status, and maternal well-being. A decline in IMR indicates improved health service coverage and quality. IMR assesses both availability and utilization of healthcare services. Therefore, IMR is globally accepted as the most sensitive indicator of healthcare effectiveness. Incorrect Options: Option B) Maternal Mortality Rate (MMR) : Important public health indicator but less sensitive due to low event frequency. Requires large population and long periods to detect meaningful change. Option C) Immunization Coverage : Reflects only one component of healthcare (vaccination). Does not assess the full spectrum of healthcare utilization or effectiveness. Option D) Disability-Adjusted Life Years (DALYs) : Measures disease burden , not healthcare service effectiveness. More suitable for global and national comparisons, not community-level sensitivity.

References:

Park's Textbook of Preventive and Social Medicine, 27th ed pg 26, 64, 635

↑ *Back to this question in Part A*

Q16: Stages of the demographic cycle with the same birth rate but variable death rate are? (Q860057)

A. Stage 1 + stage 2

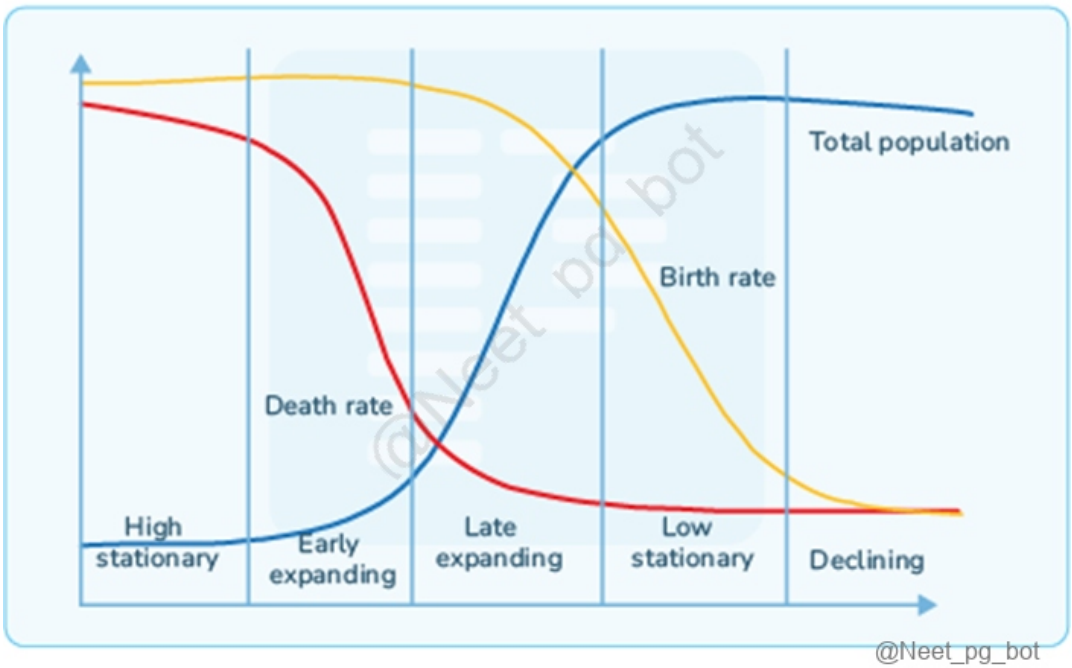
B. Stage 2 + stage 3

C. Stage 3 + stage 5

D. Stage 4 + stage 5

Correct Answer: A. Stage 1 + stage 2

Explanation: Stage 1 (High Stationary) and Stage 2 (Early Expanding) have the same birth rate , i.e., both have a high birth rate . However, the death rate differs : Stage 1 : High death rate. Stage 2 : Declining death rate (due to improved healthcare, sanitation, and nutrition). Since the birth rate remains high in both stages but the death rate decreases in Stage 2 , the correct answer is Stage 1 + Stage 2 . According to the demographic transition model, a country goes through 5 phases. Stages Birth rate Death rate Population High stationery High High Population is stable Early expanding High Starts declining Population rapidly expands Late expanding Starts declining Keeps declining Population still grows (birth > death) Low stationery Low Low Stable population Declining Low Lower Population declines (death > birth) Incorrect Options: Options B, C & D are incorrect



References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 554

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: In a family, Mr. X is 69 years old, and his wife, Mrs. X, is 58 years old. They have a 30-year-old son, his 28-year-old wife, and a 5-year-old grandchild. Calculate the dependency ratio for this family. (Q860021)

A. 33

B. 66.6

C. 22.4

D. 44.6

Correct Answer: B. 66.6

Explanation: The dependency ratio is the average number of economically dependent individuals per 100 economically productive individuals in a specific country, territory, or geographic area at a given time. To calculate the dependency ratio, we use the formula: Dependency Ratio = (2 / 3) × 100 Dependency Ratio = 66.67%

$$\text{Dependency ratio} = \frac{\text{Children 0-14 years + Population >65 years age}}{\text{Population between 15-64 years age}} \times 100$$

@Neet_pg_bot

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 554

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: What is the growth rate if the crude birth rate is 19 and the crude death rate is 7? (Q860005)

A. 1.2%

B. 0.7%

C. 1.1%

D. 1.5%

Correct Answer: A. 1.2%

Explanation: To determine the growth rate of a population, we use the following formula: Growth Rate = Crude Birth Rate – Crude Death Rate Given: Crude Birth Rate (CBR) = 19 Crude Death Rate (CDR) = 7 Growth Rate=19–7=12 per 1000 people To express this as a percentage: Growth Rate= 12/1000 x 100 = 1.2%

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 554

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Which of the following provides valuable information about the reproductive behavior of couples within a population? (Q860584)

A. TFR

B. NRR

C. GFR

D. GRR

Correct Answer: A. TFR

Explanation: The Total Fertility Rate (TFR) is the average number of children born to a woman over her reproductive lifetime (15-49 years), usually expressed per woman. It is a common measure used to assess fertility levels within a population. TFR takes into account the age-specific fertility rates of women across all reproductive ages. TFR provides valuable information about the reproductive behavior of couples within a population and is used by demographers and policymakers to understand trends in population growth, as well as to formulate policies related to family planning, healthcare, and social services. Incorrect Options: NRR (Option B): Net Reproduction Rate (NRR) is the number of daughters or girls a newborn girl will bear or will have throughout her reproductive lifespan, considering the current age-specific fertility patterns and mortality rates. NRR is a mortality dependent fertility indicator. GFR (Option C): General Fertility Rate (GFR) is the total number of live births in an area in a year per 1000 women in the reproductive age group (15-49 years) in a year. Not everyone in the reproductive age group is exposed to the risk of childbirth. GRR (Option D): Gross Reproduction Rate (GRR) is

the total number of girls a woman will have throughout her reproductive age, considering the current age-specific fertility pattern and with out mortality. · GRR is given by TFR for girl children.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Which of the following is not included in MMR? (Q860574)

A. Death due to RTA

B. Death due to preeclampsia

C. Death due to ectopic pregnancy

D. Death on the 14th day postpartum

Correct Answer: A. Death due to RTA

Explanation: The Maternal Mortality Ratio (MMR) is a key indicator used in public health to measure the health outcomes related to pregnancy and childbirth. It represents the number of maternal deaths per 100,000 live births. Maternal deaths included in the MMR are those that occur during pregnancy, childbirth, or within 42 days after the termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. Death due to a Road Traffic Accident (RTA) would be considered an accidental cause and therefore would not be included in the maternal mortality rate (MMR). Incorrect Options: Options B, C, and D are incorrect.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Calculate the maternal mortality ratio in a population of 2 lakhs, with 4000 live births, and 5 stillbirths where 2 died due to ectopic, 2 by abortion, 2 by electrocution, 2 deaths by sepsis and 4 by PPH? (Q860563)

A. 25 per one lakh

B. 250 per lakh

C. 500 per lakh

D. 100 per lakh

Correct Answer: B. 250 per lakh

Explanation: Maternal deaths included in the MMR are those that occur during pregnancy, childbirth, or within 42 days after the termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. Total maternal deaths = Deaths due to ectopic + Deaths due to abortion + Deaths due to sepsis + Deaths due to PPH Total maternal deaths = 2 + 2 + 2 + 4 = 10 Deaths due to electrocution is not considered under the MMR because it an accidental cause of death. Maternal Mortality Ratio (MMR) = (Total no. of maternal deaths/Life Births) ´100000. (10/4000) x 100,000 = 250 per lakh Incorrect Options: Options A, C, and D are incorrect.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Marriage and mortality belong under? (Q860519)

A. Demographic process

B. Demographic dividend

C. Demographic bonus

D. Demographic window

Correct Answer: A. Demographic process

Explanation: Governs the changes in the demographic structure of the population. These include factors that affect a population's size, composition, and distribution. Factors included in the demographic process: Marriage Mortality Fertility Migration Social mobility Incorrect Options: Demographic dividend (Option B): An increase in economic growth driven by a growing proportion of working-age individuals in the population Demographic bonus (Option C): A phase in a nation's demographic evolution in which the proportion of the dependent population relative to the working-age population declines. This is often associated with economic growth opportunities as more people are in the workforce than dependents. Demographic window (Option D): Refers to a period in a nation's demographic structure when the proportion of the population in the working-age group is at its highest.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 559

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: Arrange the following stages of the demographic cycle in the correct order: Early expanding High stationary Late expanding Low stationary (Q844101)

A. 1, 2, 3, 4

B. 2, 1, 3, 4

C. 1, 3, 2, 4

D. 3, 2, 4, 1

Correct Answer: B. 2, 1, 3, 4

Explanation: Correct Option B - 2, 1, 3, 4: 2. High Stationary Stage: This is the first stage of the demographic cycle, characterized by high birth and death rates. The population growth is slow and fluctuating. Societies at this stage are typically pre-industrial. 1. Early Expanding Stage: In the second stage, the death rate begins to decline due to improvements in healthcare, sanitation, and food supply, while the birth rate remains high. This leads to a rapid increase in population 3.Late Expanding Stage: The third stage sees a continued decline in the death rate, but the birth rate also starts to decrease due to factors like urbanization, increased access to contraception, and changes in societal values. Population growth starts to slow down. 4. Low Stationary Stage: This is the final stage of the demographic cycle, where both birth and death rates are low, leading to a stable population. Countries in this stage often have high levels of development and a balanced population structure. Incorrect Options: Options A, C, and D are incorrect, as given above.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: In a given population, The number of individuals aged 0-14 years = 6,000 The number of individuals aged 15-59 years = 12,000 The number of individuals aged 60 years and above = 2,000 What is the dependency ratio of this population? (Q865308)

A. 0.33

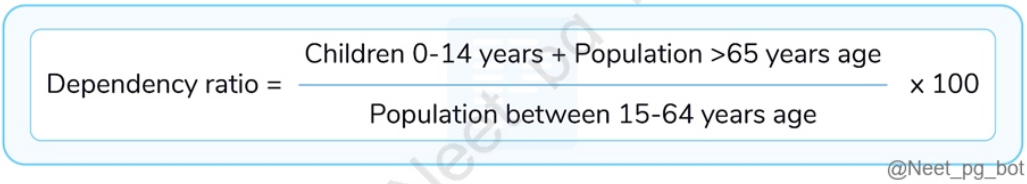
B. 0.50

C. 0.66

D. 1.00

Correct Answer: C. 0.66

Explanation: The given population has a Dependency Ratio of 0.66. It is the average number of economically dependent individuals per 100 economically productive individuals in a specific country, territory, or geographic area at a given time. To calculate the dependency ratio, we use the formula: In the given question, The number of individuals aged 0-14 years = 6,000 The number of individuals aged 60 years and above = 2,000 The number of individuals aged 15-59 years = 12,000 Dependency Ratio: (6000 + 2000)/12000 = (8000/12000) = 0.6667 per 100 economically productive individuals.



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition,Page 559.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: Which of the following statements accurately describes the fifth stage of the demographic cycle? (Q793600)

A. Birth rate remains unchanged

B. Death rate increases

C. Demographic gap is positive

D. Birth rate falls below death rate

Correct Answer: D. Birth rate falls below death rate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Correct Option D - Birth Rate Falls below Death Rate: In the fifth stage of the demographic cycle, birth rates decrease below death rates, leading to population decline. Incorrect Options: Option A - Birth Rate Remains Unchanged: Birth rates remaining unchanged is not characteristic of this stage. Option B - Death Rate Increases: Increased death rates are not expected in this stage. Option C - Demographic Gap is Positive: The demographic gap doesn't describe birth rates falling below death rates, which is characteristic of this stage.

References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

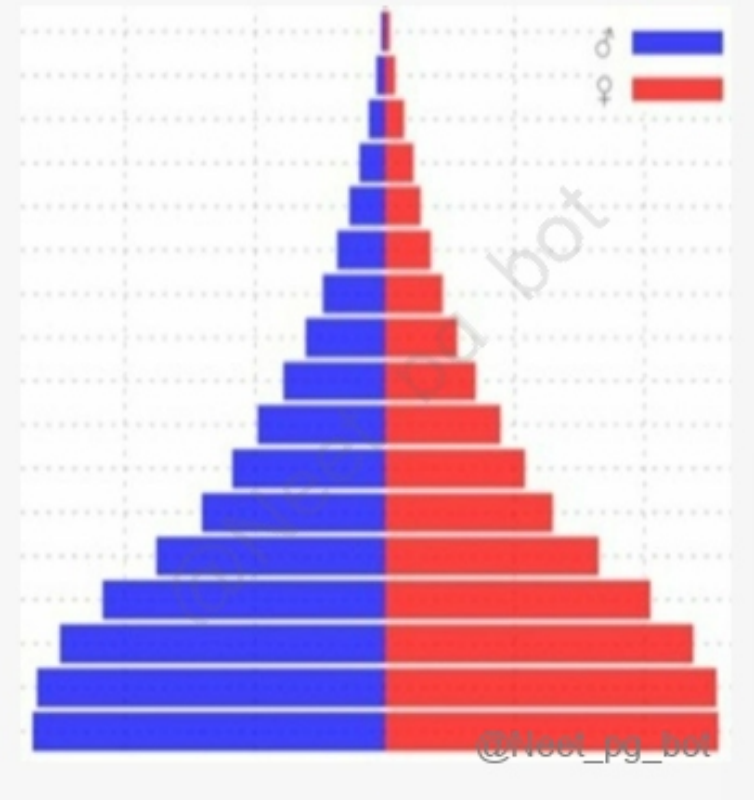
Q26: What does the provided population pyramid indicate, with the exception of? (Q793628)

A. Developing countries

B. Developed countries

C. Increasing population

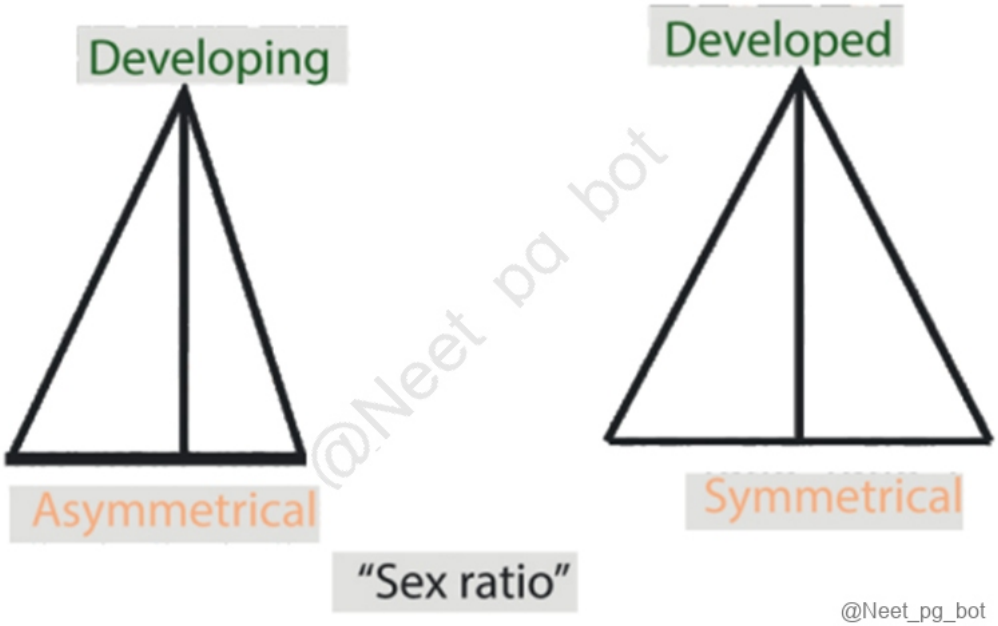
D. More young population



Correct Answer: B. Developed countries

- *Listen (English)*
- *Listen (Hindi)*

Explanation: Correct Option B - Developed Countries: Developed countries show more even age distributions with smaller bases, reflecting lower birth rates and higher life expectancy. Sex ratio graphs often display symmetry. Incorrect Options: Option A - Developing Countries: Developing countries have broad-based pyramids, indicating high birth rates and lower life expectancy, often with asymmetrical sex ratios. Option C - Increasing Population: Developing countries exhibit increasing population trends with wide bases and narrow tops due to high birth rates and improved healthcare, often with asymmetrical sex ratios. Option D - More Young Population: Developing countries typically have younger populations with wide bases and narrow tops, reflecting high birth rates and fewer elderly individuals, often with asymmetrical sex ratios.



References:

Prepladder Notes

↑ *Back to this question in Part A*

@Neet_pg_bot

• [08_Family Planning and Contraceptives] 034 Family Planning And Contraceptives

« Back to Folder Directory

[08_Family Planning and Contraceptives] 034 Family Planning And Contraceptives — Quick Jump

Q1 (p. 1329)	*Q2 (p. 1330)*	*Q3 (p. 1330)*	*Q4 (p. 1331)*	*Q5 (p. 1332)*	*Q6 (p. 1333)*
Q7 (p. 1333)	*Q8 (p. 1335)*	*Q9 (p. 1337)*	*Q10 (p. 1339)*	*Q11 (p. 1340)*	*Q12 (p. 1341)*
Q13 (p. 1343)	*Q14 (p. 1344)*	*Q15 (p. 1344)*	*Q16 (p. 1347)*	*Q17 (p. 1348)*	*Q18 (p. 1349)*
Q19 (p. 1351)	*Q20 (p. 1353)*	*Q21 (p. 1353)*	*Q22 (p. 1354)*	*Q23 (p. 1355)*	*Q24 (p. 1356)*
Q25 (p. 1359)	*Q26 (p. 1363)*	*Q27 (p. 1363)*	*Q28 (p. 1365)*		

Q1: A 30 Y/o woman has been taking oral contraceptive pills (OCPs) for the past five years, not just for contraception but also for managing her menstrual cramps and acne. Which of the following are additional long-term health benefits of OCPs, aside from birth control and symptomatic relief? (Q840838)

A. Reduced risk of hypertension

B. Decreased risk of thrombosis

C. Reduced risk of ovarian cancer

D. Reduced risk of cervical cancer

Correct Answer: C. Reduced risk of ovarian cancer

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Oral contraceptive pills (OCPs) are hormonal contraceptives consisting of either combined estrogen and progesterone or only progesterone or only estrogen. It prevents ovulation and implantation, decreases tubal motility, and thickens cervical mucus. Benefits of OCPs: Contraceptive benefits: If taken correctly, they are 100% effective in preventing pregnancy. Non-contraceptive benefits: Decreases the risk of: Benign breast diseases such as fibrocystic disease and fibroadenoma. Ovarian cysts Pelvic inflammatory diseases Ectopic pregnancy Iron deficiency anemia Ovarian cancer (option C) Colon cancer Dysmenorrhea, DUB, irregular menstrual cycles Osteoporosis OCPs are proven to increase the risk of hypertension in women, which further increases the risk of stroke and myocardial infarction.(Option A) Women taking OCPs will have an increased risk of arterial/venous thrombosis due to the estrogen component of the pill. The risk increases with age and if she is a smoker. (Option B) OCPs are proven to increase the risk of cervical cancer. The risk increases with the duration of use of OCP's(Option D)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no: 576-577

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A contraceptive “X” is used by 100 couples for a continuous period of 2 years. During this period 20 women become pregnant despite using contraceptive “X”. What is the pearl index of contraceptive “X”? (Q882189)

A. 0.1 per HWY

B. 1 per HWY

C. 10 per HWY

D. 1000 per HWY

Correct Answer: C. 10 per HWY

Explanation: Option: C: 10 per HWY The Pearl index is defined as the number of "failures per 100 woman-years of exposure (HWY)." Pearl index (Failure rate per HWY) = Total accidental pregnancies / Total months of exposure × 1200 In the given question: Total accidental pregnancies = 20 Total months of exposure = 100 couples x 24 months each = 2400 months PI = 20 x 1200/2400 = 10 per HWY Therefore, other options (A, B, and D) can be ruled out.

References:

Park 25/e p561

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is not a characteristic of a planned family? (Q841317)

A. No childbirth beyond the age of 30-35

B. Gap of 2 years between marriage and first child birth

C. Age of mother is >20 years at the time of first child birth

D. Gap of 2 years between 2 successive pregnancies

Correct Answer: D. Gap of 2 years between 2 successive pregnancies

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In a planned family the gap between two successive pregnancies should be atleast 3 years. Terms Used in Family Planning: Planned family: The birth of the first child should be delayed till the mother is 20 years old (option C). No child birth after the age of 30-35 years (option A). The ideal gap between marriage and first child birth should be 2 years (option B). There should be a gap of atleast 3 years between 2 successive pregnancies (option D). No unwanted pregnancies. Should have a limited family size.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no. 567

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: In a village with a population of 2,000 eligible couples, the survey findings revealed that 600 couples use oral contraceptives, 300 couples use condoms, 200 couples use intrauterine devices (IUDs), and 100 couples have undergone sterilization. Which of the following is the couple protection rate (CPR)? (Q841316)

A. 45%

B. 50%

C. 55%

D. 60%

Correct Answer: D. 60%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Based on the above information, The total number of couples using contraception is: 600+300+200+100=1200 The total number of eligible couples = 2000 Therefore, CPR= (1200/2000)x100=60% (option D)

$$\text{Couple protection rate (CPR)} = \frac{\text{No. of couples using contraception}}{\text{Total number of eligible couples}} \times 100$$

@Neet_pg_bot

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no 567

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following statements is incorrect regarding the Pearl Index for measuring contraceptive effectiveness? (Q841315)

A. Technique for evaluating contraceptive efficacy

B. (Total no of accidental pregnancies/ total months of exposure) * 1200

C. More accurate than life table analysis

D. Pregnancies per 100 woman-years of exposure to a contraceptive method

Correct Answer: C. More accurate than life table analysis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Pearl Index is calculated as the number of pregnancies that occur per 100 woman-years of exposure to a contraceptive method. It is a technique for evaluating contraceptive efficacy. Formula (Total accidental pregnancies / Total months of exposure) x 1200 Numerator The total number of accidental pregnancies, including pregnancies that resulted in live births, stillbirths, abortions, or are ongoing. Denominator (Total months in the review period) – (months stopped using contraception for non-pregnancy reasons) Disadvantages PI assumes a constant failure rate over time, but contraceptive failure rates typically decline with longer use. High-fertility couples conceive earlier, skewing results towards lower-fertility couples later in studies. PI ignores factors beyond accidental pregnancy that affect effectiveness, like user dissatisfaction, side effects, attempts to conceive, or loss of follow-up. Better methods Life Table Analysis is a better method to evaluate contraceptive efficacy. It calculates cumulative failure rates over a specified time frame, like one month.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 585

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Match the following contraceptive methods with their appropriate failure rates. Contraceptive Failure Rate A. Male condom 1. 9-20/HWY B. Female Condom 2. 20-40/HWY C. Diaphragm 3. 6-12/HWY D. Vaginal sponge (Nulliparous women) 4. 2-14/HWY E. Vaginal sponge (Parous women) 5. 5-21/HWY (Q841314)

A. A-1, B-4, C-3, D-2, E-2

B. A-5, B-4, C-2, D-1, E-3

C. A-4, B-5, C-3, D-1, E-2

D. A-2, B-5, C-3, D-1, E-4

Correct Answer: C. A-4, B-5, C-3, D-1, E-2

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Contraceptive Method Failure Rate (Pregnancies per 100 women-years) Additional Information Male Condom 2-13 The most common cause of failure is incorrect use. Female Condom 5-21 Higher failure rate than male condoms. Diaphragm 6-12 Not recommended under the National Family Planning Welfare Programme. Vaginal sponge 9-20 Higher failure rate in parous women (20-40/HWY) compared to nulliparous women. Spermicides High High failure rate when used alone, but good to use with some other contraceptive method.

References:

Park’s textbook of preventive and social medicine, 27th edition, Page 569-570. https://cdn.who.int/media/docs/default-source/reproductive-health/contraception-family-planning/mechanisms-of-action-and-effectiveness-of-contraception-methods.pdf?sfvrsn=e39a69c2_1

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Match the following: a) Mission Parivar Vikas 1) Contraception counselling method b) NISCHAY 2) Population stabilization fund c) Jansankhya sthirata kosh 3) Nayi pahel kit- family planning kit for newly weds d) Gather approach 4) Home

testing UPT provided by ASHA (Q840864)

A. a-3, b-4, c-2, d-1

B. a-1, b-4, c-2, d-3

C. a-4, b-2, c-3, d-1

D. a-2, b-1, c-3, d-4

Correct Answer: A. a-3, b-4, c-2, d-1

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Mission Parivar Vikas Aims to promote family planning. ‘Nayi Pahel’ – kit for newlyweds. ‘Saas Bahu Sammelan’ – promotes intergenerational dialogue. ‘Saarthi’ – mobile FP van. NISCHAY Home testing UPT provided by ASHA Jansankhya sthirata kosh Population stabilization fund Gather approach Contraception counselling method Stands for Greet, Ask, Tell, Help, Explain, and Return





References:

https://sansad.in/getFile/loksabhaquestions/annex/172/AU4337.pdf?source=pqals

https://www.nhmmp.gov.in/WebContent/FW/Scheme/Scheme2017/Mission_Parivar_Vikas.pdf

https://pubmed.ncbi.nlm.nih.gov/23564053/

https://www.aiims.edu/aiims/events/Gynaewebsite/ec_site/manual/1_3_1.htm

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: What program is the given image a logo for? (Q840860)

A. National family welfare program

B. Jansankhya sthirata kosh

C. Mission parivar vikas

D. Janani shishu suraksha karyakram



Correct Answer: A. National family welfare program

- *Listen (English)*
- *Listen (Hindi)*

Explanation: The image is the logo for the National Family Welfare Program {{caption_text}} Themes: 2 child norms: Son or daughter → two will do Spacing pregnancies: The Second child should be after 3 years of the first child Universal immunization Community needs-based assessment approach



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 592-3 https://pib.gov.in/newsite/PrintRelease.aspx?relid=159064#:~:text=Scheme%20for%20ASHAs%20to%20ensure,the%20birth%20of%201st%20child .

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A 29-year-old woman with 3 children has come for counselling regarding sterilisation. She is hesitant to have surgery. Which of the following methods suits her needs? (Q840854)

A. Essure

B. DMPA

C. Mesigyna

D. Cerazette

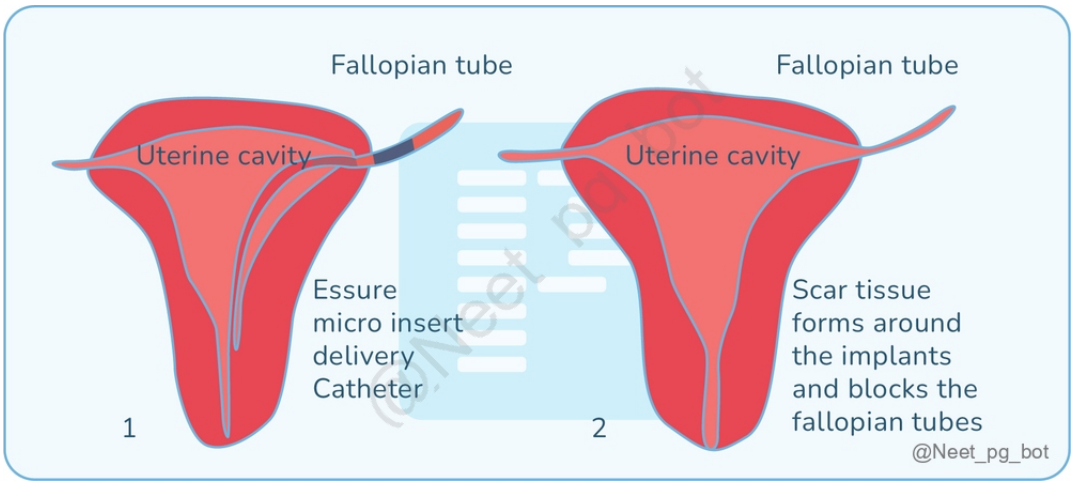
Correct Answer: A. Essure

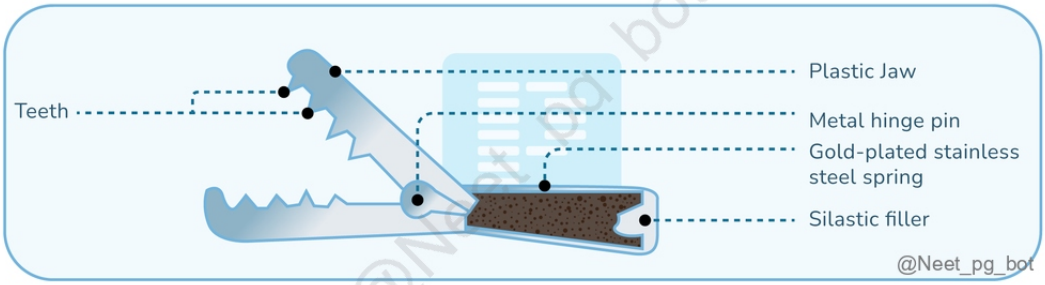
■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Essure is a non-surgical sterilization procedure inserted via the vagina into the fallopian tubes. Causes tubal occlusion via scar tissue. Confirmed by HSG. Used in USA. Risks: pain, displacement, expulsion, and unintended pregnancy. {{caption_text}} Hulka clips are another form of non-surgical sterilisation in women The clip is placed over the fallopian tube to occlude it DMPA (Option B) is an injectable form of birth control called ANTARA. It is not a method of sterilisation. Mesigyna (Option C): 50 mg norethisterone enanthate plus 5 mg oestradiol valerate is a newer form of oral contraception. Cerazette (Option D) is a progesterone-only pill







References:

https://www.fda.gov/medical-devices/essure-permanent-birth-control/essure-benefits-and-risks

https://www.sciencedirect.com/topics/medicine-and-dentistry/female-sterilization

https://www.sciencedirect.com/science/article/abs/pii/S0010782400001098

https://dtb.bmj.com/content/41/9/68.long

https://www.nbcnews.com/health/womens-health/essure-sterilization-device-causes-serious-safety-concern-study-n443966

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following is false regarding female sterilisation? (Q840852)

A. Minilap can be performed at PHC level

B. Permission of spouse must be obtained

C. At least one child over age 1 year old

D. They must be of age 22-49 years

Correct Answer: B. Permission of spouse must be obtained

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Female sterilisation: Eligibility: Married or has been married Age 22-49 years (Option D) At least one child over age 1 year old (Option C) Spouse must not have undergone a sterilization procedure Consenting Permission of spouse not necessary (Option B) Who can perform the procedure: Minilap by a trained MBBS doctor Laparoscopic sterilization (admitted for observation for 24 hours) by DGO (Diploma Gynaecologist), MD (Gyn-obs), or MS (Surgery) Procedure and timing: Procedure Timing Interval sterilization Any time after 6 weeks of childbirth Postpartum sterilization Between 24 hours to 7 days of delivery Sterilization with MTP Concurrently Sterilisation following spontaneous abortion Within 7 days (if no other complications) Types of operation:

Laparoscopic- procedure is done after 6 weeks postpartum or concurrently with MTP Minilap- smaller incisions than laparoscopic procedure and easier to perform at PHC. (Option A)

References:

Park's Textbook of Preventive and Social Medicine 27th ed Pg 585-6

cghealth.nic.in/dhs/NEW%20OFFERINGS-FP%20GUIDELINES/Ref%20Manual%20for%20Female%20Sterilization%202014.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: A 40-year-old male is ready for discharge after vasectomy under his family planning program. How long should he use additional contraceptive measures till he becomes completely sterile? (Q840847)

A. No need of additional contraceptive measures

B. 15 ejaculations

C. 20 ejaculations

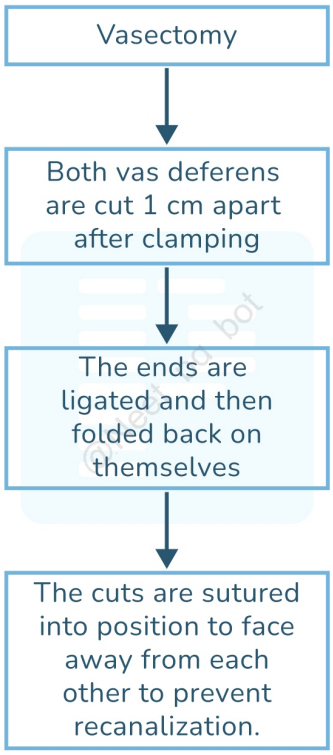
D. 10 ejaculations

Correct Answer: C. 20 ejaculations

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Vasectomy is a terminal method of contraception for males. It is a single-time method, which does not require prolonged motivation for its effectiveness. Guidelines for Vasectomy: The age of the husband should be 25-50 yrs. The couple should have 2 living children. If the couple has 3 or more children, then the lower limit of age can be relaxed. Procedure: Postoperative advice: Must use alternate methods of contraception for for 3 months or 20 ejaculations after the procedure to ensure sterility (option C). Should keep the surgical area clean Should not lift weights Complications: Operative complications Pain Scrotal hematoma (3 % cases: Resolved with antibiotics) Local infection Sperm granules → seen 10 – 14 days post-vasectomy Common & troublesome Hard mass → 7 mm in diameter Self-Resolves Can cause re-anastomosis of vas deferens Autoimmune response To sperms Reabsorption of spermatozoa via blocked vas deferens → formation of antibodies Psychological Loss of sexual vigor Spontaneous recanalization (0-6%)



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no 583

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: In the Basal body temperature method, which of the following is the reason for increase in body temperature? (Q840844)

A. Increase in estrogen

B. Increase in progesterone

C. Decrease in progesterone

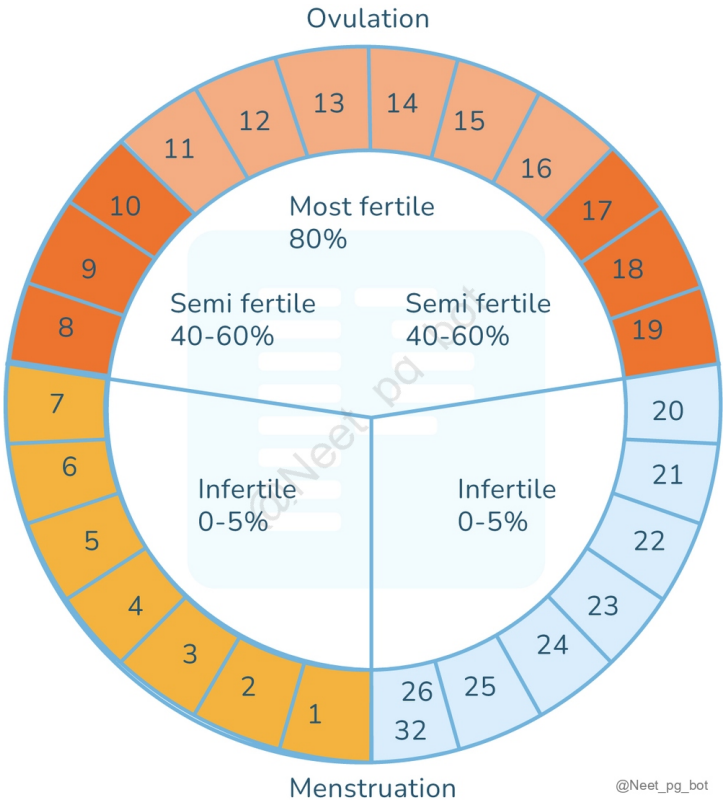
D. Decrease in estrogen

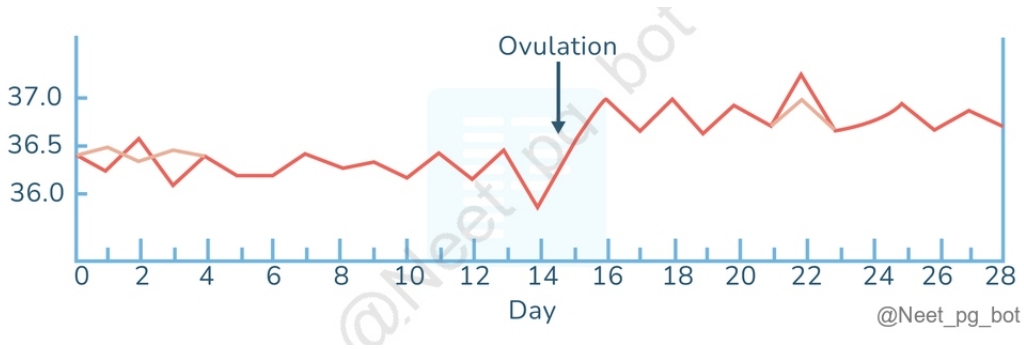
Correct Answer: B. Increase in progesterone

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Physiological methods of contraception: Calendar/Rhythm method Avoid intercourse on days 11–17 (fertile window). Ovum survives 12–24 hrs. Not reliable in irregular cycles. Basal Body Temperature method: Basal body temp rises 0.3–0.5°C post-ovulation due to progesterone. Safe period starts 3 days after rise. Cervical mucus/Billings method: Based on cervical mucus changes. During ovulation: clear, slippery, egg-white mucus. Post-ovulation: thick, scanty (↑progesterone). Requires high motivation. Effects of Progesterone: Produced primarily by the corpus luteum after ovulation, its main job is to maintain a potential pregnancy. Thermogenesis: It resets the hypothalamic thermostat, raising the BBT by 0.2°C to 0.5°C . Endometrial Transformation: It changes the uterine lining from "proliferative" (growing) to "secretory" (nutrient-rich), preparing it for an embryo. Cervical Mucus: It makes mucus thick, sticky, and cellular , creating a "plug" that is hostile to sperm. Smooth Muscle Relaxation: It relaxes the uterus to prevent contractions, but this also affects the gut, often leading to bloating and constipation . Breast Tissue: Stimulates the development of mammary glands (lobules and alveoli), often causing premenstrual tenderness. Effects of Estrogen: Produced by the growing follicles in the ovaries, estrogen dominates the first half of the cycle (follicular phase). Proliferation: It stimulates the regrowth of the endometrial lining after menstruation. Cervical Mucus: Estrogen makes mucus clear, thin, and stretchy . This is known as Spinnbarkeit and is essential for sperm survival and transport. Secondary Sex Characteristics: Responsible for breast development, hip widening, and subcutaneous fat distribution. Bone Health: It inhibits bone resorption by osteoclasts, which is why post-menopausal women (with low estrogen) are at higher risk for osteoporosis. Cardiovascular: It helps maintain healthy cholesterol levels (increases HDL, decreases LDL) and promotes vasodilation.





References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no 582

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following is not an emergency contraceptive? (Q840843)

A. Ulipristal

B. Mifepristone

C. Levonorgestrel

D. Desogestrel

Correct Answer: D. Desogestrel

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Desogestrel, a progestin, is used as a birth control pill but is not effective as an emergency contraceptive. This differentiates it from the other options, which are all used specifically for emergency contraception. Drugs used in emergency contraception: Emergency contraception MOA How to use(hrs after unprotected sexual intercourse) Copper-containing IUD (most effective) Causes a chemical reaction and prevents fertilization Should be inserted within 120 hours (99% effective) Levonorgestrel (i-pill) (option C) Progesterone thickens cervical mucus and decreases tubal motility 1.5 mg single tablet or two doses of 0.75 mg 12 hours apart within 72 hours Ulipristal (option A) Selective progesterone receptor downregulator 30 mg single tablet within 120 hours Mifepristone (option B) Makes the endometrium unsuitable for implantation 10 mg single dose within 72 hours Yuzpee method (not used now) Prevents implantation and thickens cervical mucus Two doses of 0.1 mg ethinylestradiol and 0.5 mg levonorgestrel, 12 hours apart, within 72 hours

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no: 575 https://www.who.int/news-room/fact-sheets/detail/emergency-contraception#:~:text=A%20copper%2Dbearing%20IUD%20is,of%20ethinyl%20estradiol%20plus%20levonorgestrel.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A woman missed 2 pills in the second week of her contraceptive pack. She had protected sex yesterday. What should she do? (Q840840)

A. Discard the pack and start a new one immediately

B. Use emergency contraception immediately

C. Skip the missed pills and continue

D. Take 2 pills at the scheduled time

Correct Answer: D. Take 2 pills at the scheduled time

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: OCPs should ideally be started on the first day of the menstrual cycle and latest by 5th day of the cycle Guidelines of missed OCP's: Missed pills Management Missed 1 or 2 pills/ started new pack 1 or 2 days late Take one pill as soon as possible or take 2 pills at the scheduled time: No risk of pregnancy Missed 3 or more pills in the first or second week/ started a new pack 3 or more days late Take one pill as soon as possible, and then continue with the scheduled pill Use the backup method for the next 7 days In case of unprotected sex in the last 72 hours, use an emergency contraceptive method Missed 3 or more pills in the third week (last week) Take one pill as soon as possible and finish the rest of the hormonal pills The last 7 non – hormonal pills should be discarded, start a new pack the next day Use a barrier method for the next 7 days In case of unprotected sex in the last 7 days, use emergency contraception

References:

https://nhm.gov.in/images/pdf/programmes/family-planing/guidelines/Reference_Manual_Oral_Pills.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A 30-year-old sexually active couple presents at a free health clinic seeking advice on contraception methods that also protect against sexually transmitted

infections (STIs). They are interested in a method that offers both protection from pregnancy and protection against STDs. Which barrier method would be most recommended for them? (Q840717)

A. Spermicidal jelly

B. Diaphragm

C. Cervical cap

D. Male condom

Correct Answer: D. Male condom

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In this scenario, the most recommended barrier method would be the male condom. Male condoms are highly effective in preventing both pregnancy and the transmission of STIs when used consistently and correctly. They are readily available, easy to use, cost-efficient and do not require a fitting like diaphragms or cervical caps. Feature Male Condom Female Condom Diaphragm Material Latex Polyurethane or Nitrile/latex Synthetic rubber or plastic Spermicide Requirement Optional Pre-lubricated with silicone; spermicide not required Used with spermicide Protection against STDs Protects both partners from STDs Protects against STDs Doesn't protect from HIV and STDs Failure rate 2-13/HWY 5-21/HWY 6-12/HWY Advantages Safe, easy to use, inexpensive, no side effects, easy disposable No Hormonal side effects. Can be used by women with latex sensitivity. Can be reused. Nil side effects and medical contraindications, reusable Disadvantages May slip off or tear due to incorrect use Interferes with sexual sensation Interferes with sexual sensation May slip off or tear High cost, noticeable during sex, needs practice to insert and use Should be present in vagina up to 6 hours post-ejaculation , Risk of Toxic Shock Syndrome (TSS) if left for > 24 hours Brand Name(s) NIRODH FEMIDOM Variations of diaphragm:Cervical cap, Vault cap, Vimule cap, Dutch cap Availability Freely available under the National Family Welfare Programme Provided under the National AIDS Control Programme (NACP) Not recommended under the National Family Planning Welfare Programme Other Information Should not be reused most Reusable; male and female condoms should not be used together due to an anti-synergistic effect


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References:

Park’s textbook of preventive and social medicine, 27th edition, Page 569 - 570

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A 28 y/o reports a history of deep vein thrombosis (DVT) five years ago but is otherwise healthy. She does not smoke and has no other significant medical history. She desires a reliable, long-term contraceptive method. Which of the following contraceptive options is MOST contraindicated in this patient? (Q840835)

A. Copper Intrauterine Device (IUD)

B. Progesterone-only pill (POP)

C. Combined oral contraceptive pills (COCPs)

D. Barrier methods (condoms, diaphragm)

Correct Answer: C. Combined oral contraceptive pills (COCPs)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The most contraindicated contraceptive option in this scenario is COCPs due to the patient's history of DVT and the associated risk of thromboembolic events with estrogen-containing contraceptives. Adverse Effects of Oral Contraceptive Pills (OCPs) Contraindications of Oral Contraceptive Pills (OCPs) Cardiovascular Effects (due to estrogen content) Myocardial infarction (MI) Cerebral thrombosis - Stroke Risk increases with age >35 and cigarette smoking. Carcinogenesis Increased risk of cervical cancer Metabolic Effects (due to progesterone content) Elevated blood pressure Altered serum lipid levels Interference with blood clotting Interference with carbohydrate metabolism Thromboembolic Events Deep vein thrombosis (DVT) Pulmonary embolism (PE) Others Lactation: Reduced quantity and quality of breast milk Weight gain Migraine Breast tenderness Absolute Contraindications: Cancer of the breast and genitals Liver disease Previous or present history of thromboembolism Cardiac abnormalities Congenital hyperlipidaemia DM with vasculopathy Migraine with aura Undiagnosed vaginal bleed Suspected pregnancy Relative Contraindications (requiring medical surveillance): Age over 40 years Smoking and age over 35 years Mild hypertension Chronic renal disease Migraine

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page no. 576, 577

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Match the following contraceptive methods with their correct descriptions: Contraceptive Method Description A. Femilon 1. A non-hormonal male contraceptive derived from cottonseed oil. B. Mini Pills 2. A combined oral contraceptive pill containing both estrogen and progesterone. C. Gossypol 3. A progestin-only oral contraceptive pill. (Q840834)

A. A-2, B-3, C-1

B. A-1, B-2, C-3

C. A-3, B-1, C-2

D. A-2, B-1, C-3

Correct Answer: A. A-2, B-3, C-1

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Contraceptive Method Composition Mechanism of Action Target Population Femilon (Combined OCP) Ethinyl estradiol IP (0.02 mg) and Desogestrel BP (0.15 mg) - Ultra low dose Inhibits ovulation by suppressing pituitary secretion of gonadotropin Women Mini pills (Progesterone only pill) Progesterone Inhibits

ovulation, thickens cervical mucus, inhibits tubal motility, delays sperm and ovum transport Older women, women who cannot use combined pills due to cardiovascular risks, women who are lactating Gossypol (Non-hormonal male contraceptivel) Natural phenol, a derivative of cotton-seed oil Inhibits spermatogenesis Men

References:

Park's 27th ed. Page no. 574-576.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which of the following correctly describes the difference between MALA-N and MALA-D? (Q840832)

A. MALA-N: Contains only progesterone; MALA-D: Contains both estrogen and progesterone

B. MALA-N: Available for free under the government program; MALA-D: Sold at a subsidised price

C. MALA-N: Taken daily; MALA-D: Taken weekly

D. MALA-N: Injectable contraceptive; MALA-D: Oral contraceptive

Correct Answer: B. MALA-N: Available for free under the government program; MALA-D: Sold at a subsidised price

■ *Listen (English)*

■ *Listen (Hindi)*

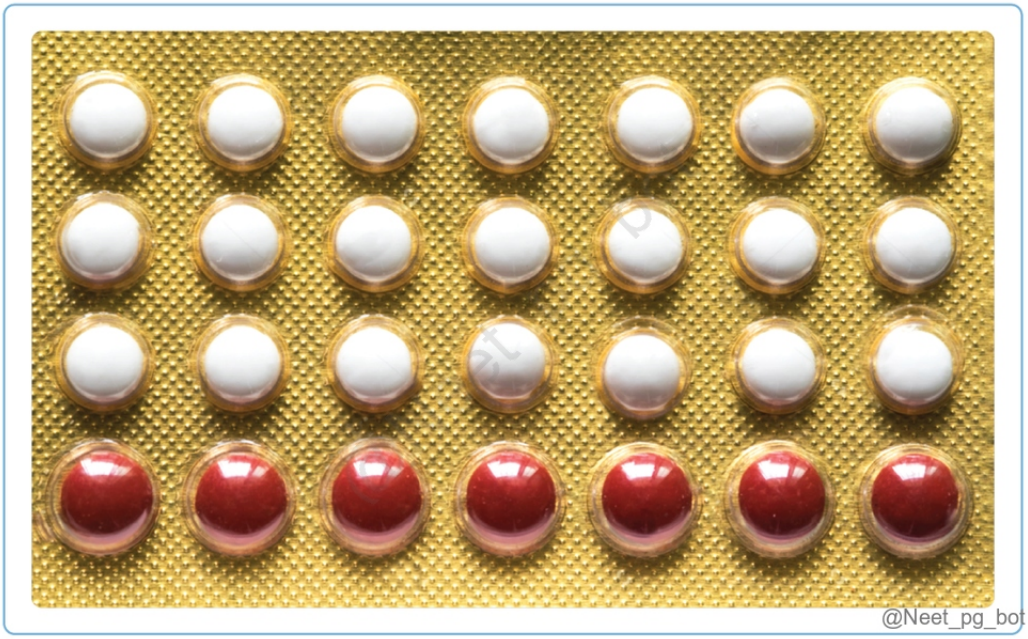
Explanation: Feature MALA-N MALA-D Availability (Option B) Supplied free of cost through PHCs, urban family welfare centers. Available at a subsidized price of Rs. 3 per packet through social marketing schemes Composition (Option A) Levonorgestrel 0.15 mg and Ethinyl estradiol 0.03 mg Packaging (Option D) Packet of 28 tablets - 21 white pills containing the hormones and 7 brown film-coated tablets containing 60 mg ferrous fumarate Mechanism of action Prevents ovulation Prevents implantation Thick cervical secretions Effectiveness 100% effective if taken correctly Failure rate with typical use is 0.8% Option C: Both MALA-N and MALA-D are taken daily, not weekly.



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References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page no. 574-575

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: A 38 y/o woman presents to a clinic seeking contraception counseling. She is a breastfeeding mother of a 3-month-old baby. She reports a history of heavy menstrual bleeding. Which of the following can be given to her? (Q840830)

A. Combined oral contraceptive pills

B. Depot medroxyprogesterone acetate injections

C. Progesterone-only pills

D. Centchroman

Correct Answer: D. Centchroman

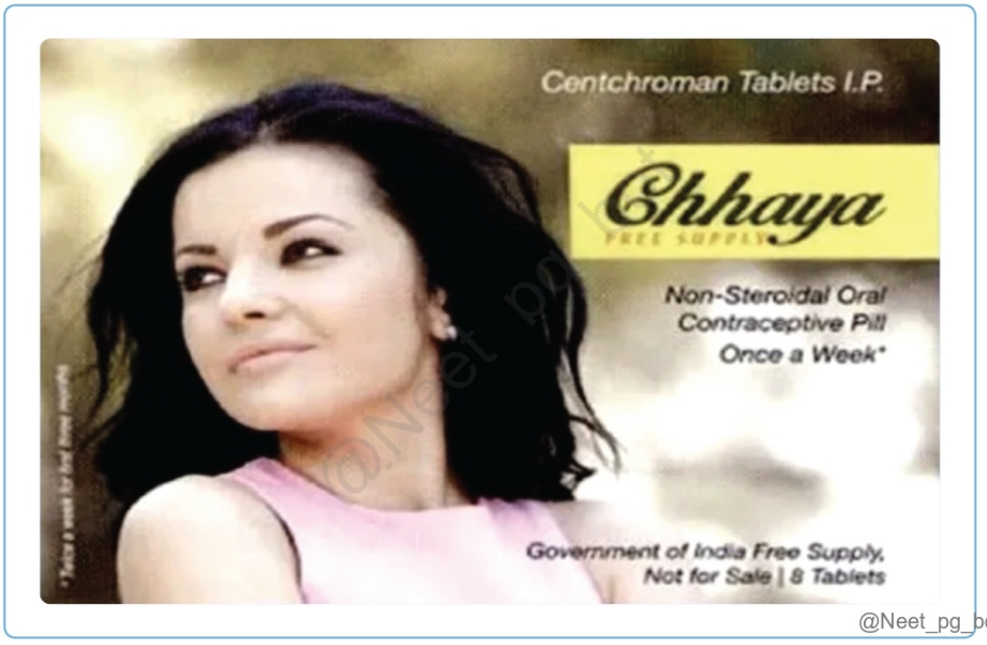
■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Due to patient's breast feeding status and heavy menstrual bleeding, Non-hormonal contraceptive such as Centchroman is advised to the patient. Centchroman (Ormeloxifene) Brand Name Saheli (formerly);

Chhaya (currently) Type of Contraceptive Non-hormonal, selective estrogen receptor modulator (SERM) Mechanism of Action Delays ovulation, alters the endometrial lining to prevent implantation Dosage One 30mg tablet twice a week for the first 3 months, followed by one tablet weekly thereafter Advantages Non-hormonal, minimal side effects Convenient weekly dosage No impact on breastfeeding Protective effect against breast and endometrial cancer. Disadvantages Has a high failure rate attributed to low compliance with the prescribed dosing schedule. Additional Uses Dysfunctional uterine bleeding Contraindications PCOD, Thromboembolic disorders, severe liver dysfunction Availability Included in the National Family Welfare program, making it available free of charge at sub-centers Combined oral contraceptive pills (Option A): COCPs are not recommended for breastfeeding mothers, especially during the first six months postpartum, as estrogen can interfere with lactation. COCPs also wouldn't address her heavy menstrual bleeding. Depot medroxyprogesterone acetate injections (Option B): DMPA can exacerbate irregular menstrual bleeding. Progesterone-only pills (Option C): Progesterone-only pills are known for causing irregular bleeding patterns and might not be suitable for this patient.





References:

Park’s Textbook of Preventive and Social medicine, 27th edition, Page no 579.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: A 28 y/o woman desires a reliable method that she can manage herself and wants to avoid daily pill-taking. She has no history of cardiovascular disease or other contraindications for combined hormonal contraception. Which of the following offers both estrogen and progesterone and would be suitable for this patient? (Q840825)

A. NuvaRing

B. ANTARA

C. NORPLANT

D. NET-EN

Correct Answer: A. NuvaRing

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: NuvaRing is a self-administered hormonal contraceptive ring that is inserted into the vagina. Contraceptive Method Hormone Type Benefits Form Duration of Effectiveness NuvaRing (Option A) Estrogen (Ethinyl Estradiol) and Progesterone (Etonogestrel) Lower Estrogen exposure than with OCPs. Low incidence of estrogenic S/E. Low incidence of irregular bleeding. Vaginal Ring 1 month ANTARA (Option B) Progesterone (Medroxyprogesterone Acetate) Long-lasting and reversible. Injectable (Depo-Provera) 3 months NORPLANT (Option C) Progesterone (Levonorgestrel) Used during lactation because it has progesterone and no estrogen. Subdermal Implants Up to 5 years NET-EN (Option D) Progesterone (Norethisterone Enanthate) Long-lasting and reversible. Injectable 8 weeks

References:

Review of the combined contraceptive vaginal ring, NuvaRing® - PMC (nih.gov)

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: A 32-year-old woman presents for contraceptive counselling. She has a history of irregular menstrual cycles and desires a long-acting reversible contraceptive method. She is not currently pregnant and has no recent history of pelvic infections. Her last menstrual period was two weeks ago, and she is not currently using any form of contraception. When is the most appropriate time for the gynecologist to insert the intrauterine device (IUD) for this patient? (Q840824)

A. During her current menstrual cycle

B. Immediately after ovulation

C. At any time during her cycle

D. Two weeks before her next menstrual period

Correct Answer: A. During her current menstrual cycle

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The most appropriate time for IUD insertion is generally during the menstrual period or immediately after (up to the first 10 days of the cycle) because the cervix is more dilated. Timing of IUD insertion: Ideal time During menstruation or within the first 10 days of the start of period Preferred time Postpartum (immediate postpartum): Post-placenta insertion; Has a higher rate of expulsion Late postpartum: Within 48 hours of delivery. Other times Post-puerperal: After 6-8 weeks of delivery Post-coital: Up to 3-5 days after unprotected intercourse. Post-abortion: After 1st trimester loss. Not recommended after a 2nd trimester abortion.

References:

Park’s textbook of Preventive and Social Medicine, 27th edition, Page 572

https://www.who.int/news-room/fact-sheets/detail/emergency-contraception

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Which of the following is not an absolute contraindication to IUD insertion? (Q840821)

A. Suspected pregnancy

B. CA cervix

C. Current PID

D. Menorrhagia

Correct Answer: D. Menorrhagia

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: According to WHO Medical Eligibility Criteria (MEC) for contraceptive use and national guidelines, the following are absolute contraindications to IUD (intrauterine device) insertion: Absolute Contraindications IUDs must not be inserted in the following situations due to significant risk: Condition Pregnancy or suspected pregnancy (Option A) Current pelvic infections (PID, endometritis, TB) (Option c) Mucopurulent cervicitis or untreated STIs Recent puerperal or septic abortion (<3 months) Cervical or endometrial cancer (Option B) Gestational trophoblastic disease with elevated β-hCG Unexplained abnormal vaginal bleeding Uterine abnormalities distorting the cavity Allergy to IUD components Wilson's disease (for copper IUDs) Current breast cancer (for hormonal IUDs) Relative Contraindications These conditions require careful risk-benefit analysis before proceeding: Condition Resolved GTD with falling β-hCG Menorrhagia - may worsen bleeding but not astrict contraindication ;copper IUDS are avoided but LNG-IUS(mirena) is actually used to treat menorrhagia High risk of STIs (e.g., multiple partners) Complicated transplant history Advanced AIDS (not clinically well) Coagulopathies or severe anemia Past history of PID, STIs, or ectopic pregnancy Certain chronic conditions (e.g., SLE, liver disease)

References:

https://www.ncbi.nlm.nih.gov/books/NBK557403/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: A 29-year-old woman with a copper IUD inserted 9 months ago presents with lower abdominal pain, fever (38.5°C), and no visible IUD strings. She has multiple sexual partners. On exam, she has lower abdominal tenderness. What is the most likely complication? (Q840820)

A. Expulsion

B. Uterine perforation

C. Pelvic inflammatory disease (PID)

D. Ectopic pregnancy

Correct Answer: C. Pelvic inflammatory disease (PID)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The patient’s symptoms of fever and lower abdominal pain, along with her history of multiple sexual partners, point to the diagnosis of pelvic inflammatory disease, which is a complication of IUD use. Side effects of IUDs: Side effects of IUDs Bleeding Breakthrough bleeding is common, resolves in 1–3 months. May need iron; persistent cases may require IUD removal. Pain The most common removal cause. Managed with analgesics. Resolves in 3 months. Severe pain → rare perforation. Pelvic inflammatory disease (Option C) Presents with fever, abdominal pain, and discharge. Treatment involves broad-spectrum antibiotics. IUD removal if no improvement. 3rd generation of IUD is protective against IUD. Uterine perforation (Option B) Rare complications linked to immediate postpartum insertion or poor technique. 1st generation IUDs are associated with a higher risk of perforation. Failure of contraception ➜ pregnancy MIRENA has the lowest pregnancy rates. Abortion is legally allowed on request. If threads visible → remove and continue pregnancy with risks explained. If threads not visible → assess uterus. If no complications, IUD can be removed and pregnancy continued with risk of abortion/preterm labor. Ectopic pregnancy (Option D) Recognized by lower abdominal pain, dark vaginal bleeding, or amenorrhea. Women at high risk should avoid IUDs. Expulsion (Option A) Typically occurs within weeks of insertion or during menstruation. Higher risk in young, nulliparous, postpartum women or using 1st generation IUDs Migration of IUD Rarely causes intestinal obstruction. Diagnosed via X-ray imaging if suspected.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 572-4.

↑ *Back to this question in Part A*

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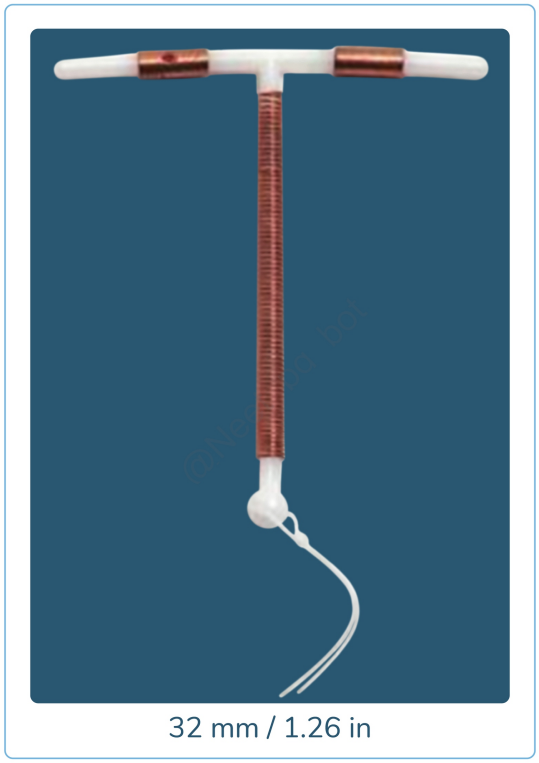
Q24: What is the name of the IUD shown below? (Q840814)

A. CuT 380

B. Nova T

C. Progestastart

D. Multiload

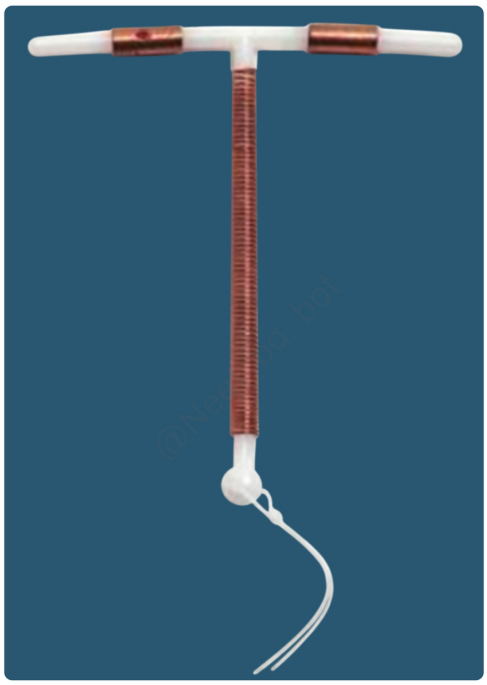


Correct Answer: A. CuT 380

■ *Listen (English)*

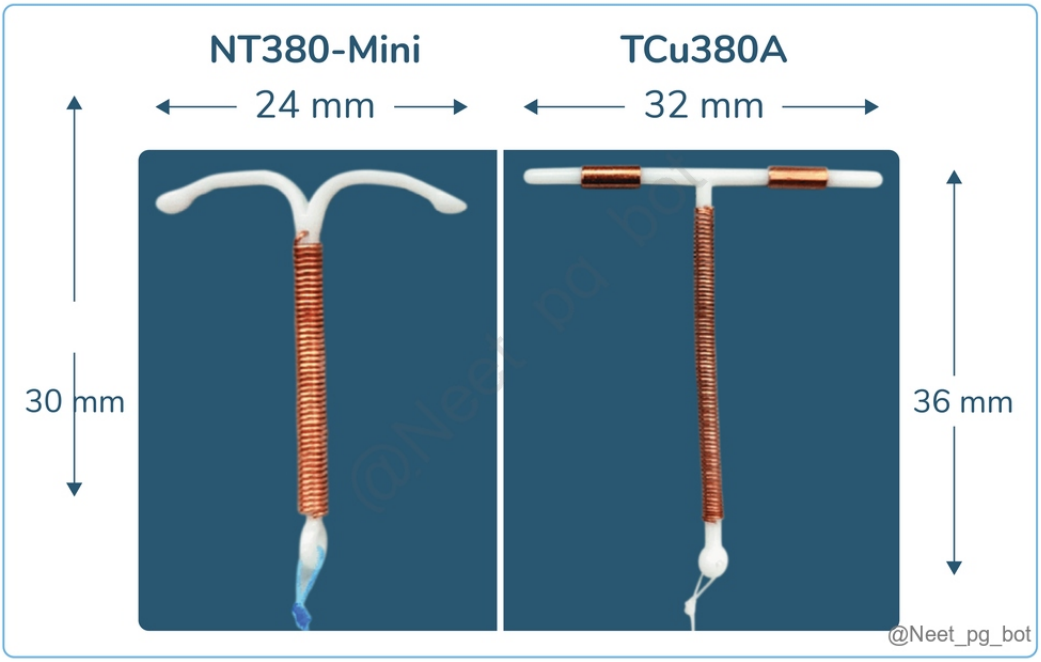
■ *Listen (Hindi)*

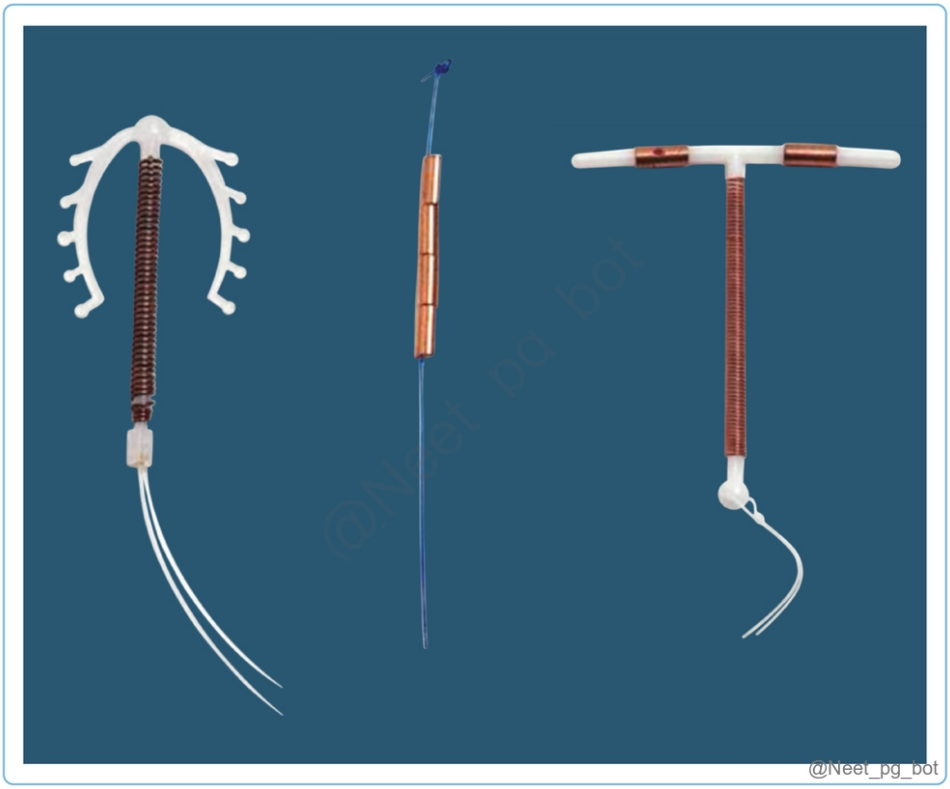
Explanation: The image depicts CuT 380, a copper-containing IUD with 380 mm² of copper. 2nd generation IUDs Type Copper containing device Mechanism of action Reduces sperm motility and survival by altering cervical mucus affecting uterine enzymes increasing cellular response in the endometrium Features Strong anti-fertility effect Low expulsion rate Easy to fit in nulliparous women Lesser side effects Effective post-coital contraceptive Side effects Bleeding Pain Pelvic inflammatory disease Uterine perforation Failure of contraception ➜ Pregnancy Ectopic pregnancy Expulsion Migration of IUD CuT 380A 380 mm² of copper wire around a stem with nylon thread attached Shelf life -10 years Nova-T CuT 380 A with a silver (Ag) core attached to it Shelf life - 5 years Multiload U-shaped ring Most commonly used IUD CuT 375



32 mm / 1.26 in

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References:

Park’s textbook of Preventive and Social Medicine, 27th Edition, Pages 570-574.

https://www.bayer.com/sites/default/files/NOVA_T_380_EN_PI.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5895549/

https://www.aiims.edu/aiims/events/Gynaewebsite/ec_site/manual/7_intra-uterine.htm

↑ *Back to this question in Part A*

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Q25: A 32-year-old woman with a history of heavy menstrual bleeding and dysmenorrhea seeks contraception counseling. She prefers a long-acting reversible contraceptive and is interested in intrauterine devices (IUDs). Which IUD would be the most appropriate choice for her, considering her medical history and preferences? (Q840809)

A. Mirena

B. CuT

C. Lippes loop

D. Grafenberg ring

Correct Answer: A. Mirena

■ *Listen (English)*

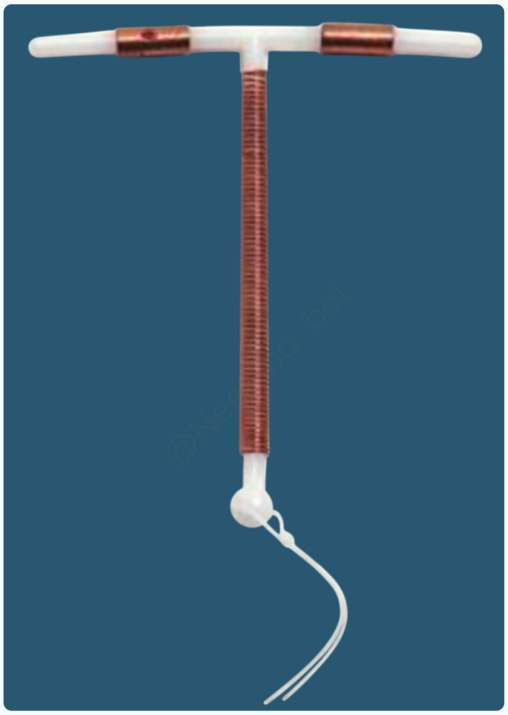
■ *Listen (Hindi)*

Explanation: Based on the above scenario, since the patient is suffering from heavy menstrual bleeding and dysmenorrhea, 3rd generation IUD such as Mirena or LNG 20, that releases levonorgestrel and decreases menstrual blood loss is used. The other options are also IUDs, but do not benefit those with heavy menstrual bleeding. 1st generation IUD 2nd generation IUD 3rd generation IUD Examples Inert -Lippes loop,Grafenberg containing ring Copper-containing- CuT-380A,Nova-T,Multiload Hormone-containing- Mirena (LNG-20),Progestasert Mechanism of action Made of polyethene/other polymers Foreign body reaction causes reduced chances of fertilization Contains copper Copper acts as spermicide Copper changes composition of cervical mucus Releases levonorgestrel Increases cervical mucus thickness Makes endometrium unfavorable for implantation Features Non-medicated High failure rate Highly effective Low failure rate Lowest failure rate among IUDs Decreases menstrual blood loss More expensive Examples Grafenberg ring Lippe’s loop Nova-T (Noncard) Multiload 250. Mirena/LNG-20 (Releases 20µg of progesterone per day) Shelf life- 5-8 years Progestasert (Releases 65µg of progesterone per day) Shelf life- 1 year Side effects Bleeding, Pain Pelvic inflammatory disease- M/c/c Actinomyces Uterine perforation Failure of contraception ➜ Pregnancy Ectopic pregnancy Expulsion, Migration of IUD



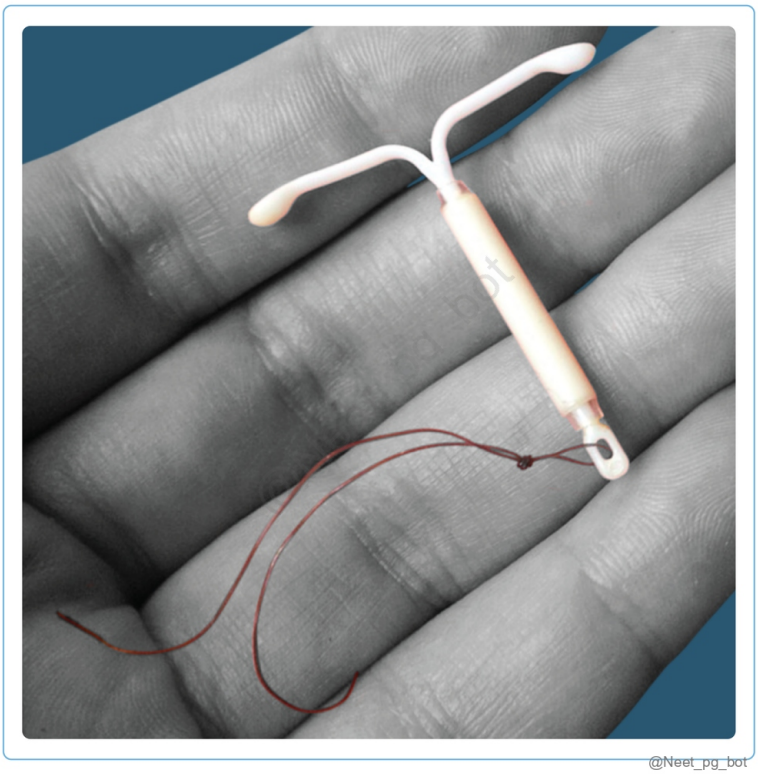


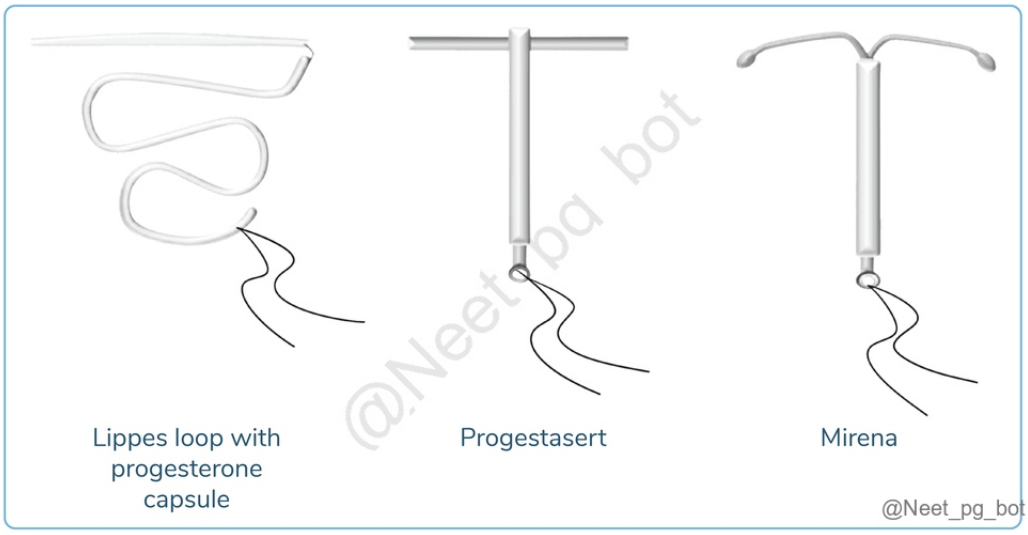
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References:

Park’s textbook of preventive and social medicine, 27th edition, Page 570-4

https://pubmed.ncbi.nlm.nih.gov/1878504/

https://www.mirenahcp.com/resource-center/frequently-asked-questions?redirect=false

https://commons.wikimedia.org/wiki/File:Grafenberg_intrauterine_device_%28IUD%29,_Europe,_1925-1935_Wellcome_L0065282.jpg

https://www.flickr.com/photos/washington_area_spark/8384238867

https://commons.wikimedia.org/wiki/File:Mirena_IUD.jpg

↑ *Back to this question in Part A*

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Q26: Which of the following is NOT a form which spermicide is available in? (Q840802)

A. Jellies

B. Patches

C. Creams

D. Foams

Correct Answer: B. Patches

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Spermicides are available in the following forms: foams, pastes, jellies, and suppositories, but not as patches. Type of contraception Chemical barrier Mechanism of action Surface-active agents that attach to spermatozoa, inhibiting oxygen uptake and killing them. Available as Creams, Jellies, Pastes, foams,Suppositories & Soluble films Advantages When used in conjunction with barrier methods, offers better pregnancy prevention than if either method were used alone Disadvantages Must be used immediately before intercourse and repeated before each sex act Must be introduced into regions of the vagina where sperm are likely to be deposited May cause burning, irritation, or messiness Failure rate High when used alone Availability Not part of the method mix promoted by the National Family Welfare Programme in India

References:

Park’s textbook of preventive and social medicine 27th ed Pg 569 - 570

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: Which of the following statements is false regarding the contraception shown below? (Q840798)

A. It is made of polyurethane foam and saturated with a spermicide nonoxynol-9

B. It must be left in place for at least 6 hours after intercourse.

C. It offers no protection from sexually transmitted infections.

D. It has a lower failure rate in women who have given birth before.



Correct Answer: D. It has a lower failure rate in women who have given birth before.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The provided image is the vaginal sponge. The failure rate of the vaginal sponge is higher in parous women - 20 to 40/HWY compared to nulliparous women - 9 to 20/HWY Brand name TODAY Material Small polyurethane foam sponge Mechanism of action Combines barrier and spermicidal methods to prevent conception Saturated with 1000 mg of spermicide ‘Non-oxynol-9’ (Option A) Technique of use Must be run under water till thoroughly wet before insertion Inserted vaginally and must be ‘placed over the cervix to be effective Must be left in place for 6 hours after ejaculation (Option B) All sponges must be removed within the time limits specified by the manufacturer (24 hours for Today) Disadvantages No protection from HIV or STDs (Option C) May lead to Toxic Shock Syndrome if left beyond 24 hours Has to be left for 6 hours post ejaculation Increased risk of yeast infection and UTI Higher failure rate than the diaphragm Failure rate Parous women: 20-40 per HWY Nulliparous women: 9-20 per HWY

References:

Park’s textbook of preventive and social medicine 27th ed Pg 569 - 570

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: Match the following contraceptives with their appropriate classification CATEGORY 1 CATEGORY 2 A. Spermicide 1. Physiological method B. Grafenberg Ring 2. Chemical barrier method C. Nuva rings 3. IUD D. Tubectomy 4. Hormonal contraceptive E. Coitus interruptus 5. Terminal surgical contraception (Q840712)

A. A-1 B-3 C-2 D-5 E- 4

B. A-2 B-3 C-4 D-5 E- 1

C. A-3 B-2 C-4 D-1 E-5

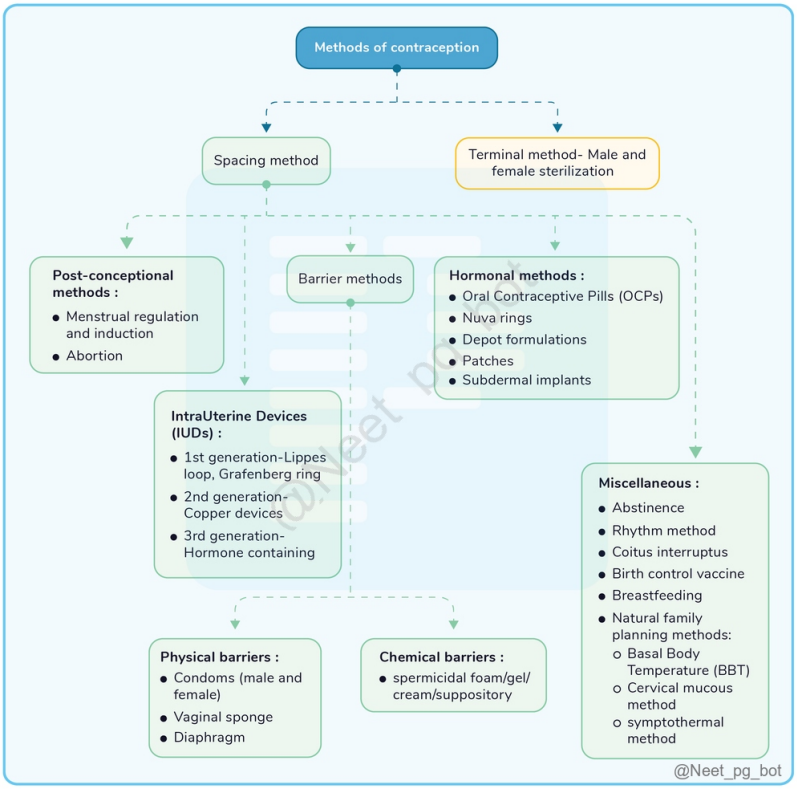
D. A-2 B-4 C-1 D-5 E-3

Correct Answer: B. A-2 B-3 C-4 D-5 E- 1

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation:



References:

Park’s textbook of preventive and social medicine, 27th edition, Page 569-582

↑ *Back to this question in Part A*

@Neet_pg_bot

• [08_Family Planning and Contraceptives] 035 Previous Year Questions

« Back to Folder Directory

[08_Family Planning and Contraceptives] 035 Previous Year Questions — Quick Jump

Q1 (p. 1367) *Q2 (p. 1367)* *Q3 (p. 1368)* *Q4 (p. 1369)* *Q5 (p. 1370)* *Q6 (p. 1370)*
Q7 (p. 1371) *Q8 (p. 1373)* *Q9 (p. 1374)* *Q10 (p. 1375)*

Q1: In which of the following conditions is the use of an intrauterine contraceptive device (IUCD) absolutely contraindicated? (Q866883)

A. Hypertension

B. Hyperlipidemia

C. Diabetes mellitus

D. Current PID

Correct Answer: D. Current PID

Explanation: Absolute Contraindications: Current PID or purulent cervicitis. Unexplained vaginal bleeding. Known or suspected pregnancy. Cervical or endometrial cancer. Distorted uterine cavity (e.g., large fibroids). Active, untreated HIV infection with high risk of opportunistic infections. Condition Category Remarks Active HIV with AIDS symptoms 4 Absolute contraindication HIV on ART, clinically stable 2 Benefits outweigh risks Unexplained vaginal bleeding 4 Insert only after evaluation Current PID 4 Treat infection before IUCD insertion Hypertension (Option A) – Not an absolute contraindication; copper IUCDs can be used safely. Hyperlipidemia (Option B) – No restriction for IUCD use. Diabetes mellitus (Option C) – Not an absolute contraindication; copper IUCDs are generally safe unless there is severe infection risk or uncontrolled complications.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A female presents at 22 weeks of pregnancy due to rape. Which statement is correct regarding medical termination of pregnancy (MTP)? (Q844029)

A. Between 20-24 weeks, one doctor’s opinion is required

B. Between 20-24 weeks, MTP is only done if it is life-saving for the mother

C. MTP can be done up to 24 weeks in this case

D. MTP can be done after 24 weeks.

Correct Answer: C. MTP can be done up to 24 weeks in this case

Explanation: Correct Option C - MTP can be done up to 24 weeks in this case: MTP can be done up to 24 weeks in this case: According to the amended MTP Act, 2021, MTP is permitted up to 24 weeks in cases of rape, with the opinion of two doctors. Incorrect Options: Option A - Between 20-24 weeks, one doctor's opinion is required: Under the Medical Termination of Pregnancy (Amendment) Act, 2021, for pregnancies between 20-24 weeks, the opinion of two doctors is required, not just one. This applies to specific categories, including survivors of sexual assault. Option B - Between 20-24 weeks, MTP is only done if it is life-saving for the mother: While protecting the life of the mother is one consideration, MTP can also be performed during this period for other reasons, including if the pregnancy is a result of rape, or if there are significant fetal anomalies, without the need for the condition to be life-threatening to the mother. Option D - MTP can be done after 24 weeks: MTP beyond 24 weeks is generally not permitted unless severe fetal anomalies are detected that are incompatible with life, or if there is a threat to the mother's life or health. This requires the approval of a medical board.

References:

Park's Textbook of Preventive and Social Medicine, 26th edition

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Oral contraceptive pills (OCPs) are known to have a protective effect against certain cancers. Which of the following cancers is not reduced (i.e., not protected or may increase in risk) with OCP use? (Q820635)

A. Endometrial cancer

B. Cervical cancer

C. Breast cancer

D. Bladder cancer

Correct Answer: B. Cervical cancer

Explanation: Correct Option: B) Cervical cancer Long-term use of oral contraceptive pills (OCPs) is associated with a modest increase in the risk of cervical cancer , especially with use beyond 5 years. The key mechanism is not direct carcinogenesis , but OCPs may facilitate persistence of high-risk HPV infection , which is the primary cause of cervical cancer. Hormonal changes induced by OCPs can enhance viral transcription and reduce local immune clearance , allowing HPV to progress to dysplasia and malignancy. Therefore, unlike endometrial and ovarian cancers (where OCPs are protective), cervical cancer risk is not reduced and may actually increase ,

making it the correct answer. Endometrial cancer (Option A): OCPs have a protective effect due to progesterone opposing estrogen. Breast cancer (Option C): May show a slightly increased risk, but not classically tested as the “non-protected” answer here. Bladder cancer (option D): No significant association with OCP use.

References:

1)Notes, 2) Ref: Park’s textbook of preventive medicine, edition: 25

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: All are given as emergency contraceptives except: (Q820678)

A. LNG 0.75 mg 2 tab

B. Ethyline Estradiol tablet

C. Ulipristal

D. OCP 2 tab within 24 hrs, repeat dose after 14 days

Correct Answer: D. OCP 2 tab within 24 hrs, repeat dose after 14 days

Explanation: Correct Option D - OCP 2 tab within 24 hrs, repeat dose after 14 days: This option refers to using regular combined oral contraceptive pills (birth control pills) as an emergency contraceptive. While some regular birth control pills can be used as emergency contraception, the regimen described here is not a recommended or standard approach. Emergency contraception should involve specific doses of emergency contraceptive pills (like levonorgestrel or ulipristal) taken within the specified time frame. Regular birth control pills taken in this manner may not provide the same level of effectiveness as dedicated emergency contraceptive pills. Therefore, this option is not a recommended method of emergency contraception. Incorrect Options: Option A - LNG 0.75 mg 2 tab: LNG (Levonorgestrel) is a progestin-only emergency contraceptive pill commonly known as the "morning-after pill" or "Plan B." It is effective at preventing pregnancy when taken within a specific time frame after unprotected intercourse. The correct dosage is to take 1.5 mg of LNG (either as a single 1.5 mg tablet or two 0.75 mg tablets) as soon as possible after unprotected intercourse. This option is indeed an emergency contraceptive. Option B - Ethinylestradiol tablet: Ethinylestradiol is a synthetic form of the hormone estrogen, and it is commonly used in combination with progestin as a component of oral contraceptive pills (birth control pills). Option C - Ulipristal T: Ulipristal acetate is a selective progesterone receptor modulator that is used as an emergency contraceptive. It can be taken up to 120 hours (5 days) after unprotected intercourse and is more effective than levonorgestrel when taken closer to the end of the recommended time frame. So, option C is indeed an emergency contraceptive.

References:

Ref: Park’s textbook of preventive medicine, edition: 25

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: The duration for which copper T 380 A remains effective is referred to as its shelf life. (Q858099)

A. 3 years

B. 5 years

C. 7 years

D. 10 years

Correct Answer: D. 10 years

Explanation: Copper T 380 A is a long-term contraceptive device that remains effective for up to 10 years after insertion, making it a widely used option for long-term family planning. 3 years (Option A) : is incorrect because copper T 380 A is designed for long-term contraception, far exceeding a 3-year effectiveness duration. 5 years (Option B) : is incorrect because copper T 380 A provides contraceptive protection well beyond five years, although some other intrauterine devices have a 5-year lifespan. 7 years (Option C) : is incorrect because copper T 380 A's effective duration is specifically rated for up to 10 years by manufacturers and health guidelines.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 576- 578

↑ *Back to this question in Part A*

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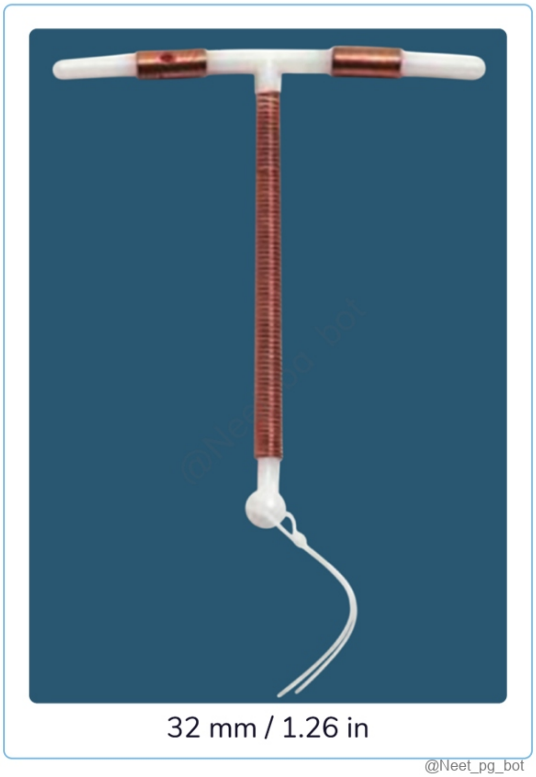
Q6: Which of the following is an absolute contraindication for the device shown in the image below? (Q857748)

A. Anemia

B. Vaginal bleeding

C. Uterine malformations

D. Purulent cervical discharge



Correct Answer: B. Vaginal bleeding

Explanation: bsolute C/I: Pregnancy, suspected pregnancy CA cervix, uterus, adnexa other pelvic tumours PID (active) Vaginal bleeding of unknown cause Relative C/I: Anemia (OPTION A) Menorrhagia PID past history Purulent discharge Uterine cavity distortion (fibroid, congenital malformations)

References:

Park’s textbook of preventive and social medicine 27th ed Pg 572

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A 25 year old female is using vaginal sponge as a barrier contraceptive during sexual intercourse. Which of the following Spermicide is used in contraceptive 'TODAY'? (Q859193)

A. NET-EN

B. DMPA

C. Nonoxynol-9

D. Norethisterone

Correct Answer: C. Nonoxynol-9

Explanation: Nonoxynol-9 is a commonly used spermicide that is used as the active ingredient in many barrier contraceptives, including vaginal sponges, foams, gels, and creams. It works by immobilizing and killing sperm, thus reducing the risk of pregnancy. Nonoxynol-9 is the spermicide used in the contraceptive product 'TODAY'. {{caption_text}} Brand name TODAY Material Small polyurethane foam sponge Mechanism of action Combines barrier and spermicidal methods to prevent conception Saturated with 1000 mg of spermicide ‘Non-oxynol-9’ (Option C) Technique of use Must be run under water till thoroughly wet before insertion Inserted vaginally and must be ‘placed over the cervix to be effective Must be left in place for 6 hours after ejaculation All sponges must be removed within the time limits specified by the manufacturer (24 hours for Today) Disadvantages No protection from HIV or STDs May lead to Toxic Shock Syndrome if left beyond 24 hours Has to be left for 6 hours post ejaculation Increased risk of yeast infection and UTI Higher failure rate than diaphragm Failure rate Parous women: 20-40 per HWY Nulliparous women: 9-20 per HWY Incorrect Options: NET-EN (Option A): NET-EN stands for norethisterone enanthate, which is a progestin hormone used in some hormonal contraceptives, such as injectable contraceptives. It is not the spermicide used in the contraceptive product 'TODAY. DMPA (Option B): DMPA stands for depot medroxyprogesterone acetate, which is another progestin hormone used in injectable contraceptives, commonly known as the birth control shot. It is not the spermicide used in the contraceptive product 'TODAY'. Norethisterone (Option D): Norethisterone is a progestin hormone used in some hormonal contraceptives, such as combined oral contraceptives (COCs) or progestin-only pills (mini-pills). It is not the spermicide used in the contraceptive product 'TODAY'.



References:

Park’s textbook of preventive and social medicine 27th edition, Page 569 - 579

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: What is the most frequent side effect experienced by a 24-year-old woman of reproductive age who visited a rural primary healthcare center in India for the purpose of having an IUCD inserted to prevent pregnancy? (Q859200)

A. Ectopic pregnancy

B. Pelvic infection

C. Pain

D. Bleeding

Correct Answer: D. Bleeding

Explanation: The most common side effect of IUCD insertion is increased or irregular menstrual bleeding. Women may experience heavier or longer periods, spotting between periods, or irregular bleeding patterns in the initial months after IUCD insertion. This is a common and expected side effect that usually resolves over time. Side effects of IUDs Bleeding (Option D) Most common side effect ; physiological bleeding resolves in 1-3 months. Iron supplementation may be needed. Persistent bleeding despite treatment may necessitate IUD removal. Pain (Option C ruled out) Frequently causes removal; managed with analgesics. Resolves in 3 months. Severe pain may indicate uterine perforation (rare). Pelvic inflammatory disease (OptionB ruled out) Certain organisms reach the uterus, fallopian tubes, and ovaries via the IUD thread. Presents with fever, abdominal pain, and discharge. Higher risk in women with multiple sexual partners. Requires broad-spectrum antibiotics; IUD removal if no improvement. Uterine perforation Rare complications linked to immediate postpartum insertion or poor technique. 1st generation IUDs are associated with a higher risk of pregnancy. Failure of contraception ➜ pregnancy Least pregnancies are reported with MIRENA. If a woman requests an induced abortion – legally allowed. If a woman wants to continue pregnancy and threads are visible: Pull the thread and continue pregnancy. Explain the risk of spontaneous abortion or congenital anomalies. If a woman wants to continue pregnancy and threads are not visible: Uterus examination for any complications Evacuation of uterus if any complication is identified. Ectopic pregnancy (OPTION A ruled out) Recognized by lower abdominal pain, dark vaginal bleeding, or amenorrhea. Women at high risk should avoid IUDs. Expulsion Typically occurs within weeks of insertion or during menstruation; higher risk in young, nulliparous, postpartum women or using 1st generation IUDs Migration of IUD Rarely causes intestinal obstruction; diagnosed via X-ray imaging if suspected.

References:

Park’s textbook of preventive and social medicine 27th ed Pg 572-4

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A couple approaches the doctor with a query regarding sexual precautions following the male partner's vasectomy procedure conducted a month ago. What guidance should be provided in this situation? (Q859201)

A. Oral contraceptive pills for 1 month for the woman

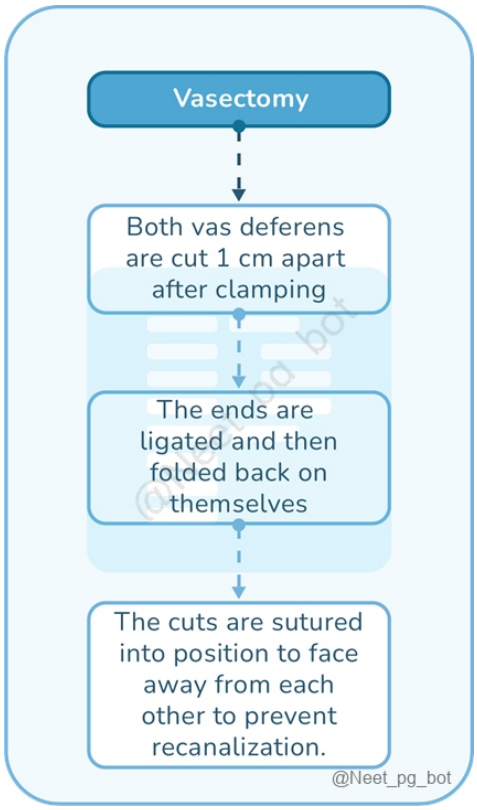
B. Use condoms for 3 months

C. No special advice

D. Hormonal treatment given for 2 more months for the man

Correct Answer: B. Use condoms for 3 months

Explanation: After a vasectomy, it is important to provide appropriate advice to the couple regarding contraception. Using condoms for 3 months helps to ensure that any remaining sperm are cleared and reduces the risk of unintended pregnancy during this period. After 3 months, the couple may choose to rely solely on the vasectomy as a contraceptive method. However, it is important to note that a follow-up semen analysis should be performed to confirm the success of the procedure and the absence of sperm in the ejaculate. Vasectomy is a terminal method of contraception done in males. It is a single time method, which does not require prolonged motivation for its effectiveness. Guidelines for Vasectomy: The age of the husband should be 25-50 yrs. The couple should have 2 living children. If the couple has 3 or more children, then the lower limit of age can be relaxed. Procedure: {{caption_text}} Postoperative advice: Must use alternate methods of contraception for 30 ejaculations (roughly 3 months) after the procedure to ensure sterility (option B). Should keep the surgical area clean Should not lift weights



References:

Park's textbook of preventive and social medicine 27th ed Pg 583

↑ *Back to this question in Part A*

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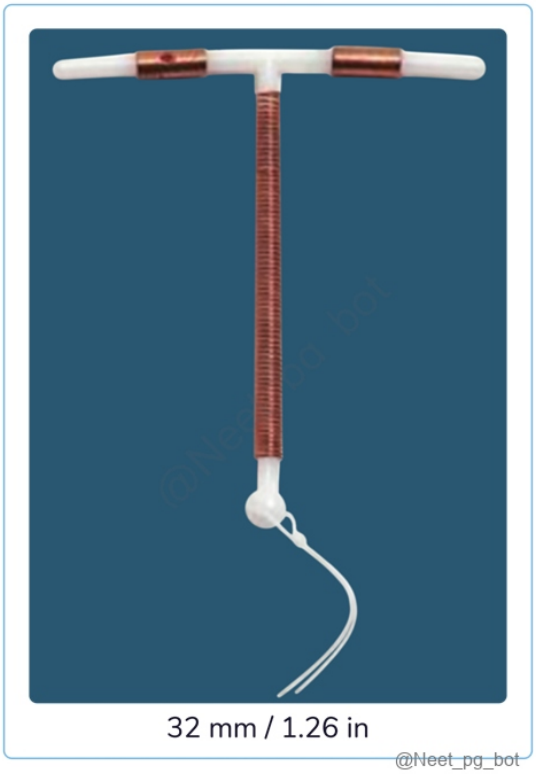
Q10: Which of the following statements about the given image is not true? (Q859217)

A. It is inserted by withdrawal technique

B. The copper in this device has a surface area of 380 square mm

C. It has a life-span of 5 years

D. It is used in emergency contraception



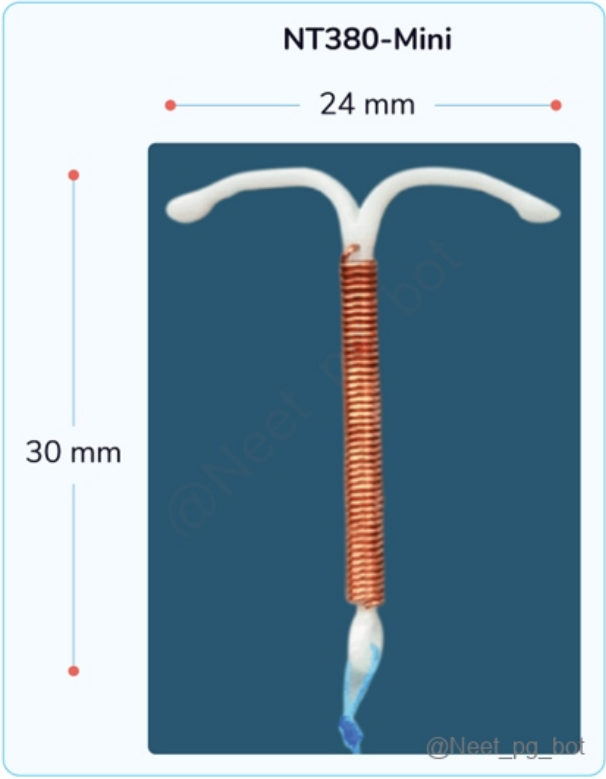
Correct Answer: C. It has a life-span of 5 years

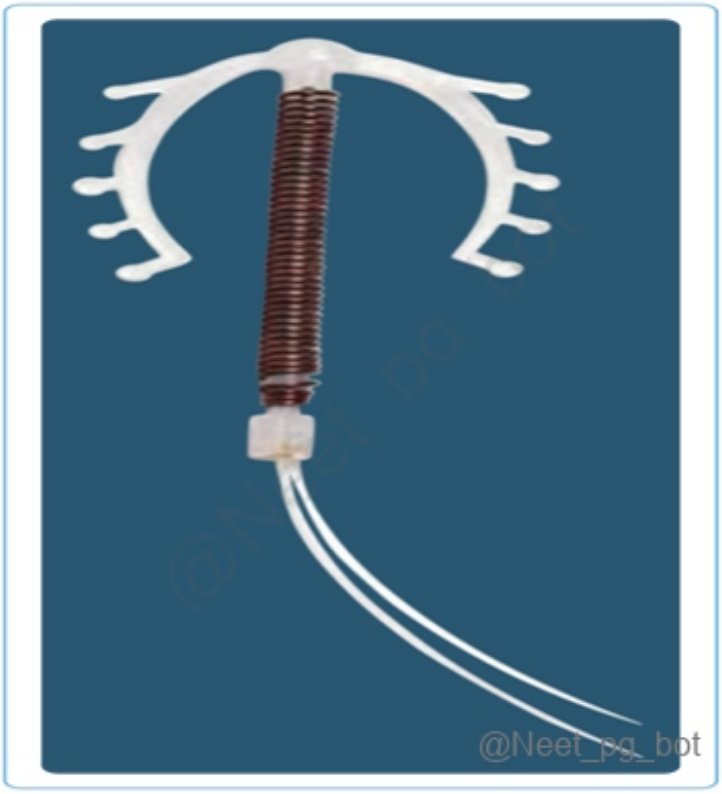
Explanation: The image depicts CuT 380. Copper T is designed to provide contraception for an extended period. Depending on the specific type of Copper T used, it typically has a lifespan of 10 years for CuT380A. 2nd generation IUDs Type Copper containing device Mechanism of action Reduces sperm motility and survival alters cervical mucus affects uterine enzymes increases cellular response in endometrium Features Strong anti-fertility effect Low expulsion rate Easy to fit in nulliparous women Lesser side effects Effective post-coital contraceptive (Option D ruled out) Side effects Bleeding Pain Pelvic inflammatory disease Uterine perforation Failure of contraception ➜ Pregnancy Ectopic pregnancy Expulsion Migration of IUD Insertion technique Withdrawl technique (Option A ruled out) CuT 380A {{caption_text}} 380 mm² of copper wire around a stem with nylon thread attached (Option B ruled out) Shelf life -10 years (Option C) Nova-T {{caption_text}} CuT 380 A with a silver (Ag) core attached to it Shelf life - 5 years Multiload {{caption_text}} U-shaped ring Most commonly used IUD CuT 375



32 mm / 1.26 in

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References:

Park’s textbook of preventive and social medicine 27th edition Pg 570-4

https://www.bayer.com/sites/default/files/NOVA_T_380_EN_PI.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5895549/

https://www.aiims.edu/aiims/events/Gynaewebsite/ec_site/manual/7_intra-uterine.htm

↑ *Back to this question in Part A*

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• [09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics] 036 Preventive Medicine In Obstetrics Pediatrics And Geriatrics

« Back to Folder Directory

[09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics] 036 Preventive Medicine In Obstetrics Pediatrics And Geriatrics — Quick Jump

Q1 (p. 1379)	*Q2 (p. 1380)*	*Q3 (p. 1381)*	*Q4 (p. 1382)*	*Q5 (p. 1383)*	*Q6 (p. 1384)*
Q7 (p. 1385)	*Q8 (p. 1387)*	*Q9 (p. 1388)*	*Q10 (p. 1390)*	*Q11 (p. 1391)*	*Q12 (p. 1392)*
Q13 (p. 1392)	*Q14 (p. 1393)*	*Q15 (p. 1394)*	*Q16 (p. 1394)*	*Q17 (p. 1395)*	*Q18 (p. 1396)*
Q19 (p. 1397)	*Q20 (p. 1397)*	*Q21 (p. 1398)*	*Q22 (p. 1399)*	*Q23 (p. 1400)*	*Q24 (p. 1401)*
Q25 (p. 1402)					

Q1: Which of the following is NOT a leading cause of mortality in children aged 1-4 years in developing countries? (Q841070)

A. Diarrhoeal diseases

B. Respiratory infections

C. Malnutrition

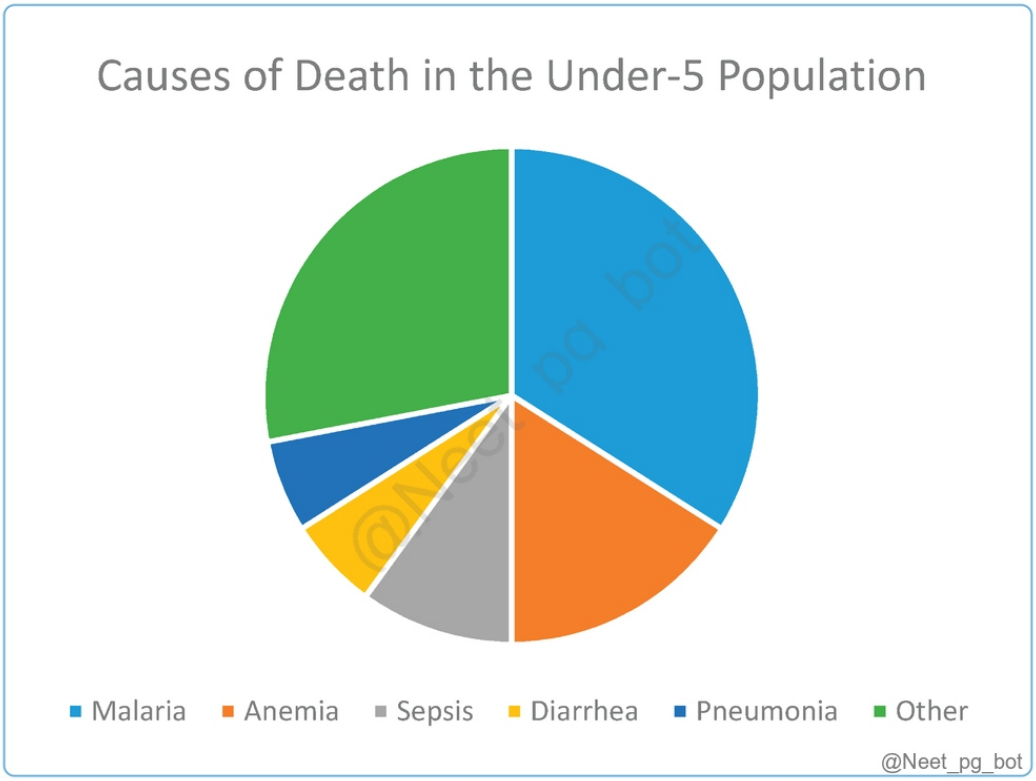
D. Congenital anomalies

Correct Answer: D. Congenital anomalies

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Congenital anomalies are a cause of mortality in age 1-4 years, they are not among the leading causes in developing countries. They are more prevalent as leading causes of mortality in developed countries. Causes of mortality in age group 1-4 years Developing Countries Developed Countries Diarrhoeal diseases Accidents and injuries Respiratory infections Congenital anomalies Malnutrition Malignant neoplasms Infectious diseases (e.g., measles, whooping cough) Influenza Other febrile diseases Pneumonia



References:

K. Park Textbook of Preventive and Social Medicine 27th Edition- Pg. 651

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Under which initiative in India are children screened for common health conditions such as birth defects, deficiencies, developmental delays, and diseases up to the age of 18 years? (Q841084)

A. Anemia Mukt Bharat

B. Rashtriya Bal Swasthya Karyakram (RBSK)

C. Applied Nutrition Programme

D. Mid-day Meal

Correct Answer: B. Rashtriya Bal Swasthya Karyakram (RBSK)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Rashtriya Bal Swasthya Karyakram (RBSK) is an initiative promoting school health Comprehensive health care for children aged from birth to 18 years by screening them for birth defects, diseases, deficiencies, and developmental delays. Children identified with these conditions receive early intervention and follow-up care provided free of cost including surgeries.



References:

rbsk.mohfw.gov.in/RBSK/

www.nhm.tn.gov.in/en/nhm-programsrmncha/anemia-mukt-bharat-amb#

nhm.gov.in/images/pdf/programmes/wifs/guidelines/icds_operational_guidelines_for_wifs.pdf

pmposhan.education.gov.in/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following statements are incorrect regarding a healthful school environment? (Q841083)

A. Classrooms should accommodate no more than 40 students with a minimum of 10 sq. ft. per student.

B. The interior walls of classrooms should be colorfully painted to create a stimulating environment for students.

C. One urinal per 60 students, one latrine per 100 students must be provided. Separate facilities for boys and girls.

D. Site should be on high-lying land with an area of 10 acres for higher elementary schools, 5 acres for primary schools, with an additional 1 acre per 100 students.

Correct Answer: B. The interior walls of classrooms should be colorfully painted to create a stimulating environment for students.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The interior walls of classrooms should be white-washed , not colorfully painted. White walls help in maintaining cleanliness and provide a calm environment in the classroom. Healthful School Environment Location Centrally situated with proper approach roads, away from busy places like roads, factories, and marketplaces. School premises should be fenced and hazard-free. Site High, well-drained land. 10 acres for higher elementary schools, 5 acres for primary schools, with an additional 1 acre per 100 students. (Option D) Structure Single-story buildings are preferred. Exterior walls should be 10 inches thick and heat-resistant Classroom No more than 40 students per room. Minimum 10 sq. ft. per student. (Option A) Color of Interior White interior walls, periodically white-washed. Lighting Natural light from the left side, not from the front. Water Supply Independent source of safe, potable water, continuous supply distributed from taps. Lavatory One urinal per 60 students, one latrine per 100 students. Separate facilities for boys and girls. (Option C)

References:

K.Park’s Textbook of Preventive and Social Medicine 27th Edition. Pg. 658

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following statements about Kangaroo Mother Care (KMC) is incorrect? (Q841082)

A. KMC involves early and prolonged skin-to-skin contact between the infant and the mother.

B. KMC is meant for clinically stable low birth weight (LBW) infants and includes exclusive and frequent breastfeeding.

C. KMC should only be provided in hospitals under skilled supervision and proper guidance.

D. KMC helps stabilize body temperature, promotes breastfeeding, and prevents infections.

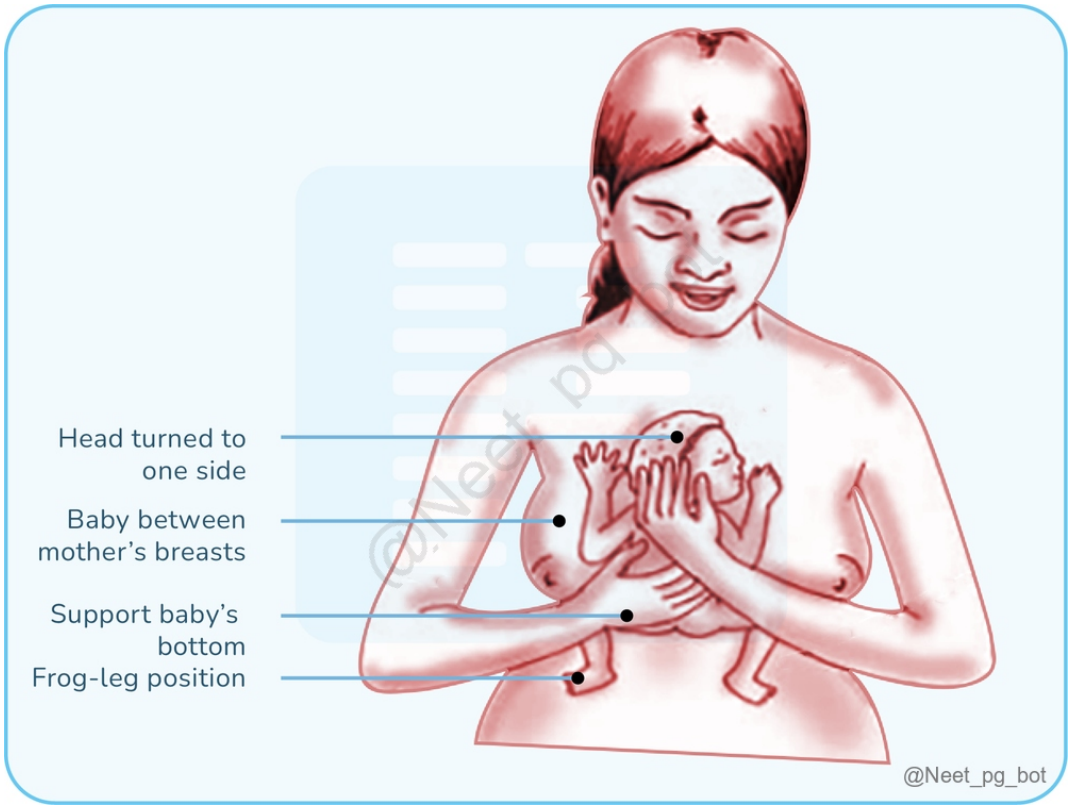
Correct Answer: C. KMC should only be provided in hospitals under skilled supervision and proper guidance.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: KMC should be initiated in the hospital under skilled supervision but is intended to be continued at home to provide ongoing benefits to the infant. Kangaroo Mother Care is a low-resource, high-impact intervention

for low birth weight infants. It has the following benefits:- (Option D) Stabilizing the infant's body temperature and preventing hypothermia Reducing neonatal mortality and risk of infections Promoting effective breastfeeding Reducing the length of hospital stay Kangaroo Mother Care (KMC) has 4 main components:- Kangaroo Position- Prolonged skin-to-skin contact (Option A) Kangaroo Nutrition- Exclusive and frequent breastfeeding (Option B) Kangaroo Discharge- The infant is sent home early, as soon as the mother can provide all basic care. Kangaroo support- Close follow-up and access to daily visits.



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 615 National Health Mission- Guidelines for KMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following statements is false regarding nutrition in infants? (Q841080)

A. The estimated protein requirement is about 2 g/kg of body weight during the first 6 months; Declines to about 1.5 g/kg by the end of one year.

B. Options used in artificial feeding include dried whole milk powder, fresh milk from a cow or other animal, or commercial formulae

C. Cow milk is the safest and most commonly used artificial feeding method in developing countries

D. The main indications for artificial feeding are failure of breast milk, prolonged illness or death of the mother.

Correct Answer: C. Cow milk is the safest and most commonly used artificial feeding method in developing countries

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: While cow milk is a commonly used alternative for infant feeding in developing countries due to its availability and cost, it is not considered the safest option . Cow milk contains higher levels of bacteria than dried milk powder It requires dilution to reduce the solute load on neonatal kidneys It lacks certain essential nutrients that are present in breast milk or commercial formulae, which are specifically designed to meet the nutritional needs of infants. Artificial Feeding Options (Option B) Dried Whole Milk Powder Fresh Milk from a Cow or Other Animal Commercial Formulae Donor Human Milk Nutritional Requirements and Feeding Guidelines for Infants Requirement/Guideline Details Energy Requirement Infants require an average of 100 kcal per kg of body weight per day (about 150 ml of milk per kg of body weight each day). Protein Requirement 2 g/kg of body weight during the first 6 months Declines to about 1.5 g/kg by the end of one year (Option A) Feeding Frequency Infants need feeding at frequent intervals about 6-8 times a day.

References:

K.Park’s Textbook of Preventive and Social Medicine 27th Edition. Pg. 615-616.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following statements is incorrect when comparing human milk to cow milk? (Q841079)

A. Human milk contains 3 times lower protein, but is rich in amino acids like cysteine and taurine, essential for infants.

B. Breast milk is almost completely digested, whereas much of cow's milk protein is excreted undigested.

C. The coefficient of uptake of iron is equal in both breast and cow milk, however breast milk contains more Vitamin A and C

D. Dilution of cow's milk during the first 2 months is recommended in order to reduce the solute load on neonatal kidneys.

Correct Answer: C. The coefficient of uptake of iron is equal in both breast and cow milk, however breast milk contains more Vitamin A and C

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The coefficient of uptake of iron is not equal in both breast and cow milk. Human milk has a higher bioavailability of iron compared to cow milk. Human milk does not contain more Vitamin A than cow milk Human milk contains more Vitamin C than cow milk Nutritional Component Human Milk Cow Milk Protein Content Lower, easily digestible Higher, harder to digest Essential Amino Acids (e.g., cysteine, taurine) Rich Lower Vitamin C Rich Lower Iron Higher bioavailability Lower bioavailability Calcium Adequate, better absorbed Higher content, less effectively absorbed Fat Content Higher proportion of essential fatty acids (e.g., linoleic, alpha-linolenic) Lower proportion of essential fatty acids Digestibility Almost completely digested Much is excreted undigested Risk of Overloading Kidneys Low High (hence dilution recommended)

References:

K.Park's Textbook of Preventive and Social Medicine 27th Edition. Pg. 616

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A 2-year-old child presents to the pediatric clinic with complaints of poor dietary intake for the past several months. On examination, the child has Bitot's spots and other signs of vitamin A deficiency. What is the most appropriate treatment plan for this child to correct the Vitamin A deficiency? (Q841077)

A. Administer a single dose of 50,000 IU of vitamin A immediately and repeat the dose the next day.

B. Administer a single dose of 100,000 IU of vitamin A immediately and another dose of 100,000 IU after 9 months.

C. Administer 50,000 IU of vitamin A immediately and repeat this dose every 6 months until the child turns 5 years.

D. Administer 200,000 IU of vitamin A immediately and the very next day. If clinical signs persist, third dose of 200,000 IU 2-4 weeks later.

Correct Answer: D. Administer 200,000 IU of vitamin A immediately and the very next day. If clinical signs persist, third dose of 200,000 IU 2-4 weeks later.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Immediate High Dose: The initial high dose of 200,000 IU is necessary to rapidly replenish vitamin A levels in the body, addressing the acute deficiency and preventing further deterioration. Follow-Up Dose:

Repeating the dose the next day ensures that the body receives a sufficient amount of vitamin A to start correcting the deficiency effectively. 2 Doses are mostly sufficient to reverse the ocular signs of Vitamin A deficiency. Third Dose if Needed: A third dose after 2-4 weeks may be required if clinical signs persist, ensuring that the deficiency is fully corrected. Dose Schedule for Management of Vitamin A Deficiency Age Range Vitamin A Dose Frequency < 6 months 50,000 IU 1st Dose - Day 0 2nd Dose- Day 1 3rd Dose (if required) - 2-4 weeks later 6-11 months 100,000 IU 1st Dose - Day 0 2nd Dose- Day 1 3rd Dose (if required) - 2-4 weeks later ≥ 12 months 200,000 IU 1st Dose - Day 0 2nd Dose- Day 1 3rd Dose (if required) - 2-4 weeks later Sources of Vitamin A: Richest animal source: Halibut liver oil (Overall richest source) Animal source: Halibut liver oil, Meat, liver, egg, milk, butter, ghee Richest vegetable source: Red palm oil Cheapest source of vitamin A: Green leafy vegetable (spinach, fenugreek, coriander, mint leaves) Vitamin A deficiency: Xerophthalmia (ocular manifestations of vitamin A deficiency) M/c age group: 1-3 years M/c cause of preventable and treatable (avoidable) blindness among children: Vitamin A deficiency WHO classification of Xerophthalmia: Important points: M/c presenting symptom: Night blindness M/c presenting manifestation: Night blindness First symptom in vitamin A deficiency: Night blindness M/c indicator for Vitamin A deficiency: Bitot's spot First clinical sign in vitamin A deficiency: Conjunctival xerosis Most specific presentation: Bitot's spot Reversible till which stage: X2 Irreversible stage: X3A, X3B Epidemiological marker: Bitot's spot Prevelance criteria for determining Xerophthalmia as public health problem: Prevalence is calculated from a cross-sectional study Age group: 6m - 6yrs

Primary signs/ findings		**Secondary signs/ findings**
Reversible:	**Non-reversible:**	• XN - Night blindness • XF - Fundal changes • XS - Scar
• X1A - Conjunctival xerosis • X1B - Bitot's Spots • X2 - Corneal Xerosis	• X3A - Corneal ulcer involving <1/3rd of cornea • X3B - Corneal ulcer involving >1/3 of cornea (Keratomalacia)	

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CRITERIA	PREVALENCE CRITERIA
Night blindness	>1%
Bitot's spot	>0.5%
Corneal xerosis/corneal ulceration/keratomalacia	>0.01%
Corneal ulcer/corneal scar	>0.05%
Serum retinol < 10 mcg/dl	>5%

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References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 166, 731

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A 2-year-old child presents with bilateral pedal edema, severe wasting, and a mid-upper arm circumference (MUAC) of 10.5 cm. Which of the following is the feature of initial management of this condition? (Q841076)

A. Focus on nutritional and electrolyte balance

B. Starter Diet provides 100 kcal per 1000 ml

C. Initiation of a home-based nutritious diet

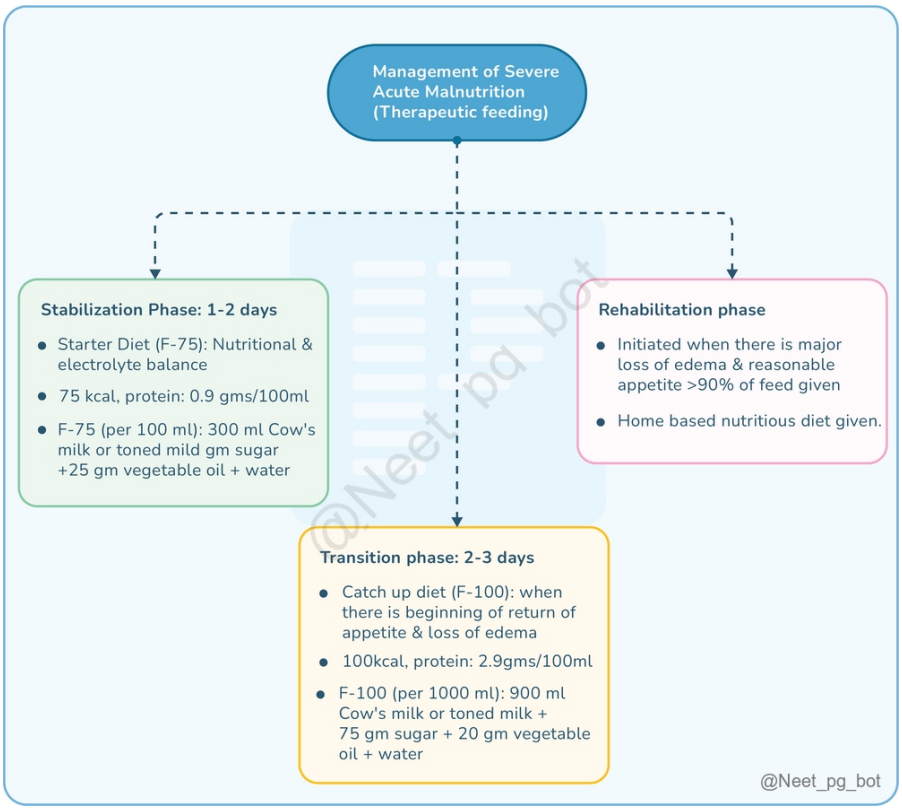
D. Provide a catch up diet like F-100

Correct Answer: A. Focus on nutritional and electrolyte balance

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The clinical features described in the question, including bilateral pedal edema , severe wasting , and a mid-upper arm circumference (MUAC) of 10.5 cm , are suggestive of severe acute malnutrition (SAM). The first step in the treatment of SAM, particularly in an inpatient setting, involves correcting electrolyte imbalances (such as low potassium or sodium), rehydration, and replenishing micronutrient deficiencies before initiating feeding.



References:

www.ncbi.nlm.nih.gov/books/NBK361900/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following statements regarding growth charts is false? (Q841075)

A. The position of dots is more important than direction

B. Flattening of the curve is a sign of growth failure

C. 0 to -2 SD signifies normal growth

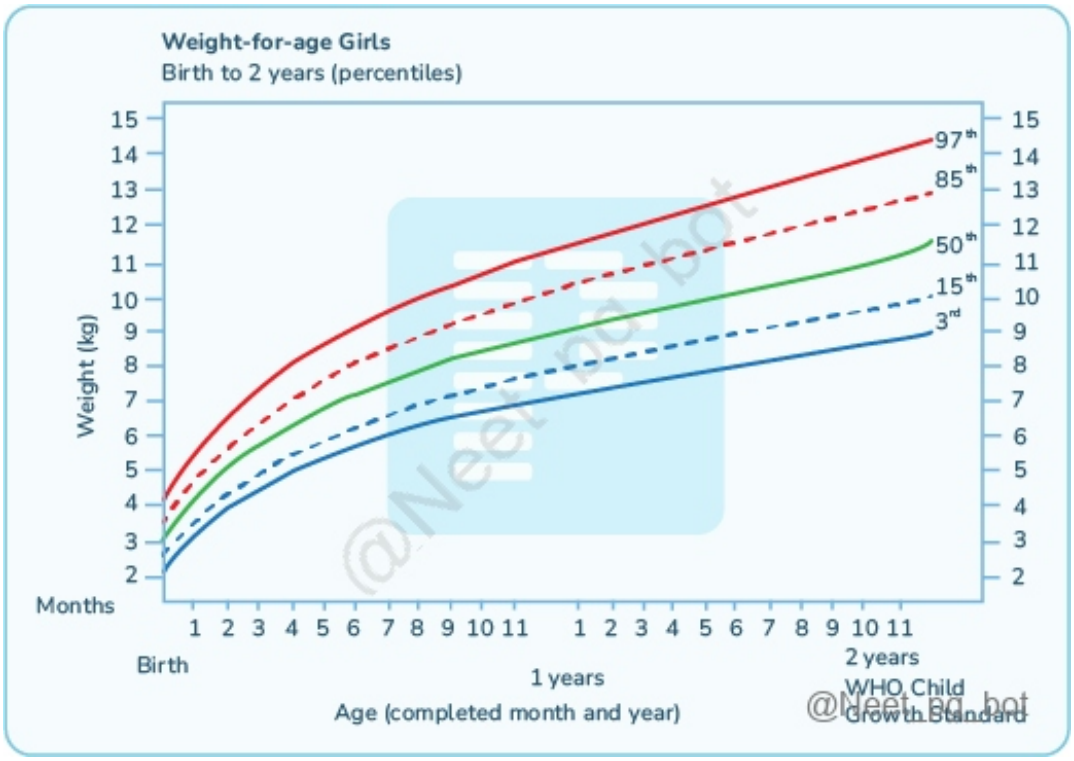
D. Age is on the x-axis

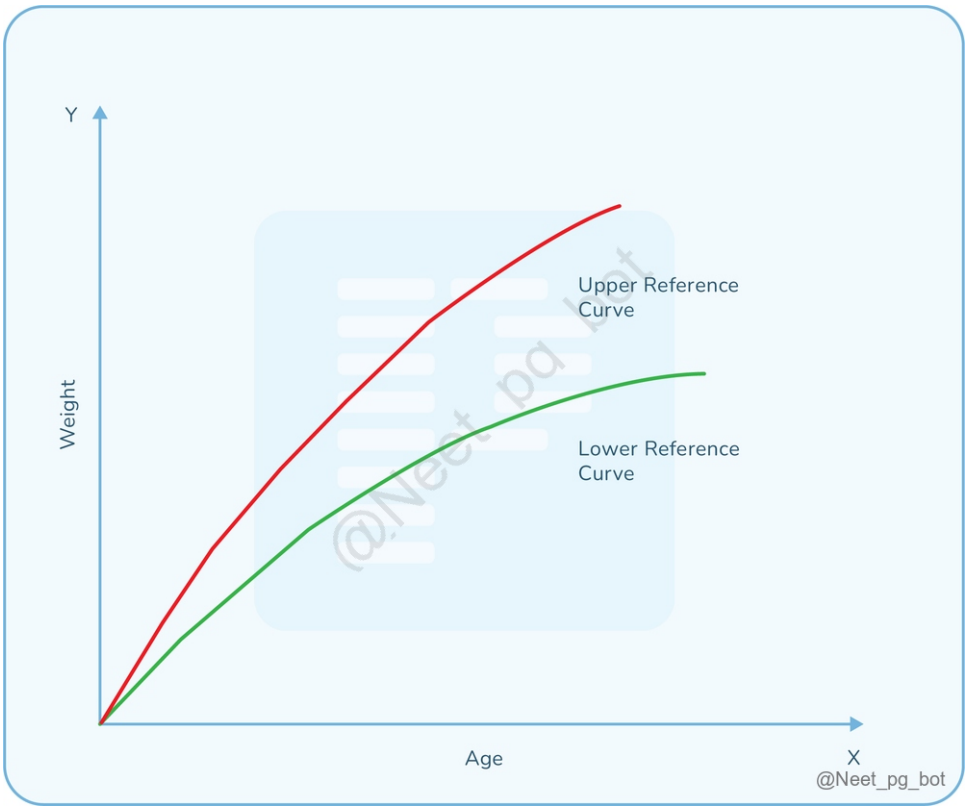
Correct Answer: A. The position of dots is more important than direction

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The direction of the curve is more important than the position of the dots as it focuses on the trajectory of a child's growth over time, and helps identify if a child is growing steadily, experiencing rapid growth, or potentially showing signs of growth faltering. Features of ICDS growth chart CRITERIA FOR ICDS GROWTH CHART 0 to -2 SD Road to health Green color Advice : Take care of danger signs. -2 to -3 SD Mild to moderate malnutrition Yellow color Advice : Supplement with diet and breastfeeding. Below -3 SD Severe malnutrition Red color Refer to a CHC level or above FEATURES OF ICDS GROWTH CHART Has 3 lines Weight is on the y-axis Age is on the x-axis The first sign of growth failure is the flattening of the curve. The direction of the growth chart is more important than the position of the dots. Features of WHO GROWTH CHART : Upper reference (50th percentile for boys) Lower reference (3rd percentile for girls) Between the two references - Normal growth Below lower reference - Malnutrition





References:

K.Park's Textbook of Preventive and Social Medicine 26th Edition, Page 628-629

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following is not a feature of a severe acute malnourished child? (Q841074)

A. MUAC < 11.5 cm

B. Low weight for height < -3 SD

C. Absence of pitting pedal edema

D. Presence of severe body wasting

Correct Answer: C. Absence of pitting pedal edema

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The presence of bilateral pitting pedal edema is an important feature of severe acute malnourished child Features of a severe acute malnourished child Mid-Upper Arm Circumference (MUAC) Less than 11.5 cm (Option A) Weight-for-height Less than -3 SD (standard deviations) (Option B) on the WHO growth chart. Bilateral pitting pedal edema Presence of edema, which is swelling caused by fluid retention, in both feet. Visible severe wasting Noticeable and significant loss of body mass, particularly muscle and fat tissue (Option D) SAM children meeting these criteria are to be admitted to Nutritional Rehabilitation Centres (NRCs) for treatment and care.

References:

K.Park's Textbook of Preventive and Social Medicine 26th Edition page 730

↑ *Back to this question in Part A*

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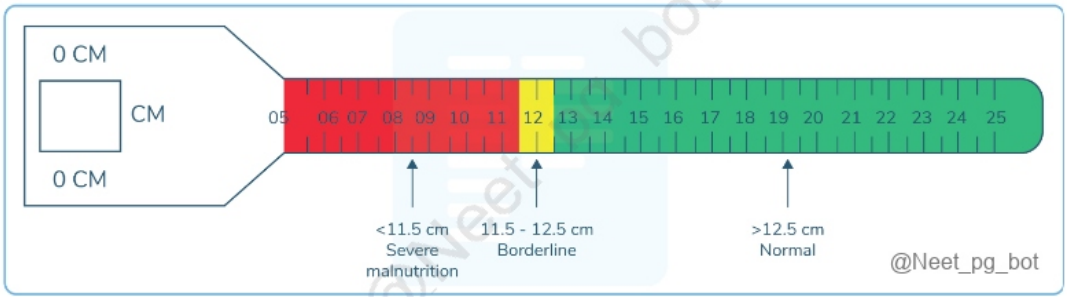
Q11: The image above depicts a measurement used to assess the nutritional status of children. What is being measured? (Q841073)

A. Head circumference

B. Mid upper arm circumference

C. Abdominal girth

D. Leg length



Correct Answer: B. Mid upper arm circumference

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Shakir tape measures the mid-upper arm circumference (MUAC), which is the most sensitive indicator for assessment of malnutrition status. Colour Measurement Status Red < 11.5 cm Severe acute malnutrition Yellow 11.5-12.5 cm Undernourished Green >12.5 cm Normal

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8183198/

https://www.unicef.org/supply/media/1421/file/mid-upper-arm-circumference-measuring-tapes-technical-bulletin.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: In a pediatric clinic, a 4-year-old child is assessed using Waterlow's Classification. The child's height-for-age is found to be 85%, while weight-for-height is 85%. According to Waterlow's Classification, the nutritional status of this child would be categorized as: (Q841072)

A. Normal

B. Wasted

C. Stunted

D. Wasted and Stunted

Correct Answer: C. Stunted

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: According to Waterlow’s criteria, Weight for height ≥ 80% and Height for Age < 90% is termed as Stunted. Weight for Heigh t Height for Age Nutritional Status ≥ 80% ≥ 90% Normal < 80% ≥ 90% Wasted ≥ 80% < 90% Stunted < 80% < 90% Wasted and Stunted Other classifications of malnutrition include the Gomez classification and the Wellcome Trust classification.

References:

https://doi.org/10.37506/ijphrd.v11i7.10047.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Match the following markers to the type of malnutrition they best assess: Marker Type of Malnutrition a. Weight-for-height 1. Chronic Malnutrition b. Height-for-age 2. Acute Malnutrition c. Weight-for-age 3. Acute on chronic malnutrition (Q841071)

A. a-2, b-3, c-1

B. a-1, b-2, c-3

C. a-2, b-1, c-3

D. a-3, b-2, c-1

Correct Answer: C. a-2, b-1, c-3

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Weight-for-height assesses acute malnutrition (wasting). Height-for-age assesses chronic malnutrition (stunting). Weight-for-age is an overall indicator but does not differentiate between acute and chronic malnutrition, making it less specific for either. Head circumference is a general indicator that can reflect both acute and chronic malnutrition, but it's not the primary marker for either.

References:

K. Park Textbook of Preventive and Social Medicine 27th Edition- Pg. 686

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: What is the minimum number of antenatal visits recommended by the WHO? (Q840777)

A. 4

B. 6

C. 8

D. 3

Correct Answer: C. 8

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: According to the WHO, the minimum number of antenatal visits (or Antenatal care contact) is 8. Schedule of visits: 1st Trimester: 1 visit (in the first 12 weeks) 2nd Trimester: 2 visits (at 20 & 26 weeks) 3rd Trimester: 5 visits (at 30, 34, 36, 38 and 40 weeks) It is recommends that pregnant women have their first contact in the first 12 weeks of gestation, with subsequent contacts taking place at 20, 26, 30, 34, 36, 38, and 40 weeks' gestation. The minimum number of visits per MOHFW is 4.

References:

www.who.int/news/item/07-11-2016-new-guidelines-on-antenatal-care-for-a-positive-pregnancy-experience

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following statements is FALSE with respect to mortality rates in children? (Q841069)

A. The most common cause of neonatal mortality is low birth weight.

B. Sepsis is a significant cause of both neonatal and infant mortality.

C. The Infant Mortality Rate is considered the best indicator of socio-economic development by UNICEF.

D. Current IMR is 28/1000 live births.

Correct Answer: C. The Infant Mortality Rate is considered the best indicator of socio-economic development by UNICEF.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: UNICEF considers Under-Five Mortality Rate (U5MR) as the best single indicator of socio-economic development, not IMR. IMR measures deaths of children under 1 year per 1000 live births, mostly reflecting health services and maternal-child care. U5MR is preferred as a socio-economic indicator because it reflects health, nutrition, sanitation, education, and living conditions. Incorrect Options: Option A: True; the most common cause of neonatal mortality is low birth weight Option B: True; Sepsis is a significant cause of both neonatal and infant mortality Option D: True; Current IMR is 28/1000 live births

References:

K. Park Textbook of Preventive and Social Medicine 27th Edition- Pg. 641 to 651.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A 32-year-old woman gives birth to a baby at 36 weeks of gestation. The baby's birth weight is recorded as 1800 grams. The mother is concerned about the baby's health and asks the pediatrician about the potential risks and necessary care for her newborn. Given the clinical scenario, which of the following statements is TRUE

regarding the newborn? 1) The baby is classified as moderately preterm and moderately low birth weight. 2) The baby is classified as extremely preterm and extremely low birth weight. 3) The baby is at a higher risk for infant mortality compared to normal birth weight babies. 4) The baby is expected to double its birth weight by 3 months. 5) The baby is classified as normal term and moderately low birth weight. (Q841068)

A. 1 and 3

B. 2, 3 & 4

C. 3 and 5

D. 1, 3, and 4

Correct Answer: A. 1 and 3

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The baby according to the period of gestation is moderately preterm , & according to birth weight is a moderately LBW baby. Classification Weight Range Moderately Low Birth Weight 1500 g to 2499 g Very Low Birth Weight 1000 g to 1499 g Extremely Low Birth Weight Below 1000 g Classification Gestational Age Extremely Preterm Less than 28 weeks Very Preterm 28 to 32 weeks Moderate to Late Preterm 32 to 37 weeks Term 37 to 42 weeks Post-term Beyond 42 weeks Also, birth weight doubles by 5 months, triples by 1 year, and quadruples by 2 years . Infant Mortality rate is 20 times higher in LBW babies. In fact, LBW is the single most important factor influencing child survival.

References:

K. Park Textbook of Preventive and Social Medicine 27th Edition- Pg. 641 to 649.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Which of the following statements about the Perinatal Mortality Rate (PMR) is FALSE? (Q841067)

A. PMR includes late fetal deaths from 28 weeks of gestation and early neonatal deaths within the first 7 days of life.

B. PMR is considered the best indicator for combined obstetrics and pediatrics care.

C. The weight of the fetus should be at least 2 kg to be included in the PMR.

D. Birth asphyxia is a significant cause of perinatal mortality.

Correct Answer: C. The weight of the fetus should be at least 2 kg to be included in the PMR.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: According to the Criteria for PMR, the weight of the fetus should be at least 1 kg to be included in the PMR. Criteria for PMR: Babies chosen for inclusion in perinatal statistics (this means late foetal deaths, live births and early neonatal deaths) should be those above a minimum birth weight, i.e., 1000 g at birth (A birth weight of 1000 g is considered equivalent to gestational age of 28 weeks); If the birth weight is not available, a gestation period of at least 28 weeks should be used; and Where (i) and (ii) are not available, body length (crown to heel) of at least 35 cm should be used. But the preferred criterion is birth weight. PMR: In PMR denominator is live birth if records are not maintained as in developing countries, and also for international comparison It is the best indicator of combined obstetrics and pediatric care In India 28 weeks → period of viability (WHO → 22 weeks) Main cause of death: Birth asphyxia, Low birth weight, birth trauma, intrauterine and neonatal infections.

$$\text{PMR} = \frac{\text{Late fetal deaths} \geq 28 \text{ weeks of gestation} + \text{death within 0-7 days of life in a year}}{\text{Live birth in a year}} \times 1000$$

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References:

K. Park Textbook of Preventive and Social Medicine 27th Edition- Pg. 641 to 649

nhm.gov.in/index1.php?lang=1&level=2&sublinkid=819&lid=219

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: What is the current Infant Mortality Rate (IMR) in India according to the Sample Registration System (SRS)? (Q841066)

A. 30 per 1000 live births

B. 28 per 1000 live births

C. 25 per 1000 live births

D. 20 per 1000 live births

Correct Answer: B. 28 per 1000 live births

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In India, the current Infant mortality rate (IMR) is 28 per 1000 live births, as reported by the Sample Registration System (SRS). Infant mortality rate (IMR) is expressed as the number of deaths of infants (aged 0-1 year) per 1000 live births in a given year. Infant mortality rate (IMR) = (No. of deaths of children (infant) 0-1 year of life / live births) x 1000) Causes: The most common cause is low birth weight/prematurity according to the latest update Other causes include asphyxia, ARIs, diarrhea, congenital anomalies, cord infection, birth trauma, and others. Most infant deaths occur within the first month of life, with a significant proportion (54.6%) occurring during the first week. The risk of death is highest within the first 24-48 hours after birth. IMR reflects the effectiveness of maternal and child health (MCH) services and overall healthcare infrastructure in preventing infant deaths.

References:

K.Park's Textbook of Preventive and Social Medicine 27th Edition. Pg. 646 Child Health

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Which of the following defines the Neonatal Mortality Rate? (Q841065)

A. Death of a child within 0-28 days of life per 1000 live births

B. Death of a child within 0-7 days of life per 1000 live births

C. Death of a child within 8-28 days of life per 1000 live births

D. Death of a child within 29 days to 1 year of life per 1000 live births

Correct Answer: A. Death of a child within 0-28 days of life per 1000 live births

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Neonatal Mortality Rate (NMR) measures the number of deaths of infants within the first 28 days of life per 1000 live births. It is calculated as, Neonatal Mortality Rate (NMR) = (No. of deaths of children (neonates) 0 – 28 days of life / live births) x 1000 Causes of Neonatal deaths: Low birth weight/ prematurity (most common cause) Birth asphyxia/hypoxia Neonatal pneumonia Sepsis Congenital anomalies Diarrhea Injuries Other non-communicable diseases

References:

K.Park's Textbook of Preventive and Social Medicine 27th Edition. Pg. 643

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: A state recorded 150 maternal deaths in a year. The number of live births during the same period was 50,000. The total number of women in the reproductive age group (15-49 years) is 10,00,000. What is the maternal mortality ratio (MMR) for this state? (Q840807)

A. 3.0 per 1,000 women of reproductive age

B. 1.5 per 1,000 live births

C. 300 per 100,000 live births

D. 15 per 100,000 women of reproductive age

Correct Answer: C. 300 per 100,000 live births

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The question specifically asks for the maternal mortality ratio. Maternal Mortality Ratio (MMR) is the number of maternal deaths during the antenatal period, during delivery, and up to 42 days post delivery per 100,000 live births. It is calculated as follows: Maternal Mortality Ratio = (No. of maternal deaths / No. of Live births) x 100000 So the answer will be, (150/50000) x 100000 = 300

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 635

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: What is the minimum number of postnatal visits by ASHA workers recommended in the case of a home delivery? (Q840804)

A. 4 visits on Day 3, Day 7, Day 14, and Day 42

B. 4 visits on Day 1, Day 3, Day 7, and Day 42

C. 6 visits on Day 1, Day 3, Day 7, Day 14, Day 21, and Day 42

D. 7 visits on Day 1, Day 3, Day 7, Day 14, Day 21, Day 28, and Day 42

Correct Answer: D. 7 visits on Day 1, Day 3, Day 7, Day 14, Day 21, Day 28, and Day 42

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Postnatal care and Home-Based Newborn Care (HBNC) are provided by ANMs and ASHAs after delivery. They make several visits to ensure proper postnatal care, with the number of visits varying depending on whether the delivery takes place, at home or in an institution. Guidelines for home visits by ANM and ASHA workers Type of delivery Postnatal Care by ANM HBNC by ASHA Home Delivery Minimum 4 visits on Day 1,3,7 and 42 Minimum 7 visits on Day 1, 3, 7, 14, 21, 28, 42 Institutional Delivery Minimum 3 visits on Day 3, 7 and 42 Minimum 6 visits on Day 3, 7, 14, 21, 28, 42 In the case of Caesarean section delivery, Day 3 is spent in the hospital and the minimum number of visits by ANM is 2 and ASHA is 5. ASHA is paid 250 rupees per child after the completion of scheduled home visits.

References:

nhm.gov.in/index4.php?lang=1&level=0&linkid=491&lid=760#

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Which maternal health initiative launched by the National Health Mission focuses on improving the quality of care in labor rooms and maternity operation theaters? (Q840801)

A. Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)

B. Janani Suraksha Yojana (JSY)

C. Dakshata Training

D. LaQshya

Correct Answer: D. LaQshya

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: LaQshya—Labour Room Quality Improvement Initiative— focuses on decreasing preventable maternal and newborn deaths, illnesses, and stillbirths by enhancing the quality of care during labor and delivery and ensuring respectful maternity care. Objectives include: Managing complications like APH, PPH, preterm labor, and sepsis Improving care during delivery and the postpartum period Ensuring prompt referrals Promoting patient satisfaction and respectful treatment for all pregnant women in public health facilities



References:

nhm.gov.in/New_Updates_2018/NHM_Components/RMNCH_MH_Guidelines/LaQshya-Guidelines.pdf

nhm.gov.in/index1.php?lang=1&level=3&sublinkid=842&lid=308

www.nhm.gov.in/WriteReadData/l892s/97827133331523438951.pdf

nhm.gov.in/index1.php?lang=1&level=4&sublinkid=854&lid=453

pmsma.mohfw.gov.in/

nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/MH/Guidelines/SUMAN%20Guideline%202020%20Web%20Version.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: A 28 y/o pregnant woman, currently at 24 weeks of gestation, visits you for her routine antenatal check-up. She reports feeling excessive thirst and has been urinating more frequently than usual. She also mentions occasional fatigue. Her obstetric history includes a previous pregnancy with a baby weighing 4.2 kg at birth. Which of the following tests would you recommend for her? (Q840799)

A. Random Blood Sugar Test (RBS)

B. Fasting Blood Sugar Test (FBS)

C. Oral glucose challenge test (OGCT)

D. HbA1c Test

Correct Answer: C. Oral glucose challenge test (OGCT)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The patient is in her 2nd trimester and has complaints of polydipsia and polyuria . She also has a history of giving birth to an overweight baby (Macrosomia). This suggests the possibility of her having Gestational Diabetes Mellitus (GDM). The OGCT is commonly used as a screening test for GDM. Procedure: The patient is given a 50g oral glucose solution to drink. One hour after drinking the glucose solution, blood is drawn to measure blood glucose levels. Interpretation: A 140 mg/dL or higher blood glucose level is considered abnormal and warrants further testing with an OGTT. OGCT used to screen for diagnose gestational diabetes mellitus

References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC4866200/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: A 25 y/o primigravida, in her 2nd month of pregnancy, has come to you for her routine antenatal checkup. On further questioning, you find out that she has not been given any vaccinations yet. Which of the following is TRUE regarding vaccination protocols in pregnancy? (Q840794)

A. A booster dose of the Td vaccine is enough for this patient

B. 3 doses of Td vaccine must be given

C. 1st Td dose should be given as soon as possible

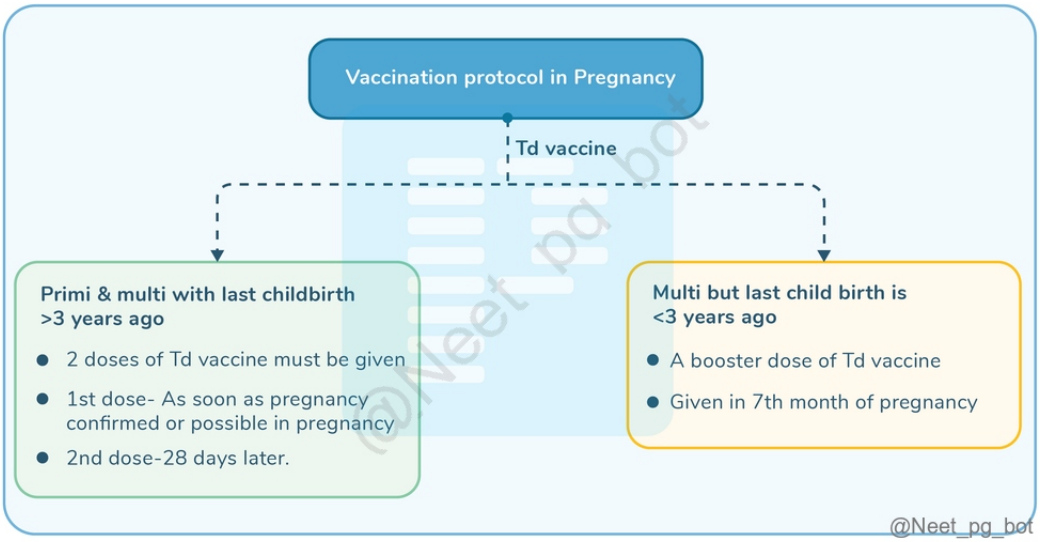
D. 2nd dose should be given 48 days after the 1st dose

Correct Answer: C. 1st Td dose should be given as soon as possible

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Since she is a primi, the 1st Td dose should be given as soon as possible. Vaccination protocol in pregnancy:



References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC4964703/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: A 23-year-old primigravida (G1P0L0) working at a construction site comes for her second antenatal check-up in the second trimester. She is found to be anemic with a hemoglobin of 8.4 g/dL. Which of the following is not appropriate advice for her? (Q840784)

A. She should take 1 iron and folic acid (IFA) tablet daily.

B. She should increase her calorie intake

C. She should increase her calcium and vitamin A intake

D. She must come for at least 2 more ANC visits

Correct Answer: A. She should take 1 iron and folic acid (IFA) tablet daily.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This patient is a primigravida & she is also anemic. Pregnant women with normal Hb levels (>11 g/dl) must take 1 IFA tablet daily. Whereas, all pregnant women with Hb between 7-9 g/dl must take 2 IFA tablets daily. For mothers with < 7g/dl = injectables are given.

References:

www.ncbi.nlm.nih.gov/books/NBK132251/

www.who.int/data/nutrition/nlis/info/antenatal-iron-supplementation#

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 748

nhm.gov.in/images/pdf/guidelines/nrhm-guidelines/stg/pregnancy-care.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

• [09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics] 037 Previous Year Questions

« Back to Folder Directory

[09_Preventive Medicine in Obstetrics_ Pediatrics and Geriatrics] 037 Previous Year Questions — Quick Jump

Q1 (p. 1404)	*Q2 (p. 1405)*	*Q3 (p. 1406)*	*Q4 (p. 1407)*	*Q5 (p. 1408)*	*Q6 (p. 1409)*
Q7 (p. 1409)	*Q8 (p. 1410)*	*Q9 (p. 1411)*	*Q10 (p. 1411)*	*Q11 (p. 1412)*	*Q12 (p. 1413)*
Q13 (p. 1414)	*Q14 (p. 1415)*	*Q15 (p. 1416)*	*Q16 (p. 1416)*	*Q17 (p. 1417)*	*Q18 (p. 1418)*
Q19 (p. 1418)	*Q20 (p. 1419)*	*Q21 (p. 1420)*	*Q22 (p. 1421)*		

Q1: The school health programs are managed by which of the following? (Q857703)

A. Primary health centre

B. District hospital

C. Sub-centre

D. Sub-divisional hospital

Correct Answer: A. Primary health centre

Explanation: hore Committee: Launched the concept of school health checkups. Renuka Roy Committee: Recommended school health checkups once every 4 years. 2. Current Recommendation: School health checkups are recommended once every 6 months. School Health Administration 1. Responsibility: Primary Health Centres (PHCs): Responsible for school health services in their respective jurisdictions. 2. Coverage: Each Medical Officer should cover 5,000-6,000 children per year. 3. Village Level: School Health Committees can be established to ensure health services at the village level. District hospitals (Option B): are higher-level healthcare facilities that provide secondary level care to the population within a district. They primarily focus on advanced medical care and management of more complex health issues. The sub-center (Option C): Sub-centres provide basic healthcare services at the village level but do not have the capacity to manage school health programs. Sub-divisional hospitals (Option D): also known as taluka hospitals or community health centres, are healthcare facilities at the sub-district level.

References:

https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/AH/guidelines/Operational_guidelines_on_School_Health_Programme_under_Ayushman_Bharat.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

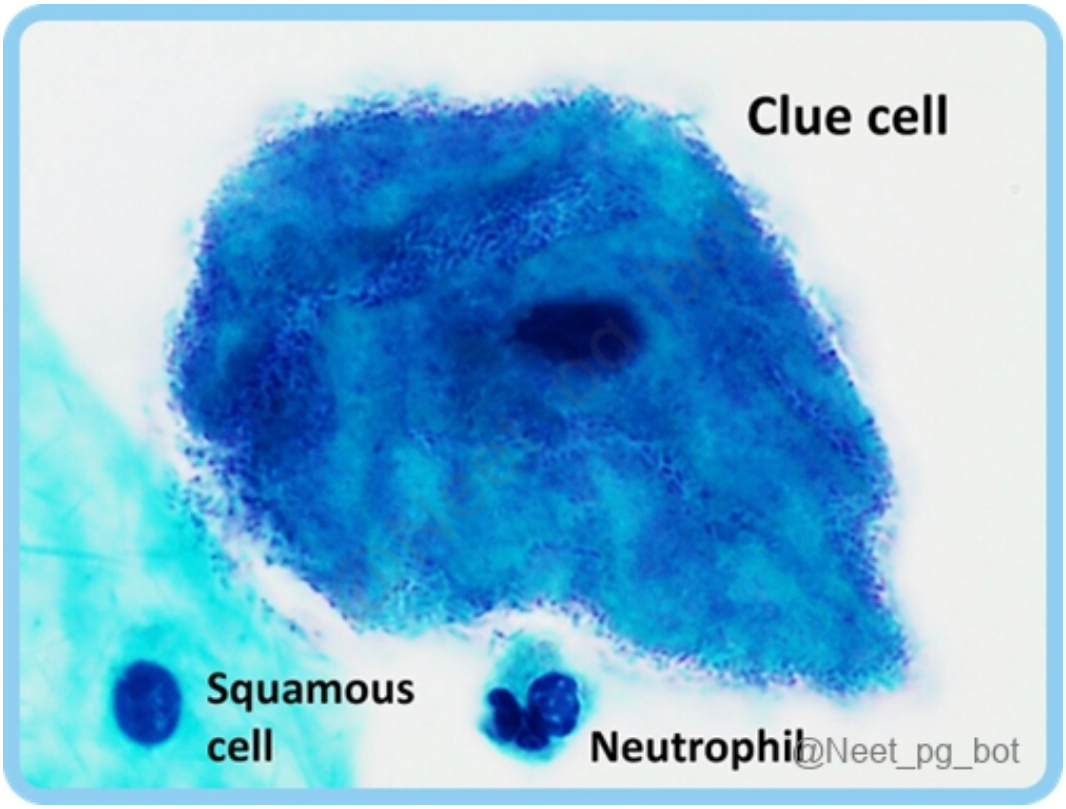
Q2: What kit would you recommend for a 30-year-old woman who has been experiencing creamy discharge with a fishy odor for the past month, AMSEL's score of 3 out of 4 on the Whiff test, and positive amines in the secretion when tested with 10% K■■? (Q859961)

A. Red kit

B. Blue kit

C. Green kit

D. Grey kit



Correct Answer: C. Green kit

Explanation: It is indicative of Bacterial vaginosis. The colour-coded kit for vaginitis in the Syndromic management of STI kits is green. Suraksha Clinics: Integrating STI/RTI Treatment and HIV/AIDS Control Government STI/RTI clinics, branded as "Suraksha Clinics," offer free standardized integrated STD and RTI treatment services at district-level and above healthcare facilities. Under National AIDS Control Program (NACP) Referral Centers STD Clinics at district, block, and First Referral Unit (FRU) levels act as referral centers for specialized treatment. Counselling and Condom Distribution Counselling services and high-quality condoms are provided to promote safer sexual practices. Utilizes the expertise of NGOs in providing counselling services at

STD clinics. Training and strengthening existing centers Existing STD clinics in hospitals and medical colleges are strengthened with technical support, equipment, Training for medical staff to manage STDs/RTIs using a syndromic approach. Pre-packed STI/RTI Color-Coded Kits Free pre-packed kits provided to clinics, centrally procured and distributed through State AIDS Control Societies. Kit Colors and Conditions Kit 1 (Grey) (Option D ruled out) Urethral discharge and cervicitis Kit 2 (Green) (Option C) Vaginitis Kit 3 (White) (Non-herpetic) Genital ulcers Kit 4 (Blue) (non-herpetic) in patient allergic to penicillin (Option B ruled out) Genital ulcers Kit 5 (Red) (herpetic) (Option A ruled out) Genital ulcers Kit 6 (Yellow) Lower abdominal pain (PID) Kit 7 (Black) Inguinal bubo Kit 8 (Brown) Anorectal discharge



References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg 501

https://naco.gov.in/sti-rti-services

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: In a village with a given population, the total number of live births in a year is 4000. 40 newborns died within the first 7 days of life whereas 40 died due to various causes between 8 to 28 days of life. There were 50 deaths between the age of 1 month to 6 months of life and O of them died in utero. What is the neonatal mortality rate in this population? (Q859811)

A. 10

B. 20

C. 30

D. 40

Correct Answer: B. 20

Explanation: Neonatal mortality rate (NMR) calculation: NMR = (Number of neonatal deaths/Total number of live births) x 1,000 Given: Total live births = 4,000 Deaths (0-7 days) = 40 Deaths (8-28 days) = 40 NMR ((40+40)/4,000) x 1,000 = (80/4,000) x 1,000 = 0.02 x 1,000 = 20 Interpretation: The NMR in this population is 20 per 1,000 live births, indicating 20 deaths within the first 28 days of life per 1,000 live births. Causes of Neonatal deaths: Most common cause - Birth Asphyxia or Hypoxia Other causes : Prematurity and low birth weight, neonatal pneumonia, sepsis, congenital anomalies, diarrhea, injuries, and other non-communicable diseases. Danger Signs: Refusal to feed, lethargic, cold to touch, difficult or rapid breathing, convulsions, persistent vomiting, jaundice at birth, blue color of extremities. Other Neonatal Mortality Indicators: Early neonatal mortality rate (No. of deaths of children (neonate) 0 – 7 days of life / live births) x 1000) Late neonatal mortality rate (No. of deaths of children (neonate) 8th – 28 days of life / live birth) x 1000) Post neonatal mortality rate (No. of deaths of children (neonate) 29th day - 1 year of life / live births) x 1000)

References:

K.Park’s Textbook of Preventive and Social Medicine 27th Edition. Pg. 643

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which one of the following options does not meet the minimum standards for maintaining sanitation in schools and their surroundings in India? (Q859209)

A. Desks to be of 'Minus type'

B. Combined doors + windows area = 25% of floor space area

C. Maximum 40 students per classroom

D. One urinal for 70 students and one latrine for 120 students

Correct Answer: D. One urinal for 70 students and one latrine for 120 students

Explanation: The correct standards are 1 urinal for 60 students and 1 latrine for 100 students. Healthful School Environment Aspect Details Location Centrally situated with proper approach roads, away from busy places like roads, factories, and marketplaces. School premises should be fenced and hazard-free. Site High, well-drained land. 10 acres for higher elementary schools, 5 acres for primary schools, with additional 1 acre per 100 students. Structure Single-story buildings preferred. Exterior walls should be 10 inches thick and heat-resistant Doors and windows Combined door + window area = atleast 25% of floor area. Cross ventilation should be present.

Classroom No more than 40 students per room. Minimum 10 sq. ft. per student. Color of Interior White interior walls, periodically white-washed. Furniture Desks should be of ‘minus type’. Chair with proper back rest. (Option A ruled out) Lighting Natural light from the left side, not from the front. Water Supply Independent source of safe, potable water, continuous supply distributed from taps. Lavatory One urinal per 60 students, one latrine per 100 students. Separate facilities for boys and girls.

References:

K. Park’s Textbook of Preventive and Social Medicine 27th Edition. Pg. 658, 659

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: The true statement about cow's milk (per 100 gm) when compared to breast milk is: (Q859199)

A. Lower sodium content

B. Higher lactose content

C. Lower protein

D. High protein

Correct Answer: D. High protein

Explanation: Cow's milk does have a higher protein content compared to breast milk. The protein content in cow's milk is generally around 3.2 grams per 100 grams, whereas breast milk contains around 1.1 gram of protein per 100 grams. Nutritional Component Human Milk Cow Milk Protein Content Lower, easily digestible Higher, harder to digest (Option D) Essential Amino Acids (e.g., cysteine, taurine) Rich Lower Vitamin A & C Rich Lower Iron Higher bioavailability Lower bioavailability Calcium Adequate, better absorbed Higher content, less effectively absorbed Fat Content Higher proportion of essential fatty acids (e.g., linoleic, alpha-linolenic) Lower proportion of essential fatty acids Carbohydrate content Lactose: 7.5 g/100 mL Lactose: 5 g/100 mL Digestibility Almost completely digested Much is excreted undigested Risk of Overloading Kidneys Low High (hence dilution recommended)

References:

K.Park’s Textbook of Preventive and Social Medicine 27th Edition. Pg. 616

Lactose intolerance and gastrointestinal cow’s milk allergy in infants and children – common misconceptions revisited - PMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A pregnant woman whose niece lives with her in the same house contracted Varicella. She tested negative for serum antibodies against varicella. What would this mean? (Q856057)

A. She is immune to zoster

B. She is susceptible to zoster

C. She is susceptible to chickenpox

D. She is immune to chickenpox

Correct Answer: C. She is susceptible to chickenpox

Explanation: Varicella-Zoster Virus (VZV) causes chickenpox (primary infection) and herpes zoster (reactivation). Serum antibodies against VZV indicate prior infection or vaccination. A negative antibody test means she has never had chickenpox nor been vaccinated , making her susceptible to primary varicella infection (chickenpox) . This is particularly concerning in pregnancy, as maternal varicella can lead to congenital varicella syndrome or severe neonatal infection. Varicella Susceptibility and Immunity Serology Interpretation Risk Status Positive VZV IgG Past infection or vaccination Immune to chickenpox Negative VZV IgG No prior exposure Susceptible to chickenpox Positive VZV IgM Recent infection Active chickenpox infection She is immune to zoster (Option A): Incorrect because her negative antibody test means she has never had VZV, so reactivation as zoster is not possible. She is susceptible to zoster (Option B): Incorrect because zoster occurs due to reactivation of prior VZV infection, which she has never had. She is immune to chickenpox (Option D): Incorrect because a negative antibody test indicates no immunity to VZV.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 156- 159

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 161- 163

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: According to the 2010-2013 verbal autopsy report, please arrange the following causes of neonatal mortality in descending order, starting from the highest to the lowest. 1. Prematurity and low birth weight 2. Birth injuries and birth asphyxia 3. Congenital anomalies 4. Sepsis (Q856610)

A. 1>2>4>3

B. 1>4>2>3

C. 4>1>2>3

D. 1>2>3>4

Correct Answer: A. 1>2>4>3

Explanation: Prematurity and low birth weight: Major contributors to neonatal mortality due to increased risk of complications. Birth injuries and birth asphyxia: Complications during labor and delivery leading to neonatal death. Sepsis: Severe infection in newborns, associated with high mortality if not promptly treated. Congenital anomalies: Structural or functional abnormalities at birth, less common but can still contribute to neonatal mortality. Incorrect Options: Options B, C and D are Incorrect.

References:

Park's textbook of preventive medicine, edition: 25, page no:619

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: As per the verbal autopsy report 2010-2013, arrange the most common cause of death among 1-4-year-old children in descending order: . Diarrhea 2. Pneumonia 3. Malaria 4. Injuries (Q856583)

A. 2>1>3>4

B. 4>1> 2>3

C. 1>2>4>3

D. 2>1>4>3

Correct Answer: D. 2>1>4>3

Explanation: Pneumonia: Leading cause of death in children aged 1-4 years, particularly where healthcare and vaccination are limited. Diarrhea: Common cause of childhood mortality, worsened by inadequate water, sanitation, and healthcare. Injuries: Also a leading cause of child mortality, including accidents and trauma, though slightly less common than pneumonia, diarrhea, and malaria. Malaria: Significant cause of death in areas with high mosquito-borne malaria prevalence, especially risky for young children. Rank Cause of Death Deaths (%) Male Female Person 1 Pneumonia 17.6 18.9 18.2 2 Diarrhoeal diseases 16.3 19.4 17.9 3 Injuries 18.5 15.3 16.9 4 Other noncommunicable diseases 11.8 9.4 10.6 5 Malaria 7.4 6.5 7.0 6 Fever of unknown origin 6.5 6.2 6.3 7 Other infectious and parasitic diseases 3.9 4.2 4.0 8 Congenital anomalies 3.9 3.2 3.5 9 Meningitis/encephalitis 3.5 3.5 3.5 10 Ill defined or cause unknown 3.3 3.1 3.2 All Other Remaining Causes 7.3 10.4 8.9 Total 100.0 100.0 100.0

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page no: 596 A Joint Report of the Registrar General of India and the Centre for Global Health Research

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Compared to a pregnant female, a lactating female would require a higher level of nutrient supplementation for which of the following? (Q855284)

A. Vitamin A

B. Calcium

C. Iron

D. Folic acid

Correct Answer: B. Calcium

Explanation: Lactating females require higher calcium supplementation compared to pregnant females due to the significant calcium demand for breast milk production. This is crucial for infant bone and teeth development, as well as maintaining maternal muscle and nerve function. Incorrect Options: Vitamin A (Option A): While important, the need for vitamin A doesn't necessarily increase during lactation compared to pregnancy. Iron (Option C): Iron requirements typically decrease slightly during lactation as maternal blood volume decreases postpartum. Folic Acid (Option D): Folic acid's importance remains, but the requirement doesn't notably increase during lactation compared to pregnancy.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: According to WHO, what is the minimum number of antenatal visits? (Q857743)

A. 8

B. 4

C. 12

D. 14

Correct Answer: A. 8

Explanation: ntenatal care contact) is 8. Schedule of visits: 1st Trimester: 1 visit (in the first 12 weeks) 2nd Trimester: 2 visits (at 20 & 26 weeks) 3rd Trimester: 5 visits (at 30, 34, 36, 38 and 40 weeks) It recommends that pregnant women have their first contact in the first 12 weeks of gestation, with subsequent contacts taking place at 20, 26, 30, 34, 36, 38, and 40 weeks' gestation.

References:

WHO guidelines on ANC visits

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: The pregnancy test kit launched by the government is called: (Q857728)

A. NISHCHAY

B. NIKSHAY

C. NIKUSTH

D. AXSHYA

Correct Answer: A. NISHCHAY

Explanation: hild Health) program. Family Planning Programme: Mission Parivar Vikas It aims to promote family planning and reduce the population Nayi pahel kit- family planning kit for newlyweds Saas bahu samelan- encourages daughter-in-law and mother-in-law to discuss family planning Saarthi- family planning mobile van NISHCHAY Home testing UPT provided by ASHA {{caption_text}} Jansankhya sthirata kosh Population stabilization fund ADD ON: provides incentives for delaying marriage, birth spacing {{caption_text}} Gather approach Contraception counseling method Stands for Greet, Ask, Tell, Help, Explain, and Return NIKSHAY (Option B): Technology-based surveillance for TB patients (TB DOTS - NTEP). NIKSUTH (Option C): Technology-based surveillance for Leprosy patients. AXSHYA (Option D): Nationwide TB initiative funded by the Global Fund to Fight AIDS, TB, and Malaria.





References:

https://sansad.in/getFile/loksabhaquestions/annex/172/AU4337.pdf?source=pqals

https://www.nhmmp.gov.in/WebContent/FW/Scheme/Scheme2017/Mission_Parivar_Vikas.pdf

https://pubmed.ncbi.nlm.nih.gov/23564053/

https://www.aiims.edu/aiims/events/Gynaewebsite/ec_site/manual/1_3_1.htm

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which is not a part of Anemia Mukt Bharat Programme? (Q852873)

A. 6 beneficiaries

B. 6 interventions

C. 6 institutional mechanisms

D. 6 health functionaries

Correct Answer: D. 6 health functionaries

Explanation: he Anemia Mukt Bharat (AMB) Programme is structured around six key components: 6 Beneficiaries - Target groups include children, adolescents, pregnant and lactating women, and women of reproductive age. 6 Interventions - Includes iron supplementation, deworming, BCC (Behavior Change Communication), dietary diversification, testing, and treatment. 6 Institutional Mechanisms - Ensures effective program implementation through policies, supply chain management, training, etc. However, there is no mention of "6 health functionaries" in the official framework, making it the incorrect option. Anemia Mukt Bharat Programme Component Details Launch Year 2018 Objective Reduce anemia prevalence across different population groups 6 Beneficiaries Children (6-59 months, 5-9 years), Adolescents (10-19 years), Pregnant & Lactating women, Women of reproductive age 6 Interventions Iron supplementation, Deworming, Delayed cord clamping, BCC, Testing & treatment, Dietary diversification 6 Institutional Mechanisms Political commitment, Supply chain management, Training & capacity building, Monitoring, Convergence, Research & Innovation Target Reduce anemia prevalence by 3% per year 6 Beneficiaries (Option A): Correct because AMB targets 6 specific groups. 6 Interventions (Option B): Correct as AMB includes 6 strategies to combat anemia. 6 Institutional Mechanisms (Option C): Correct since it ensures the smooth implementation of AMB.

References:

https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797

https://pmposhan.education.gov.in/aboutus.html

https://nhm.gov.in/images/pdf/programmes/maternal-health/guidelines/5x5_matrix_2502.pdf

https://wcd.nic.in/kishori-shakti-yojana

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: When should a primigravida initiate breastfeeding after a normal delivery of a healthy baby? (Q858015)

A. Within 1 hour

B. After 1 hour

C. After 4-6 hours

D. After 24 hours

Correct Answer: A. Within 1 hour

Explanation: For a primigravida (first-time mother) delivering a healthy baby through normal delivery, it is recommended to initiate breastfeeding within 1 hour after birth. Early initiation of breastfeeding is crucial because: It helps in the initiation of milk production . The baby receives the first milk , known as colostrum , which is rich in nutrients and antibodies, providing essential protection against infections. Early breastfeeding also promotes bonding between the mother and the baby. After 1 hour (Option B): is incorrect because, as per guidelines, the baby should begin breastfeeding within the first hour of birth, not after it. After 4-6 hours (Option C): is incorrect. Delaying breastfeeding for this long can lead to problems like poor milk production and inadequate intake by the baby. After 24 hours (Option D): is incorrect. Waiting for 24 hours is too long, and early breastfeeding is essential for both maternal and infant health.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 623, 991

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A pregnant woman with a 2-year-old child gives a history of completing required antenatal vaccinations during her previous pregnancy. Which of the following would you recommend for her current pregnancy? (Q858006)

A. Give a booster dose of TT

B. Give a booster dose of Td

C. Give 2 doses of TT

D. Give 2 doses of Td

Correct Answer: B. Give a booster dose of Td

Explanation: The Td (Tetanus and Diphtheria) vaccine is recommended as a booster dose during pregnancy, especially if the woman has completed the required antenatal vaccinations previously. In India, the current guidelines suggest giving two doses of Td (Tetanus and Diphtheria) during pregnancy: one at the start of pregnancy and one between 20 to 26 weeks . Tetanus Toxoid (TT) is part of routine antenatal immunization, but the Td vaccine is recommended if there is a history of prior TT vaccination in previous pregnancies, as it also covers Diphtheria . Give a booster dose of TT (Option A): is not correct in this context, as the current guidelines recommend Td (Tetanus and Diphtheria) for booster doses, not TT . Give 2 doses of TT (Option C): Incorrect because only a booster dose of Td is needed. Giving 2 doses of TT is not the standard recommendation if the woman has completed required antenatal vaccinations in the previous pregnancy. If the gap between two deliveries is more than 3 years , the mother is treated as unimmunized for tetanus during pregnancy. Give 2 doses of Td

(Option D): is not correct because only 1 dose of Td is recommended for the current pregnancy, not two. The second dose of Td is given between 20-26 weeks of pregnancy if the first dose was given early in the pregnancy.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 356

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A 22-year-old female comes to the STI clinic with minimal cervical discharge. On speculum examination, erosions are seen on the cervix. Which of the following kit should be given to this patient? (Q855449)

A. Green

B. Red

C. Grey

D. Yellow

Correct Answer: C. Grey

Explanation: The probable diagnosis would be cervicitis There are 7 color-coded STD kits. Kit 1- Grey is given for cervicitis Colour-coded STD kits along with medicines: Kit Colour Indication Medicines 1 Grey · Urethral discharge syndrome · Vaginal discharge syndrome (For Cervicitis) · Painful scrotal swelling · Presumptive treatment Azithromycin, cefixime 2 Green Vaginitis Secnidazole, fluconazole 3 White Genital ulcer disease syndrome (For Syphilis and chancroid) Azithromycin, B. Penicillin 4 Blue → Genital ulcers → Penicillin allergy + Azithromycin, doxycycline 5 Red Herpetic genital ulcers Acyclovir 6 Yellow Lower abdominal pain, Pelvic Inflammatory Disease Cefixime metronidazole, doxycycline 7 Black Inguinal bubo Doxycycline 8 Brown Anorectal discharge syndrome Cefixime, doxycycline

References:

Park textbook of preventive and social medicine, 25th edition, Pg. no. 472, 362.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Which of the statements about palliative care is true? A. Disease is the centre of concern B. The patient is sovereign C. Death should neither be prolonged nor

hastened D. The aim is to improve the quality of life E. The intention is to cure F. Imperative to do something than passively observe (Q857369)

A. A, B, C, D

B. C, E, F

C. B, D, F

D. A, B, E, F

Correct Answer: C. B, D, F

Explanation: Palliative care: It is a specialized medical care, where the main aim is to improve the quality of life and alleviate the suffering of patients . It addresses the physical, psychosocial, and spiritual aspects of patients who have a life-threatening disease with interprofessional team approach Management of symptoms and patient distress is the central focus Care is not limited to a hospital; there are many community clinics and in-home opportunities Hospice care is a form of palliative care specifically designed for patients with a terminal illness and a prognosis of six months or less to live. It focuses on providing comfort and support to patients and their families in the final stages of life, often foregoing curative treatments.

References:

https://anaesthetics.ukzn.ac.za/wp-content/uploads/2022/11/Palliative-Care-StatPearls-NCBI-Bookshelf.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: In a population with a total of 4050 births, there are 50 stillbirths, 50 neonatal deaths within the first 7 days, and 150 deaths between 8 and 28 days of life. What is the Neonatal Mortality Rate (NMR) for this population? (Q859997)

A. 12.5per 1000 live births

B. 50per 1000 live births

C. 49.4per 1000 live births

D. 62.5per 1000 live births

Correct Answer: B. 50per 1000 live births

Explanation: Neonatal Mortality Rate (NMR) measures the number of deaths of infants within the first 28 days of life per 1000 live births. It is calculated as, Neonatal Mortality Rate (NMR) = (No. of deaths of children (neonates) 0 – 28 days of life / live births) x 1000) Calculate Live Births: Live births = Total births - stillbirths Live births =

4050 - 50 = 4000 Determine the Total Number of Neonatal Deaths: Neonatal deaths include deaths within the first 7 days and between 8 and 28 days. Total neonatal deaths = 50 (deaths within the first 7 days) + 150 (deaths between 8 and 28 days) = 200 Calculate NMR: NMR = (200/4000) x 1000 = 50

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 643

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: What were the goals for Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) by 2023? (Q859991)

A. 70 per 100,000 live births and 30per 1000live births

B. 30 per 100,000 live births and 70per 1000 live births

C. 100 per 100,000 live births and 30per 1000 live births

D. 30 per 100,000 live births and100per 1000 live births

Correct Answer: A. 70 per 100,000 live births and 30per 1000live births

Explanation: Correct Option A- 70 per 100,000 live births and 30 per 100,000 live births The goal for MMR and IMR by 2023: Maternal Mortality Rate (MMR): Reduce to less than 70 per 100,000 live births. Infant Mortality Rate (IMR): Reduce to less than 30 per 1,000 live births.

$$\text{Maternal Mortality Ratio} = \frac{\text{No. of maternal deaths} \times 100000}{\text{No. of Live births}}$$

$$\text{Maternal Mortality Rate} = \frac{\text{Number of maternal deaths} \times 100000}{\text{No. of women in reproductive age group}}$$

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 596

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Calculate the maternal mortality ratio (MMR) for the year 2023, given the following events: Total women who died: 6 Total live births: 4000 Causes of death: 1 due to road traffic accident (RTA) 1 due to sepsis 1 due to obstructed labor 1 due to eclampsia 1 due to ectopic pregnancy 1 due to snake bite (Q844092)

A. 75

B. 150

C. 100

D. 125

Correct Answer: C. 100

Explanation: Correct Option C - 100: Maternal Mortality Ratio (MMR) is calculated as the number of maternal deaths per 100,000 live births. Maternal deaths include those caused by complications of pregnancy, childbirth, or within 42 days of termination of pregnancy, excluding accidental or incidental causes. Identifying Maternal Deaths: Maternal deaths: Sepsis, obstructed labor, eclampsia, ectopic pregnancy. Non-maternal deaths: Road traffic accident (RTA), snake bite. Incorrect Options: Options A, B and D are incorrect as given above.

Total Maternal Deaths: 4 (Sepsis, obstructed labor, eclampsia, ectopic pregnancy)

Formula:

$$\text{MMR} = \left(\frac{\text{Number of maternal deaths}}{\text{Total live births}}\right) \times 100,000$$

$$\text{MMR} = \left(\frac{4}{4000}\right) \times 100,000 = 100$$

@Neet_pg_bot

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Given 500 live births, 12 stillbirths, and 9 deaths within the first 7 days, calculate the Early Neonatal Mortality Rate (ENMR). (Q844086)

A. 18 per 1,000 live births

B. 36per 1,000 live births

C. 24per 1,000 live births

D. 50per 1,000 live births

Correct Answer: A. 18 per 1,000 live births

Explanation: Correct Option A - 18: The Early Neonatal Mortality Rate (ENMR) is calculated as the number of deaths of live-born infants within the first 7 days of life per 1000 live births. Since stillborn babies were never alive , they cannot be part of a mortality rate that measures deaths among live births . Incorrect Options: Options B, C and D are incorrect as given above.

Formula:

$$\text{ENMR} = \left(\frac{\text{Number of deaths in the first 7 days}}{\text{Total number of live births}}\right) \times 1000$$

Substituting the given values:

$$\text{ENMR} = \left(\frac{9}{500}\right) \times 1000 = 18$$

@Neet_pg_bot

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: The formula with the numerator being maternal deaths and the denominator being women of reproductive age represents which of the following? (Q844077)

A. Maternal mortality rate

B. Maternal mortality ratio

C. Perinatal mortality rate

D. Perinatal mortality ratio

Correct Answer: A. Maternal mortality rate

Explanation: Correct Option A - Maternal mortality rate: The maternal mortality rate (MMR) is calculated as the number of maternal deaths per 100,000 women of reproductive age (usually defined as ages 15-49) in a given time period. It measures the risk of maternal death in the general population of women of reproductive age. Incorrect Options: Option B - Maternal mortality ratio: This ratio measures the number of maternal deaths per 100,000 live births in a given time period. It reflects the risk of death once a woman becomes pregnant, not the general population risk. Option C - Perinatal mortality rate: Perinatal mortality rate is the number of late fetal deaths (≥28 weeks) plus early neonatal deaths (0–7 days) per 1,000 total births (live births + late fetal births). Option D - Perinatal mortality ratio: This term is not commonly used. If used, it might be mistaken for the perinatal mortality rate, but it does not apply to maternal deaths or reproductive-age women.

References:

Park’s textbook of preventive medicine, 25th Edition

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: A mother delivers in a rural area under the guidance of a skilled care attendant. Which of the following is incorrect regarding the care provided by the skilled care attendant at birth? (Q844000)

A. Start breastfeeding as early as possible

B. Cover the baby's head and body

C. Bathe the baby with warm water

D. Clear eyes with a sterile swab

Correct Answer: C. Bathe the baby with warm water

Explanation: Correct Option C - Bathe the baby with warm water: This option is incorrect because immediate bathing can lead to hypothermia and is discouraged right after birth. Instead, the focus should be on keeping the baby warm and starting breastfeeding. Incorrect Options: Option A - Start breastfeeding as early as possible: Early initiation of breastfeeding, ideally within the first hour of birth, is crucial for the baby’s health. It helps with bonding, provides essential nutrients, and supports the infant's immune system. Option B - Cover the baby's head and body: Covering the baby’s head and body immediately after birth is important to prevent heat loss and maintain the baby’s body temperature, especially in rural or resource-limited settings. Option D - Clear eyes with a sterile swab: Clearing the baby’s eyes with a sterile swab helps prevent eye infections, which is part of routine newborn care.

↑ *Back to this question in Part A*

@Neet_pg_bot

• [10_Nutrition and Health] 038 Macronutrients

« Back to Folder Directory

[10_Nutrition and Health] 038 Macronutrients — Quick Jump

Q1 (p. 1422) *Q2 (p. 1422)* *Q3 (p. 1423)* *Q4 (p. 1424)* *Q5 (p. 1425)* *Q6 (p. 1426)*
Q7 (p. 1426) *Q8 (p. 1427)* *Q9 (p. 1428)* *Q10 (p. 1429)* *Q11 (p. 1430)* *Q12 (p. 1431)*
Q13 (p. 1432) *Q14 (p. 1432)* *Q15 (p. 1433)*

Q1: Which of the following best describes a balanced diet? (Q840720)

A. A diet containing micronutrients forms the bulk of the food.

B. A diet consisting of 70% carbohydrates, 10% proteins, and 20% fats.

C. A diet adhering to dietary goals, focused on high protein and vitamin intake.

D. A diet consisting of 150 gm/day of cereals, 40 gm/day of pulses and 10 gm/day of fat.

Correct Answer: B. A diet consisting of 70% carbohydrates, 10% proteins, and 20% fats.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Balanced diet: A diet containing all macro and micronutrients in required quantities to prevent any excess or deficiency. Macronutrients Micronutrients Form the main bulk of the food (Option A) Proportion of total energy intake (Option B) : Protein: 10-15%, 4 kcal/ gram Carbohydrates: 50-80%, 4 kcal/gram Fats: 15-30%, 9 kcal/gram Required in small amounts (Option C) Consists of vitamins and minerals. Major minerals: Magnesium, Trace elements, Iron, Iodine, Zinc, Sodium, Potassium, Calcium. Recommended Intake of Nutrients: (Option D) Food item Man (sedentary) Female (sedentary) Cereals 460 gm/day 410 gm/day Pulses 40 gm 40 gm Leafy vegetables 40 gm 100 gm Milk 150 ml 100 ml Oil & fat 40 gm 20 gm Sugar 30 gm 20 gm

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 751, 753, 778

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A 55-year-old patient with a history of diabetes mellitus and hypertension visits your clinic. During the consultation, you advise the patient to adopt a diet that reduces

fat and salt intake. What type of diet is being recommended to this patient? (Q840721)

A. Staple diet

B. Prudent diet

C. High-protein diet

D. Balanced diet

Correct Answer: B. Prudent diet

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Prudent diet: A temporary diet that adheres to dietary goals. Beneficial for managing diabetes, post-op patients, cardiovascular and renal diseases. Includes: Fat intake: < 20-30% of total energy intake. Saturated fats: < 7% of total energy intake Cholesterol < 200 mg/day Salt intake to <5 gm per day Increase complex carbohydrates and avoid alcohol consumption. Cholesterol: HDL Ratio < 3.5 Diet adapted for special needs: pregnancy, lactation, growth etc. Most people consume a staple diet (Option A) , which is culturally acceptable depending on the plants native to a region. A high-protein diet (Option C) emphasizes higher protein intake and is often used for muscle-building or specific weight-loss plans. Balanced diet (Option D): A diet that includes all the necessary nutrients (carbohydrates, proteins, fats, vitamins, and minerals) in the right proportions. Relevance: While generally healthy, this is too broad a term. It doesn't specifically emphasize reduced fat and salt, which is key in this case.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 753

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Match the following types of food sources with their respective limiting amino acids Food source Amino-acid 1. Corn a. Lysine 2. Wheat b. Methionine 3. Nuts c. Tryptophan 4. Legumes d. Threonine (Q840738)

A. 1:c, 2:d, 3:a, 4: b

B. 1:a, 2:c, 3:d, 4: b

C. 1:c, 2:a, 3:b, 4: d

D. 1:d, 2:c, 3:a, 4: b

Correct Answer: A. 1:c, 2:d, 3:a, 4: b

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Food item Limiting amino acid 1. Corn/ Maize Tryptophan & lysine (most common) Tryptophan is a precursor of Vitamin B3 (niacin), hence its deficiency can lead to Pellagra, a condition characterized by “4 D’s” i.e., dermatitis, diarrhea, dementia, and in severe cases, death. 2. Cereals (Wheat, Rice) Threonine & lysine Rice has a slightly higher lysine content 3. Nuts Lysine 4. Legumes/Pulses Methionine & Cystine Limiting Amino Acids: These are essential amino acids in short supply in certain foods. Lysine most deficient amino acid Combining vegetarian foods (e.g., rice and dal) allows proteins to complement each other, creating a complete amino acid profile. Properly planned vegetarian diets with cereals, pulses, and vegetables can provide high-quality protein comparable to animal sources.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 741-743

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following statements best describes the protein efficiency ratio (PER)? (Q840739)

A. The ratio of protein to the total energy in a diet

B. Measure of protein quality based on weight gain per unit of protein consumed

C. The balance of essential amino acids in a protein source

D. The proportion of protein retained for growth expressed as the amount of nitrogen absorbed.

Correct Answer: B. Measure of protein quality based on weight gain per unit of protein consumed

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Quantitative measures of protein: Protein-energy ratio (Option A) Protein Efficiency Ratio (Option B) Energy from protein in food product/total energy x 100 PER > 2.5: Better utilisation and promotes growth (animal protein) PER=0.5-2.5: supports life (vegetable protein) Maximum Protein energy ratio = Fish (80%) Weight gain (g) of test subject/amount of protein consumed(g) x 100 Laboratory indicator. Assess how well the protein supports growth. The balance of essential amino acids in a protein source relates to the Amino Acid Score , which measures the adequacy of essential amino acids in a protein source compared to a reference protein. (Option C) Amino Acid Score = (mg of each essential amino acid in the test protein■ / mg of the same amino acid in the reference protein) x 100 Biological value (BV) refers to the percentage of protein retained in the body for growth, measured in terms of the amount of nitrogen absorbed. (Option D) Biological value = (Nitrogen retained /

Nitrogen absorbed) x 100 Net Protein Utilization (NPU): NPU is similar to Biological Value (BV) but accounts for digestibility . It measures the proportion of dietary protein that is actually retained by the body. NPU = (Nitrogen Retained / Nitrogen Intake) x 100 While BV measures nitrogen retained out of nitrogen absorbed , NPU measures nitrogen retained out of the total nitrogen eaten . Therefore, NPU = Biological Value X Digestibility . Protein Digestibility Corrected Amino Acid Score (PDCAAS): It evaluates a protein based on both the amino acid requirements of humans and their ability to digest it. PDCAAS = Amino Acid Score x True Digestibility The score is "truncated" at 1.0 . This means any protein that meets 100% of the requirements (like soy or dairy) is scored the same, even if one is actually superior in quality. Digestible Indispensable Amino Acid Score (DIAAS): Ileal Digestibility: Unlike PDCAAS, which looks at "fecal" digestibility, DIAAS measures digestibility at the end of the small intestine (ileum). This is more accurate because bacteria in the large intestine can consume nitrogen, skewing fecal results. No Truncation: Scores are not capped at 100. This allows for a more precise comparison of high-quality animal proteins. DIAAS% = 100 x (mg of digestible indispensable amino acid in 1g of dietary protein / mg of the same amino acid in 1g of reference protein)

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 725

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following correctly describes the food's digestible amino acid content ratio to the same amino acid in a reference pattern? (Q840742)

A. Digestible Indispensable Amino Acid Score

B. Digestibility coefficient

C. Net Protein Utilization

D. Reference protein

Correct Answer: A. Digestible Indispensable Amino Acid Score

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Qualitative measures of protein 1. Digestible Indispensable Amino Acid Score (DIAAS) (Option A) Digestible dietary amino acid mg in 1g of dietary protein/same dietary amino acid mg in 1g of reference protein X 100 Ideal digestibility coefficient of a food product Best indicator to measure protein quality 2. Digestibility coefficient (Option B) Amount of amino acid absorbed / amount of protein ingested. External protein quality indicator of the food product. 3. Net Protein Utilization (NPU) (Option C) Digestibility coefficient (external indicator) x Biological value (internal indicator) / 100 Percentage of the ingested nitrogen retained in the body 1 gm protein = 6.25gm nitrogen NPU Indian diet: 50-80 4. Biological Value Nitrogen retained/ Nitrogen absorbed x 100 5. Reference protein (Option D) It is the standard for measuring other proteins, such as eggs, because it has the highest NPU and contains all essential amino acids.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page725

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Why is an egg known as a reference protein? (Q840744)

A. It is the easiest protein to digest.

B. It has the highest protein content per gram.

C. It contains all essential amino acids.

D. It has the longest shelf life of all proteins.

Correct Answer: C. It contains all essential amino acids.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Eggs are known as reference proteins because they provide all the essential amino acids in the right proportions needed by the human body. This complete amino acid profile makes eggs a benchmark for evaluating the protein quality of other foods. Egg Importance Eggs are highly nutritious and rich in protein, essential vitamins, & minerals. They support muscle building, brain health, and overall wellness. Rule of 6 6 grams of protein 6 grams of fat 60 calories per large egg 6 essential vitamins (A, B2, B12, D, E, K) 60 grams average weight Others: 6x5=30 mg Calcium 6x0.25=1.5mg Iron The Net Protein Utilization (NPU) of eggs is typically around 96% . This means that 96% of the protein absorbed from eggs is retained by the body for growth and maintenance. Eggs (Option A) are easy to digest and have high bioavailability, meaning the body can efficiently absorb and utilise the protein; this characteristic alone does not make them a reference protein. Eggs are a good source of protein, but they do not have the highest protein content per gram compared to other protein-rich foods like certain types of fish or meat. (Option B) Eggs have a reasonable shelf life when stored properly, but many other protein sources, such as dried legumes or certain preserved meats, have longer shelf lives. (Option D)

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 745

IAPSM textbook of Community medicine, 2nd edition, Page 41

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: All are true regarding unsaturated fats except? (Q840747)

A. Contain one or more double bonds in their fatty acid chains.

B. Usually liquid at room temperature.

C. Primarily found in plant-based sources and fish.

D. Increase the risk of cardiovascular disease.

Correct Answer: D. Increase the risk of cardiovascular disease.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Unsaturated fats lower the risk of cardiovascular disease. Fats, or lipids, are essential macronutrients that play crucial roles in the body, including energy storage, hormone production, and cell structure maintenance. Importance: Energy Source: 9 calories per gram, more than twice the energy carbohydrates or proteins provide. Cellular Functions: Integral components of cell membranes, maintaining fluidity and integrity. Absorption of Fat-Soluble Vitamins A, D, E, and K Hormone Production: Steroid hormones such as estrogen, testosterone, and cortisol. Insulation and Protection. Types of Fats Saturated Fats Fatty acid chains have no double bonds, making them solid at room temperature. Predominantly found in animal products such as meat, dairy, and eggs, as well as some plant-based oils like coconut oil and palm oil. Consuming high amounts is associated with increasing levels of LDL cholesterol (bad cholesterol) in the blood, which can raise the risk of cardiovascular diseases such as heart disease and stroke. Unsaturated Fats Contain one or more double bonds in their fatty acid chains, which makes them usually liquid at room temperature. (Option A and B) Primarily found in plant-based sources such as oils, nuts, and seeds, as well as in fish. (Option C) Considered healthier for consumption as they Improve blood cholesterol levels, reduce inflammation, and lower the risk of cardiovascular disease . (Option D) Types: Monounsaturated fats: single, double bond. Polyunsaturated fats: Multiple double bonds; includes Omega-3 and Omega-6 Trans Fats Industrially produced fats are found in partially hydrogenated oils.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 725-728

IAPSM textbook of Community medicine, 2nd edition, Page 30,31

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A patient with a history of cardiovascular disease is advised by their doctor to incorporate oils rich in polyunsaturated fatty acids (PUFA) into their diet, with a recommendation of oils containing more than 50% PUFA. Which of the following oils would not be recommended? (Q840750)

A. Safflower Oil

B. Sunflower Oil

C. Soybean Oil

D. Coconut Oil

Correct Answer: D. Coconut Oil

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Coconut oil is primarily composed of saturated fats, with very low levels of polyunsaturated fats. It contains approximately 6% PUFA, significantly lower than oils like safflower, sunflower, and soybean oils, which contain more than 50% PUFA. Due to its high saturated fat content, coconut oil raises LDL cholesterol levels and potentially increases the risk of cardiovascular disease. PUFA Safflower Oil (Option A) 75 Sunflower Oil (Option B) 62 Soybean Oil(Option C) 53 Groundnut Oil 32 Palm Oil 11 Coconut Oil (Option D) 2 Butter 2 Polyunsaturated fatty acids (PUFA) : They are dietary fats characterised by having more than one double bond. Types: omega-3 and omega-6 fatty acids. Role in cardiovascular health: Lowers levels of triglycerides (a type of fat in the blood). Reduce LDL cholesterol, thereby improving the lipid profile and reducing the risk of atherosclerosis and cardiovascular disease. Oils rich in PUFA, such as safflower (Option A), sunflower(Option B), and soybean oils(Option C), are recommended for heart health because they improve blood cholesterol levels and reduce the risk of cardiovascular events when consumed in moderation.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 728

IAPSM textbook of Community medicine, 2nd edition, Pages 30,31

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A patient presents with rough, dry, scaly skin patches on their elbows, knees, buttocks, and hair follicle keratosis (bumps around hair follicles). Which nutrient deficiency is not associated with this condition? (Q840753)

A. Vitamin A

B. Essential Fatty Acids

C. Vitamin E

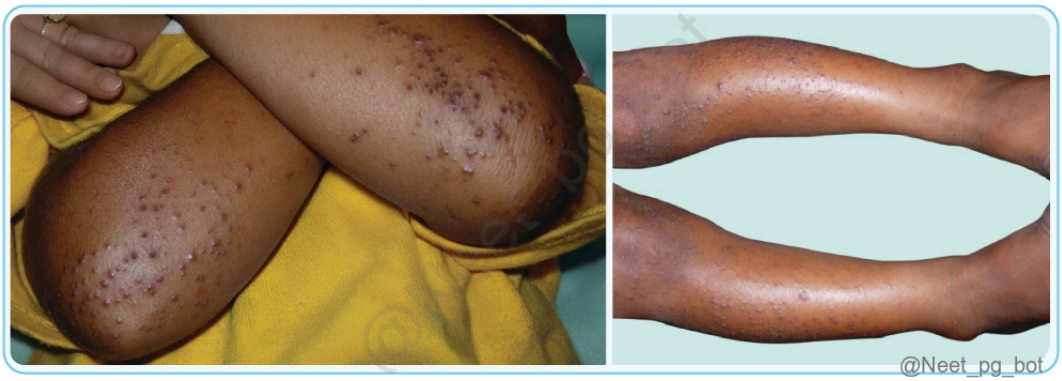
D. Zinc

Correct Answer: D. Zinc

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Zinc deficiency causes acrodermatitis enteropathica–like dermatitis , not follicular keratosis. Phrynoderma is a manifestation of nutritional deficiency involving Vitamin A , E or essential fatty acids (EFA), particularly linoleic acid (an omega-6 fatty acid) and alpha-linolenic acid (an omega-3 fatty acid). These fatty acids are crucial for maintaining the integrity and function of the skin barrier. A deficiency can lead to dry, scaly skin. Characterised by the presence of small, rough, cone-shaped papules (follicular hyperkeratosis) on the skin, typically on the outer surface of the upper arms, thighs, buttocks, and sometimes on the face. Can be asymptomatic or associated with mild itching. Treatment Intake of foods rich in omega-3 and omega-6 fatty acids, such as fish, nuts, seeds, and vegetable oils. Treating any underlying conditions contributing to malabsorption or dietary restrictions. Emollients and moisturizers.



References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 725-727

IAPSM textbook of Community medicine, 2nd edition, Pages 30,31

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which statements regarding partially hydrogenated vegetable oils are correct? 1. Longer shelf life compared to unprocessed oils. 2. Fortified with Vitamin A 3. Liquid at room temperature 4. Contains Trans fats 5. No association with increased risk of heart disease. 6. Primarily used in cooking oils to enhance flavor. (Q840756)

A. 1, 2, and 4

B. 2, 4, and 5

C. 1, 2, and 3

D. 2, 4, and 6

Correct Answer: A. 1, 2, and 4

Listen (English)

Listen (Hindi)

Explanation: Partially hydrogenated vegetable oils are created through a chemical process called Hydrogenation. Fortified with Vitamin A and D.(Statement 2) Eg. Vanaspati ghee/ dalda ghee. Purpose of Hydrogenation: Solidification of oil to fat (Solid at room temperature).(Statement 3) Increase Shelf Life, Easy storage & Handling/transport. (Statement 1) No role in adding flavor. (Statement 6) Leads to formation of Trans fats which are unsaturated fats with a different molecular structure than naturally occurring cis fats found in foods like dairy and meat. These trans fats have been linked to adverse health effects. (Statement 4) Health Implications: Raise levels of LDL and decrease levels of HDL which increases the risk of heart disease . (Statement 5) Consumption of trans fats has been associated with insulin resistance, and a higher risk of type 2 diabetes.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 727

IAPSM textbook of Community medicine, 2nd edition, Pages 30,31

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: A patient is newly diagnosed with diabetes mellitus. Which of the following dietary recommendations would you recommend? (Q840759)

A. Oats

B. White bread

C. Watermelon

D. Mashed potatoes

Correct Answer: A. Oats

Listen (English)

Listen (Hindi)

Explanation: The glycemic index (GI) categorises foods based on how quickly they raise blood sugar levels after consumption compared to pure glucose (GI of 100). A scale from 0 to 100 categorises foods into low, medium, or high based on their effect on blood glucose levels. GI measures how quickly carbohydrates in food are converted into glucose and absorbed into the bloodstream. Scale: Low GI (≤ 55): Foods that cause a slow and gradual rise in

blood glucose levels. Medium GI (56-69): Foods that cause a moderate rise in blood glucose levels. High GI (≥ 70): Foods that cause a rapid and significant rise in blood glucose levels. Low GI (≤ 55) Medium GI (56-69) High GI (≥ 70) Oats Apples Oranges Lentils Chickpeas Kidney beans Barley Nuts and seeds Sweet potatoes Brown rice Pineapple Mango Watermelon (Option C) Dairy products White bread (Option B) Bagels White rice Sugary cereals Potato chips Dates Mashed potatoes (Option D) Importance: Blood Sugar Control: Helps in managing blood sugar levels (individuals with diabetes or insulin resistance). Weight Management: Low GI diets may aid in weight management by promoting satiety and reducing hunger levels.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 728,729

IAPSM textbook of Community medicine, 2nd edition, Page 29

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following statements are true regarding the reference Indian man and woman? Statements: The reference Indian man is defined as having a body weight of 60 kg and a height of 170 cm. The reference Indian woman is defined as having a body weight of 55 kg and a height of 162 cm. The reference Age range of 19-29 years is considered The reference Indian BMI (Woman > Man) The reference Indian man typically has a waist circumference of 90 cm. (Q840760)

A. Statements 1 and 3 are correct

B. Statements 2 and 4 are correct

C. Statements 3 and 5 are correct

D. Statements 1 and 4 are correct

Correct Answer: B. Statements 2 and 4 are correct

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Reference Indian men and women aged between (19-39 years): Classified based on the following attributes. Indian Man Indian Woman Average Height 1.77 m 1.62m Average Weight 65 kg 55 kg Average BMI 20.75 20.95 Average Waist Circumference 85 cm 75 cm Activity Level : (for both man and women) 8 hours of sleep 8 hours of moderate work 4-6 hours of sitting/moving 2 hours of walking/recreation

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 747

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following statements about dietary fiber are true? Promotes satiety but has no role in reducing blood glucose Acts as bile acid sequestrants in the small intestine The recommended daily intake is approximately 60 grams Excessive fibre intake can lead to micronutrient malabsorption Bowel irritation can only occur if the daily intake reaches 80 grams (Q840761)

A. 1,2 and 5

B. 2 and 4

C. 3 and 5

D. 2,3 and 4

Correct Answer: B. 2 and 4

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Dietary fibre acts as bile acid sequestrants in the small intestine, helping to reduce blood cholesterol levels (statement 2). Key actions: promotes satiety (statement 1), improves digestion, enhances gut microbiome. Fibres, especially gum and pectin, also significantly reduce blood glucose levels (statement 1). Recommended daily intake is approximately 30 grams (statement 3) since excessive fibre intake, especially when nearing 60 grams per day, can lead to micronutrient malabsorption (vitamins, calcium, magnesium, zinc) (statement 4). Bowel irritation can also occur when 60 grams of fibre are consumed daily (statement 5).

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 729

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Match the following food items with their respective limiting amino acids a) Cereal i) Lysine b) Pulses ii) Threonine c) Nuts iii) Tryptophan d) Maize iv) Methionine (Q844363)

A. a-ii; b-iv; c-i; d-iii

B. a-iv; b-i; c-ii; d-iii

C. a-iii; b-ii; c-i; d-iv

D. a-iv; b-iii; c-iii; d-ii

Correct Answer: A. a-ii; b-iv; c-i; d-iii

Explanation: Food sources Limiting amino acid Cereals Threonine and Lysine. Pulses Methionine and Cystine. Nuts Lysine. Maize Tryptophan and Lysine Limiting Amino Acids: These are essential amino acids in short supply in certain foods. Lysine most deficient amino acid Combining vegetarian foods (e.g., rice and dal) allows proteins to complement each other, creating a complete amino acid profile. Properly planned vegetarian diets with cereals, pulses, and vegetables can provide high-quality protein comparable to animal sources.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 725

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A 23-year-old male reports that his diet has been low in protein. Which of the following amino acids cannot be synthesised in the body and must be obtained from the diet? (Q840737)

A. Glycine

B. Lysine

C. Tyrosine

D. Histidine

Correct Answer: B. Lysine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Types of amino acids: 1. Essential AA (Option B) Not synthesised in the body, it must obtained from the diet Total 9: Phenylalanine, Valine, Threonine, Tryptophan, Isoleucine, Methionine, Histidine, Phenylalanine, Lysine , Leucine. (Mnemonic: PVT-TIM-HALL) 2. Non-essential AA (Option A) Synthesised in the body Total 6: Arginine, Asparagine, Serine, Proline, Glycine , Glutamine 3. Conditionally-essential AA (Option C) Non-essential amino acids turn essential if precursors are limited in the body (during stress or illness) Tyrosine , cysteine, glutamine 4. Semi-essential AA (Option D) Increase requirement during growth (like pregnancy) Arginine, Histidine . Histidine is strictly essential in infants and growing children In healthy adults, histidine can

often be synthesized in adequate amounts or recycled through protein turnover

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 724

↑ *Back to this question in Part A*

@Neet_pg_bot

• [10_Nutrition and Health] 039 Food Adulteration And Food Fortification

« Back to Folder Directory

[10_Nutrition and Health] 039 Food Adulteration And Food Fortification — Quick Jump

Q1 (p. 1435) *Q2 (p. 1436)* *Q3 (p. 1437)* *Q4 (p. 1438)* *Q5 (p. 1439)* *Q6 (p. 1440)*
Q7 (p. 1440) *Q8 (p. 1442)* *Q9 (p. 1442)* *Q10 (p. 1443)* *Q11 (p. 1444)*

Q1: Match the following: 1) Food adulteration a) Claviceps in wheat 2) Food additivity b) Saccharin in health drinks 3) Food fortification c) Vanaspati in ghee 4) Food toxication d) Iodine in salt (Q840659)

A. 1-b, 2-d, 3-a, 4-c

B. 1-d, 2-c, 3-b, 4-a

C. 1-c, 2-b, 3-d, 4-a

D. 1-a, 2-d, 3-b, 4-c

Correct Answer: C. 1-c, 2-b, 3-d, 4-a

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Definition Example Food adulteration is the act of adding or removing any substance to and from natural food sources, which alters the nature and composition of the latter. E.g., adding dried papaya seeds with black pepper, animal fat with butter, etc. Vanaspati in ghee Food additivity is the process of mixing substances into food to improve its taste, colour, and texture and increase its shelf life. Saccharin in health drinks Food fortification incorporates micronutrients into food substances to improve nutritional deficiencies, especially in endemic areas. Examples include iron-fortified rice and adding iodine with salt. Iodine in salt Food toxication is the process in which potential health effects occur as a result of consuming foods that contain toxic substances either present naturally, accidental contamination or deliberate adulteration, e.g., Claviceps in wheat causing ergotism Claviceps in wheat

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 772, 773

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A patient presents with short, jerky steps, which developed progressively over the past month. He has been consuming Khesari dal for the past 8 months. Which of the following should be prescribed as prophylaxis to this patient? (Q840668)

A. Vitamin B

B. Vitamin C

C. Vitamin B12

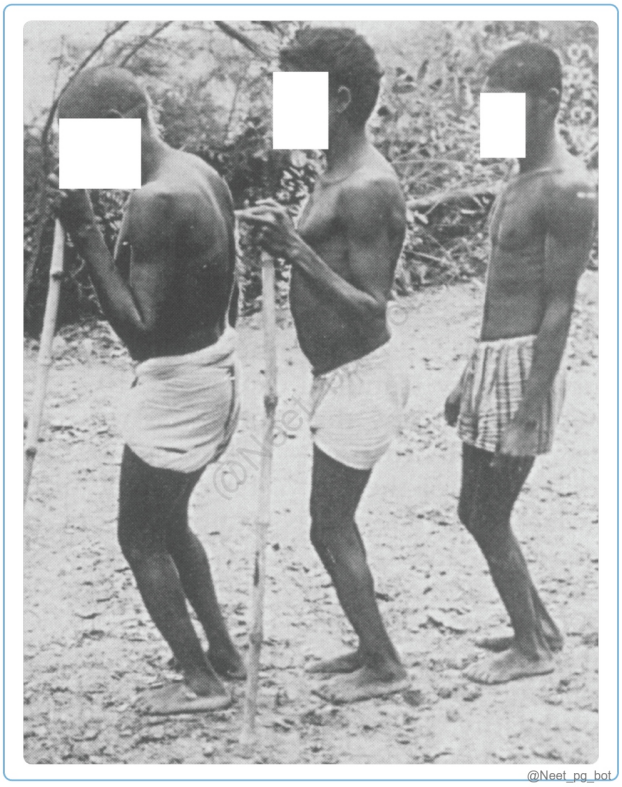
D. Vitamin D3

Correct Answer: B. Vitamin C

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The above scenario with a history of consuming khesari dal (Lathyrus sativus) suggests neurolathyrism and vitamin C/ascorbic acid are used as prophylaxis. Lathyrism Causative agent Beta-oxalyl amino alanine (BOAA) present in Lathyrus sativus Significant exposure : >30% inclusion in diet over 2-6 months Clinical features Latent stage: preventive can be best implemented here No stick stage: most common point of diagnosis One-stick stage: muscular stiffness begins Two-stick stage: will need crutches Crawler stage: muscular atrophy sets in. Treatment Vitamin C prophylaxis: 500-1000 mg per day Banning the crop Toxin removal Steeping method: soaking in hot water for 2 hours, drained and sun-dried. Parboiling: overnight soaking in limewater. Genetic approach: selecting variants with less BOAA content and cultivating the same. Educating people. Bringing socio-economic changes.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 759,760

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A patient presents with new onset swelling in both her legs associated with frequent diarrhoeal episodes and progressive breathlessness. She has a history of consumption of mustard oil. Which of the following adulterants would have caused the above presentation? (Q840673)

A. Canola oil

B. Argemone oil

C. Rapeseed oil

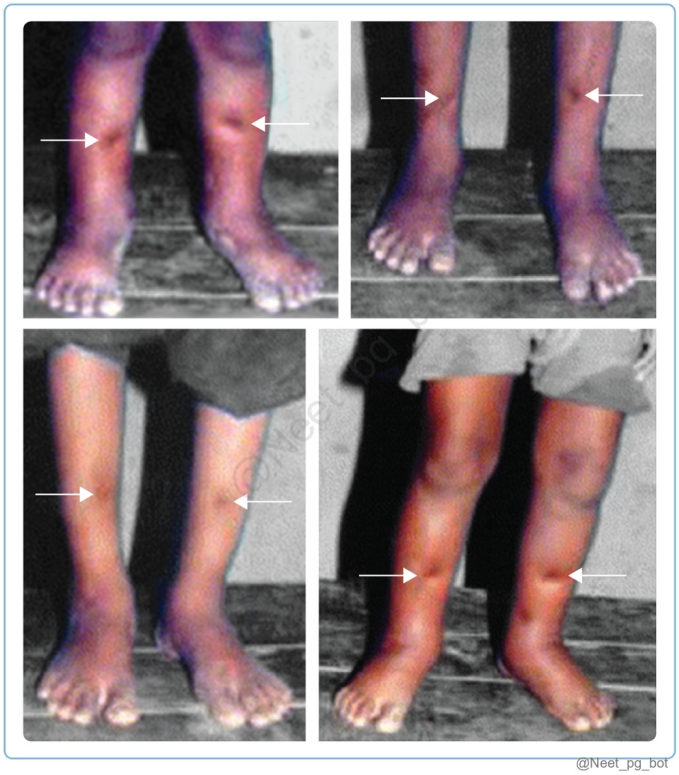
D. Linseed oil

Correct Answer: B. Argemone oil

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The above clinical scenario, with a history of mustard oil consumption, suggests epidemic dropsy , commonly occurring when mustard oil is contaminated with argemone oil. Epidemic dropsy Clinical features Bilateral leg swelling, diarrhoea, dyspnoea, features of glaucoma and heart failure even up to death. Causative agent Sanguinarine (toxic alkaloid present in argemone oil). Detection of contamination Nitric oxide test: the presence of a red-brown ring when added to the sample oil indicates the presence of argemone oil. Paper chromatography test Prevention Accidental contamination: removing argemone weeds growing among oilseed crops. Deliberate contamination: enforcing Prevention of Food Adulteration Act.



References:

Park’s Textbook of Preventive and Social Medicine 27th edition, page 772

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following toxins is responsible for endemic ascites? (Q840683)

A. Glycoalkaloids

B. Cyanogenic glycosides

C. Lectins

D. Pyrrolizidines

Correct Answer: D. Pyrrolizidines

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Pyrrolizidine alkaloids are responsible for endemic ascites. Endemic ascites Clinical features Features of hepatic damage: hepatomegaly, jaundice, ascites. Causative agent Panicum miliare (millet) contamination with crotalaria which contains the hepatotoxic pyrrolizidine alkaloids. Prevention Educating people Proper de-weeding Sieving: crotalaria seeds are smaller than millet seeds

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 772

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following is true about aflatoxicosis? (Q840688)

A. The G1 variant is not associated with hepatocellular carcinoma

B. The B1 variant can commonly be associated with infantile cirrhosis

C. The minimum temperature that favours toxin formation is 18 degrees C

D. Keeping moisture content <22% is recommended for prevention

Correct Answer: B. The B1 variant can commonly be associated with infantile cirrhosis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The B1 variant of aflatoxins can be responsible for the occurrence of infantile cirrhosis, as evidenced by the detection of the same in breast milk and also in the urine of the affected infants Aflatoxicosis Clinical features Features of hepatotoxicity (jaundice, hepatomegaly) Hepatocellular carcinoma Causative agent Infestation of Aspergillus flavus and Aspergillus parasiticus over stored rice, wheat, and corn Produce mycotoxins: aflatoxin B1 & G1 (both are hepatotoxic & carcinogenic) (Option A) Risk factors Storage temperature of 11 to 37 degree Celsius (Option C) Moisture content >16% Prevention Educating people Moisture content <10% during storage (Option D)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 771,772

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: What are the acute symptoms associated with ergotism caused by consuming ergot-infested grains? (Q840691)

A. Joint pain and muscle stiffness

B. Nausea, repeated vomiting, giddiness, and drowsiness

C. Rash and skin irritation

D. High fever and chills

Correct Answer: B. Nausea, repeated vomiting, giddiness, and drowsiness

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The acute symptoms of Ergotism include nausea, repeated vomiting, giddiness, and drowsiness lasting up to 24 to 48 hours. Ergotism: Ergot is a fungus (Claviceps purpurea) that infects food grains such as bajra, rye, sorghum, and wheat during their flowering stages. Consumption of ergot-infested grains can lead to ergotism , characterised by acute symptoms such as nausea, repeated vomiting, giddiness, and drowsiness lasting up to 24 to 48 hours. In chronic cases, ergotism may cause painful cramps in limbs and peripheral gangrene due to vasoconstriction of capillaries. Modern high-yielding varieties of bajra are more susceptible to ergot infestation. Infested grains can be removed in 20% salt water, hand-picking, or air floatation. The upper safe limit for ergot alkaloids in food material is 0.05 mg per 100 grams.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 772

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: What is the device shown in the image used for? (Q840694)

A. Nutritional assessment

B. Height/length measurement

C. Head circumference measurement

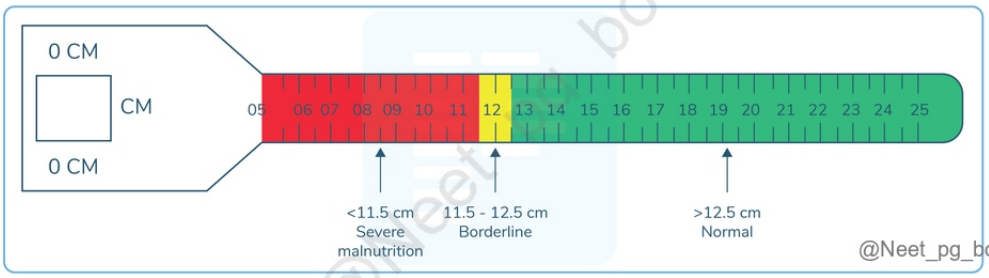
D. None of the above



Correct Answer: A. Nutritional assessment

- *Listen (English)*
- *Listen (Hindi)*

Explanation: An image of Shakir's tape is given [Mid Upper Arm Circumference-MUAC- Tape], used for nutritional assessment (malnutrition). Shakir's tape: MUAC tapes measure the upper arm circumference of children and pregnant women to identify malnutrition. There are different types of MUAC tapes, all graduated in millimetres. Some tapes are colour-coded (red, yellow, green) to indicate nutritional status. MUAC tapes are used to assess nutritional status quickly and non-invasively, aiding in timely intervention for malnutrition. MUAC tapes for children and adults are available through UNICEF Supply Division warehouses. It cannot be used for infants. Interpretation: Red <11.5 cm Severe Malnutrition Yellow 11.5-12.5 cm Borderline Malnutrition Green >12.5 cm Normal



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 755

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: What is one of the criteria used to define severe acute malnutrition (SAM) according to WHO standards? (Q840697)

A. Mid-upper arm circumference >115 mm

B. Weight-for-age Z-score below -1 SD

C. Presence of nutritional oedema

D. Height-for-age Z-score below -2 SD

Correct Answer: C. Presence of nutritional oedema

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Severe Acute Malnutrition (SAM) can be defined by: Very low weight-for-height/length (Z-score below -3SD). A mid-upper arm circumference <115 mm. The presence of nutritional oedema. SAM significantly increases the risk of death in children under five years of age. It can indirectly cause child death by increasing the case fatality rate in children suffering from common illnesses such as diarrhoea and pneumonia. Children who are severely wasted (SAM) are 9 times more likely to die than well-nourished children. MUAC >115 mm (Option A): SAM is defined by MUAC <115 mm , not above. Weight-for-age Z-score below -1 SD (Option B): This is not used for SAM diagnosis. Weight-for-age < -2 SD defines underweight , not SAM. Height-for-age Z-score below -2 SD (Option D): This defines stunting , a sign of chronic malnutrition, not acute malnutrition .

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 755

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following can be best used to determine acute malnutrition? (Q840702)

A. Weight for age

B. Height for age

C. Weight for height

D. Mid-upper arm circumference

Correct Answer: C. Weight for height

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Low weight for age Underweight Both chronic & acute malnutrition. Low height for age Stunting Chronic malnutrition Low weight for height Wasting Acute malnutrition

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pages 754-755

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following is an age-independent anthropometric measure of malnutrition? (Q840710)

A. Mid -upper arm circumference only

B. Weight for height only

C. Weight for height and mid-upper arm circumference

D. None of the above

Correct Answer: C. Weight for height and mid-upper arm circumference

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: To check the nutritional status, anthropometric indices are commonly used. The most common ones are: Weight for age. Height for age (chronic malnutrition). Weight for height (acute malnutrition). Mid-upper arm circumference . Age-independent indices: Weight for height. Mid-upper arm circumference . Weight for height: It reflects the child’s current body mass relative to their skeletal size. Clinical Significance: A low weight-for-height indicates acute malnutrition (wasting), usually caused by recent illness or a sudden drop in food intake. Advantage: It is the most sensitive indicator for sudden nutritional changes. Mid-upper arm circumference (MUAC): Measured at the midpoint between the tip of the shoulder (acromion) and the tip of the elbow (olecranon). Clinical Significance: Between ages 1 and 5, the arm circumference changes very little in healthy children. Therefore, a measurement below 11.5 cm is a reliable indicator of severe acute malnutrition (SAM). Advantage: It is "age-independent" in the preschool years and requires only a simple, inexpensive measuring tape. Height for Age

(Stunting): Measures linear growth retardation. Clinical Significance: Low height-for-age indicates chronic malnutrition (stunting). This reflects long-term cumulative effects of poor nutrition and repeated infections. Implication: Unlike wasting, stunting is often a slow process and may be irreversible if not addressed in the first 1,000 days of life. Weight for Age (Underweight): A composite indicator that considers both height and weight relative to age. Clinical Significance: It identifies if a child is "underweight" but does not distinguish between a child who is short (stunted) and a child who is thin (wasted). Utility: Best used for growth monitoring over time in a clinic setting to ensure a child is following their growth curve.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pages 754-755

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: A 10-month-old infant is brought to the clinic by his mother due to concerns about poor growth. The child appears emaciated, with visible rib bones and a sunken appearance of the face. On examination, there is minimal subcutaneous fat and muscle wasting. The mother reports that the infant has been exclusively breastfed, but she herself has been malnourished due to economic constraints. What is the most likely diagnosis? (Q840714)

A. Kwashiorkor

B. Marasmus

C. Cystic fibrosis

D. Celiac disease

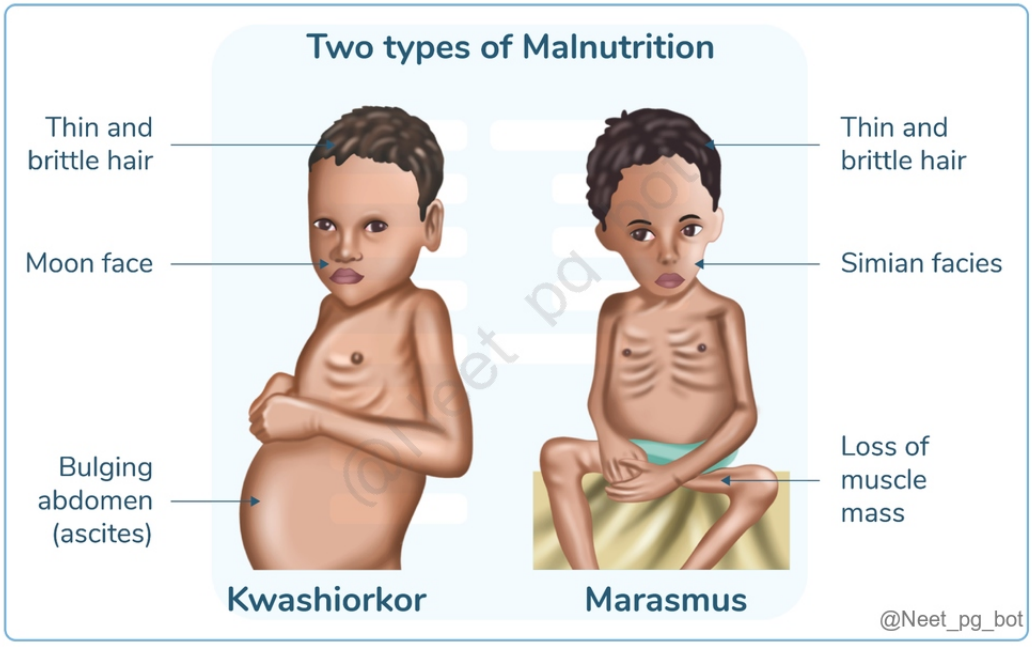
Correct Answer: B. Marasmus

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The most likely diagnosis for the 10-month-old infant who appears emaciated with minimal subcutaneous fat and muscle wasting, especially in the context of being exclusively breastfed by a malnourished mother, is marasmus. Marasmus is a form of severe malnutrition characterised by energy deficiency. It typically presents with significant weight loss, visible rib bones, a sunken facial appearance, and muscle wasting. Protein-energy malnutrition: Kwashiorkor. Marasmus. Characteristic Kwashiorkor Marasmus Cause Low protein/energy ratio in diet Inadequate intake of both protein and energy Affected age group 1 to 4 years < 1 year Severity Severe Less severe Physical appearance Lethargic, moon face due to edema, flaky paint dermatosis & flag sign Alert & thin, loose wrinkled skin, baggy pants appearance & muscle wasting Feeding behaviour Children are usually voracious feeders. Often poor appetite or anorexia Oedema Present Minimal or no oedema

Subcutaneous fat - Minimal or absent Muscle wasting Present Present Serum albumin levels Hypoalbuminemia (low albumin levels) Non-normal serum albumin levels Liver involvement Enlargement - Skin and hair changes Depigmentation - Other features Steatosis (fatty liver) -



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 755

↑ *Back to this question in Part A*

@Neet_pg_bot

• [10_Nutrition and Health] 040 Micronutrients

« Back to Folder Directory

[10_Nutrition and Health] 040 Micronutrients — Quick Jump

Q1 (p. 1446)	*Q2 (p. 1447)*	*Q3 (p. 1448)*	*Q4 (p. 1449)*	*Q5 (p. 1449)*	*Q6 (p. 1450)*
Q7 (p. 1451)	*Q8 (p. 1454)*	*Q9 (p. 1455)*	*Q10 (p. 1456)*	*Q11 (p. 1458)*	*Q12 (p. 1458)*
Q13 (p. 1459)	*Q14 (p. 1460)*	*Q15 (p. 1464)*	*Q16 (p. 1465)*		

Q1: Which of the following is true regarding vitamin A? Obtained from animal sources like liver, egg yolks, and dairy products. Maintains healthy skin and mucous membranes. Deficiency leads to night blindness and an increased risk of childhood infections. It helps in calcium absorption (Q840556)

A. 1 only

B. 2, 4

C. 1, 3

D. 1, 2, and 3

Correct Answer: D. 1, 2, and 3

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Sources of Vitamin A: The richest source of Vitamin A is Halibut fish Animal sources: Liver (beef, chicken, fish), Egg yolks, Dairy products (milk, cheese, butter), Fish liver oils. (statement 1) Plant sources (provitamin A carotenoids): Orange/yellow fruits and vegetables (carrots, sweet potatoes, mangoes, papaya), Green leafy vegetables (spinach, kale, broccoli), Red palm oil Functions of Vitamin A: Vision: Essential for normal vision and low-light vision Immune function: Supports immune cell development and mucosal barriers Skin and epithelial cell health: Maintains integrity of skin and epithelial linings (statement 2) Growth and development: Important for growth, especially in children and pregnancy Antioxidant properties: Some carotenoid forms act as antioxidants Involved in regulating gene expression Deficiency can cause night blindness and increased risk of childhood infections (statement 3) It does not aid in calcium absorption — that's Vitamin D 's function. (statement 4)

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pg 705

↑ *Back to this question in Part A*

@Neet_pg_bot

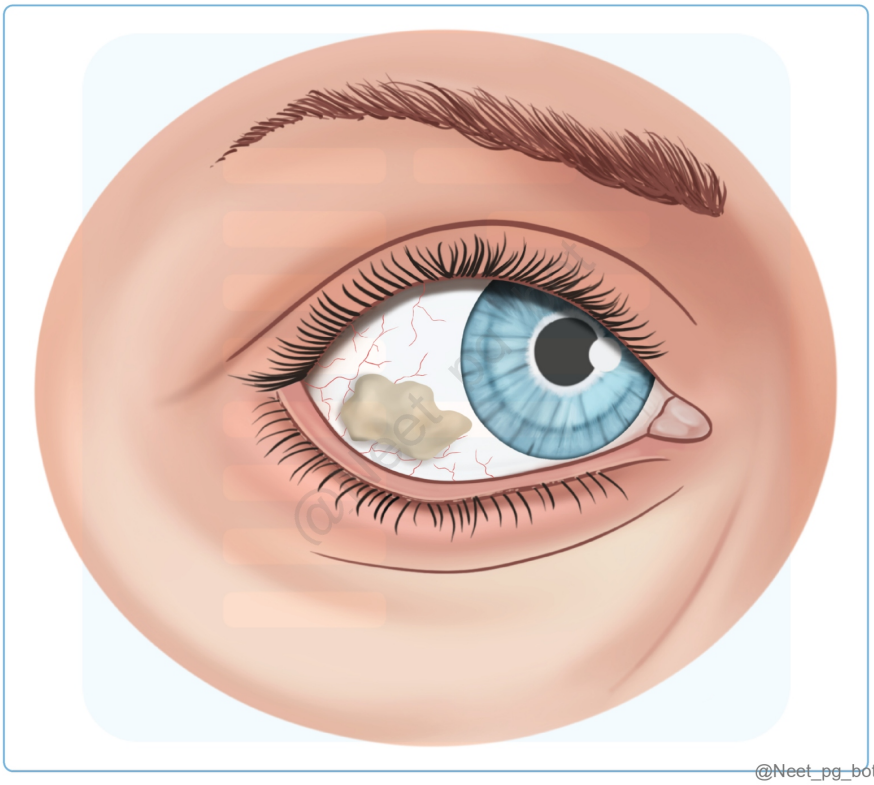
Q2: Which stage of xerophthalmia is depicted in the following image? (Q840558)

A. X1A

B. X1B

C. X2

D. X3A



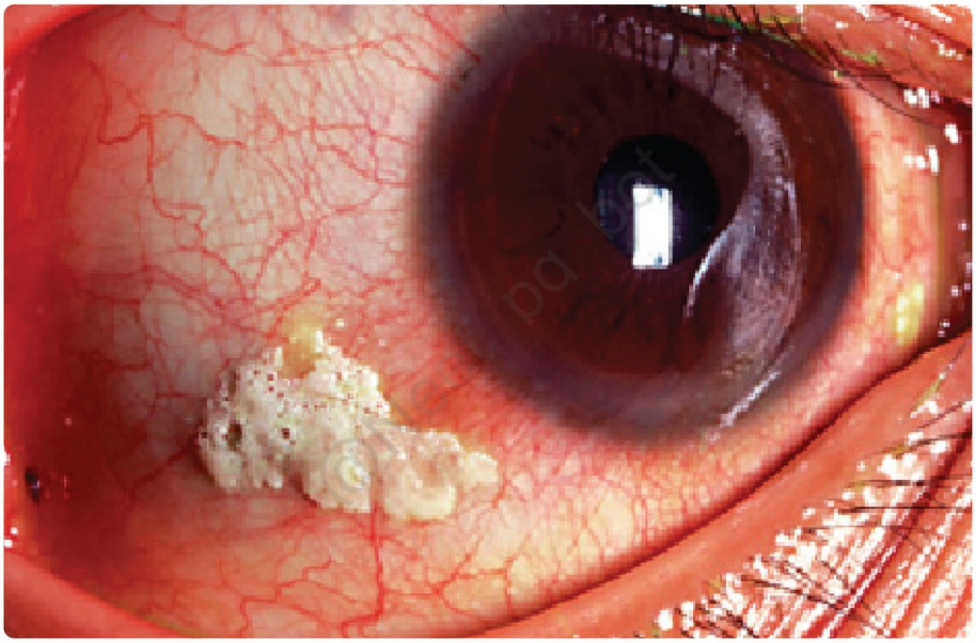
Correct Answer: B. X1B

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The provided image illustrates Bitot spots belonging to the X1B classification of xerophthalmia. Classification of Xerophthalmia: Stage Description XN Night blindness: Difficulty seeing in low light or at night. X1A Conjunctival xerosis: Dryness of the conjunctiva without foamy patches (Bitot spots). X1B Bitot spots: Presence of foamy, whitish accumulations on the conjunctiva. Epidemiological marker for vitamin A deficiency . X2 Corneal xerosis: The cornea's dryness makes it appear dull and hazy. X3A Corneal ulceration/keratomalacia (<1/3rd of the cornea) X3B Corneal ulceration/keratomalacia (>1/3rd of the cornea) XS Corneal scar: Scarring of the cornea resulting from the healing of ulcers or keratomalacia. XF Xerophthalmic fundus: Retinal changes

associated with chronic Vitamin A deficiency.



References:

Park's Textbook of Preventive and Social Medicine, 26th edition, Pg 705-706

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: What is the first clinical manifestation of Vitamin A deficiency? (Q840562)

A. Bitot spots

B. Night blindness

C. Corneal xerosis

D. Corneal ulceration

Correct Answer: B. Night blindness

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Night blindness (XN) is the initial clinical manifestation of Vitamin A deficiency. Individuals with night blindness have difficulty seeing in low light or at night. This condition occurs because Vitamin A is essential for producing rhodopsin, a pigment found in the retina. (Rhodopsin = 11- cis Retinal + Opsin) Without adequate Vitamin A, the eyes cannot adapt well to darkness, leading to night blindness. Night blindness is an early indicator, alerting to possible deficiencies before more severe eye conditions develop.

References:

Park's Textbook of Preventive and Social Medicine, 26th edition, Pg 705

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: According to WHO criteria, which prevalence rate of night blindness indicates that xerophthalmia is a significant public health problem? (Q840563)

A. Less than 0.5%

B. 0.5% to 1.0%

C. More than 1.0%

D. Less than 0.01%

Correct Answer: C. More than 1.0%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The prevalence criteria for determining xerophthalmia is assessed in age groups 6 months to 6 years. Stages Description Levels in community (Prevalence) XN Night blindness > 1% X1B Bitot spots > 0.5% X3A Corneal ulceration/keratomalacia (<1/3rd of the cornea) > 0.01% XS Corneal scar. > 0.05%

References:

Park's Textbook of Preventive and Social Medicine, 26th edition, Pg 706

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: What is the recommended dosage for Vitamin A supplementation in a 2-year-old child diagnosed with Vitamin A deficiency? (Q840565)

A. 50,000 IU

B. 100,000 IU

C. 200,000 IU

D. 400,000 IU

Correct Answer: C. 200,000 IU

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Administer 2 lakh IU orally on 2 successive days. All early stages of xerophthalmia can be reversed by administration of a massive dose of 200000 IU or 110 mg of retinol palmitate orally on two successive days. IM dose = 1⁄2 of oral dose All children with corneal ulcers should receive vitamin A whether or not deficiency is suspected. <6 months 6 months-1 year > 1 year Day 1 50000 IU 1 lakh IU 2 Lac IU Day 2 50000 IU 1 lakh IU 2 Lac IU Day 14 50000 IU 1 lakh IU 2 Lac IU

References:

Park's Textbook of Preventive and Social Medicine, 26th edition, Pg 706

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A 32-year-old female presents with weakness, fatigue, and tingling sensations in her extremities. Upon further investigation, she has dry beriberi. Which of the following dietary habits will most likely lead to this condition? (Q840568)

A. High fat, low carbohydrate diet

B. Diet predominantly of polished white rice

C. Vegan diet

D. Gluten-Free Diet

Correct Answer: B. Diet predominantly of polished white rice

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A diet predominantly of polished white rice can lead to thiamine (vitamin B1) deficiency as Thiamine is lost during the process of milling. It is water soluble; thus, further loss occurs during washing and cooking. Thiamine is also lost if the food is baked with baking soda, e.g. bread and cereals. Thiamine deficiency also occurs in chronic alcoholics (Wernike's encephalopathy) Deficiency of thiamine leads to Dry beriberi

(Peripheral neuritis) Wet beriberi (High output cardiac failure) Infantile beriberi (Seen in infants 2 - 4 months of age who are breastfed by thiamine deficient mother). Wernicke's encephalopathy (Chronic alcoholics): Confusion + ophthalmoplegia + ataxia To prevent thiamine deficiency due to dietary habits, it is advised to Consume parboiled and under-milled rice. Have a well-balanced diet. Reduce alcohol consumption. High fat, low-carbohydrate diet (Option A) is also known as the ketogenic diet. It does not cause thiamine deficiency, but it can lead to ketoacidosis in the body. Vegan diet (Option C) consists of a good mix of plant-based products that are rich in thiamine; thus, vitamin B1 deficiency rarely occurs, but since the diet lacks dairy and animal products, it can lead to Vitamin B12, Vitamin D, and Iron and Calcium deficiency. Gluten-Free Diet (Option D) is mainly used to manage celiac disease or gluten intolerance; it has no direct involvement in causing thiamine deficiency.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 733 Risk Assessment of Micronutrients Deficiency in Vegetarian or Vegan Children: Not So Obvious - PMC Vegetarian and vegan diets: benefits and drawbacks

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which vitamin deficiency leads to the condition in the image depicted below? (Q840569)

A. Vitamin E

B. Vitamin B5

C. Vitamin B2

D. Vitamin B6



Correct Answer: C. Vitamin B2

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The image shows angular stomatitis, often associated with Vitamin B2 deficiency (Riboflavin). Vitamin B2 (Riboflavin) Sources Function Deficiency Milk Eggs Liver Green leafy vegetables Cofactor for glutathione reductase. Cofactor for metabolism of Vitamin B6, Niacin and Vitamin K Antioxidant activity. Maintenance of integrity of mucocutaneous membranes. Angular stomatitis Glossitis Nasolabial dyssebacia It can also lead to Neuromotor dysfunction Poor wound healing Cataract (Image-1: Geographic tongue, image 2- angular cheilitis, image 3- magenta colored tongue) Vitamin E (Option A) deficiency leads to ataxia, blindness, dementia and cardiac arrhythmias. Vitamin B5 (Option B) is a precursor for Coenzyme A, and its deficiency leads to fatigue, headache, personality changes, muscle cramps, paresthesia, and muscle/abdominal cramps. Vitamin B6 (Option D) deficiency leads to peripheral neuropathy and does not cause angular stomatitis, but it often occurs along with vitamin B2 deficiency, which can lead to angular stomatitis.


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References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 734-735
https://commons.wikimedia.org/wiki/File:Angular_cheilitis1.jpg Vitamin E Deficiency - StatPearls - NCBI Bookshelf . Vitamin B5 (Pantothenic Acid) - StatPearls - NCBI Bookshelf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A 16-year-old female with dementia was brought to the emergency due to severe diarrhoea and skin lesions similar to the image given below. Investigations reveal niacin deficiency. Which of the following amino acids, if consumed in large quantities, can lead to the above condition? (Q840572)

A. Leucine

B. Tryptophan

C. Threonine

D. Lysine



@Neet_pg_bot

Correct Answer: A. Leucine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Leucine is a branched-chain amino acid that alters the tryptophan-niacin metabolic pathway when consumed in large quantities, worsening the symptoms of niacin deficiency. It reduced hepatic uptake and intestinal absorption of tryptophan (precursor of niacin). It inhibits several enzymes, such as hepatic tryptophan dioxygenase and kynureninase. Food products that are pellagra genic are: Jowar (Rich in leucine and poor in tryptophan). Corn/maise (Poor in tryptophan) Niacin deficiency causes pellagra, characterised by the "4 D's": dermatitis, dementia, diarrhoea, and can be fatal (Death).

References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC4259507/

www.ncbi.nlm.nih.gov/pmc/articles/PMC1177827/pdf/biochemj00602-0084.pdf

www.sciencedirect.com/topics/biochemistry-genetics-and-molecular-biology/pellagra

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following are NOT true regarding vitamin B9 and Vitamin B12? Both vitamin B9 and B12 deficiency lead to megaloblastic anaemia. Both vitamin B9 and B12 supplementation prevent neural tube defects in pregnancy. Demyelinating neurological symptoms are associated with only Vitamin B12 deficiency. Castle's intrinsic factor is essential for folate absorption. (Q840574)

A. 1 and 2

B. 2 and 4

C. 2 and 3

D. 4 only

Correct Answer: B. 2 and 4

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Only vitamin B9 supplementation is recommended in the first trimester of pregnancy to prevent neural tube defects in the fetus. Castle's intrinsic factor is essential for the absorption of cobalamin, not folate. Folate - vitamin B9 Cobalamin - vitamin B12 Sources Liver; Meat; Dairy products; Eggs; Fruits; Cereals; Green leafy vegetables Liver; Meat; Milk; Eggs; Cheese; Synthesized by gut bacteria (not found in food of vegetable origin) Absorption Absorbed from the proximal part of the small intestine. Absorbed in terminal ileum, bound to intrinsic factor. Uses It helps in the synthesis of nucleic acids. It helps in the synthesis of fatty acid(myelin) and DNA. Deficiency Macrocytic anemia Neural tube defects in neonates No neurological symptoms (Statement 3) Megaloblastic anemia (Statement 1) Demyelinating lesion in the spinal cord Infertility

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 735 and 751

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A 16-year-old boy presents with swollen and bleeding gums, easy bruising, and small red spots on his skin. His diet mostly consists of processed foods and lacks fresh fruits and vegetables. Which of the following is the most likely cause of his symptoms? (Q840576)

A. Vitamin B2

B. Vitamin C

C. Vitamin D

D. Iron

Correct Answer: B. Vitamin C

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Scurvy occurs due to vitamin C deficiency and manifests as swelling and bleeding of the gums, easy bruising, delayed wound healing, and bleeding into joints. Sources of vitamin C are Indian gooseberry, fresh fruits, green leafy vegetables, and germinating pulses. Functions of vitamin C: Hydroxylation of Collagen. Iron absorption in the stomach. Inhibition of nitrosamine formation in the intestine. Manifestations of Vitamin C: Bleeding gums Subcutaneous bruising Delayed wound healing Weakness Hemarthrosis Anaemia (Vitamin C is essential for the absorption of iron from the diet) RDA: 40 mg/day for adults Radiological Manifestations of Scurvy: ■■■■■■■The "White Line" of Frankel: A dense, opaque band at the metaphysis. Because the body can’t turn calcified cartilage into bone, the calcium just piles up, creating a bright white line. Trümmerfeld Zone (Scurvy Zone): This is a "zone of debris" just below the White Line of Frankel, where the bone is extremely weak and prone to micro-fractures. Pelkan Spur: Small bony outgrowths or "spurs" that project outward from the metaphysis. These occur because the weakened bone margins are pushed out by the pressure of the periosteum. Subperiosteal Hemorrhage: Healing bleeds that appear as a "cloak" of new bone along the shaft. Vitamin B2 (Option A) deficiency leads to glossitis and stomatitis, not scurvy. Vitamin D (Option C) deficiency leads to rickets in children and osteomalacia in adults. Iron (Option D) deficiency leads to iron deficiency anaemia and impaired cell-mediated immunity.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 735-736

https://picryl.com/media/scorbutic-gums-7e881a

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: A 45-year-old woman with a past medical history of celiac disease visits the clinic complaining of fatigue, muscle weakness, and bone pain. Upon examination, she is found to have vitamin D deficiency. The doctor advises her to increase her intake of the vitamin D. All of the following are sources of this vitamin except: (Q840577)

A. Sunlight exposure

B. Halibut fish

C. Fortified dairy products

D. Whole grains

Correct Answer: D. Whole grains

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The patient's fatigue, muscle weakness, and bone pain are signs of vitamin D deficiency. Her history of celiac disease likely contributes to this deficiency due to impaired nutrient absorption. While whole grains are nutritious and provide various vitamins and minerals, they are not a significant source of vitamin D. Sources that are rich in vitamin D include: The richest source is Halibut fish (Option B) Sunlight exposure (Option A) Liver, Egg yolk, butter, cheese, and cod fish. (Option C) Function of vitamin D: Intestine: Facilitates Calcium & phosphate absorption Bone: Promotes mineralization & resorption Kidney: Enhances Phosphate reabsorption; variable effect on calcium

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 731

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: A 30-year-old woman visits a clinic complaining of fatigue, weakness, and pale skin. She has a medical history of menorrhagia, for which she sees a gynaecologist.

The serum iron panel is ordered. Which of the following should the patient be advised to consume to prevent this mineral deficiency? Spinach Red meat Fortified cereals Dairy products (Q840579)

A. 1, 4

B. 1, 2

C. 1, 2, and 3

D. 1, 2, 3, and 4

Correct Answer: C. 1, 2, and 3

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Sources rich in iron: Two types: heme-iron and non-heme iron. Heme iron Heme iron is better absorbed than non-heme iron. Found in liver, meat, poultry, and fish. Promotes absorption of non-heme iron in plant foods eaten concurrently. Non-heme iron: It is found in plant-based foods such as cereals, green leafy vegetables, legumes, nuts, oilseeds, jaggery, and dried fruits. Additional Iron Sources : Cooking in iron vessels can significantly contribute to dietary iron in some areas. Iron Content in Milk : Low in all mammalian species. Breast milk contains less than 0.2 mg/dL but has good bioavailability. Bioavailability and Absorption Inhibitors : Non-heme iron absorption is hindered by phytates, oxalates, carbonates, phosphates, and dietary fibre. Foods like milk, eggs, and tea also inhibit iron absorption. (statement 4) Indian vegetarian diets often contain high levels of these inhibitors (e.g., phytates in bran, phosphates in egg yolk, tannin in tea, and oxalates in vegetables).

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg. 737

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following is an important epidemiological indicator for monitoring iodine deficiency in the Goiter Control program? (Q840582)

A. Goiter prevalence

B. Urinary iodine excretion

C. Serum T3/T4/TSH levels

D. Prevalence of Neonatal hypothyroidism

Correct Answer: B. Urinary iodine excretion

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Urinary iodine excretion is an important epidemiological indicator for monitoring iodine deficiency in the Goitre Control program. Surveillance Indicators : Urinary iodine excretion Goiter prevalence (Option A) Prevalence of cretinism Measurement of serum T4 and TSH levels prevalence of neonatal hypothyroidism. Goitre Control Programme: The aim is to increase iodine intake. Neonatal hypothyroidism is a sensitive marker of environmental iodine deficiency. (Option D) Serum T4 levels are more sensitive indicators of thyroid insufficiency than T3 levels. (Option C)



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg.739

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which of the following levels of fluorine in water leads to the development of dental carries? (Q840585)

A. 0.3mg/L

B. 1.8mg/L

C. 3-6mg/L

D. >10mg/L



Correct Answer: A. 0.3mg/L

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The given image depicts dental caries due to fluorine deficiency. The recommended fluorine dose in water is 0.5 - 0.8 mg/L . The Nalgonda technique is used to remove fluoride from water. Fluorine content in water Related symptoms <0.5mg/L (Option A) Dental caries 1.5mg/L (Option B) Mottling of teeth (dental fluorosis) 3-6mg/L (Option C) Skeletal fluorosis >10mg/L (Option D) Crippling fluorosis


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References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 739.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7312808/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A 2-year-old child is brought to the clinic with symptoms of diarrhea, alopecia, and a distinctive rash shown in the image below. The child's mother reports that the symptoms have persisted despite various treatments. Which of the following nutrient deficiencies is most likely responsible for this condition? (Q840590)

A. Copper

B. Zinc

C. Chromium

D. Molybdenum



@Neet_pg_bot

Correct Answer: B. Zinc

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Distinctive rash around the mouth and orifices of the face, along with diarrhea, and alopecia is called Acrodermatitis Enteropathica , an autosomal recessive condition caused by a defect in dietary zinc absorption in the duodenum and jejunum. Symptoms of zinc deficiency: Diarrhea. Mood changes. Anorexia. Neurological disturbances. Hypogonadism Growth retardation. Alopecia (hair loss). Weight loss. Recurrent infections. Copper (Option A) deficiency leads to neutropenia; it does not cause dermatitis in children. Chromium (Option C) deficiency leads to insulin resistance and diabetes mellitus. Molybdenum (Option D) deficiency leads to mouth and esophageal cancer.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, 739

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4902399/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Which of the following fruits is recognized as the richest source of Vitamin C? (Q844362)

A. Amla

B. Avocado

C. Pomegranate

D. Guava

Correct Answer: A. Amla

Explanation: Amla (Indian Gooseberry): Amla is renowned for its exceptionally high Vitamin C content, typically providing about 600-700 mg per 100 grams, making it the richest source of Vitamin C among these options. Avocado (Option B): is high in healthy fats, particularly monounsaturated fats, and also contain potassium, but they are low in Vitamin C. Pomegranate (Option C): is rich in antioxidants and provide some Vitamin C which is much lower than that found in amla. Guava (Option D): is a very good source of Vitamin C, typically containing about 200-250 mg per 100 grams. While this is high, it is still lower compared to the Vitamin C concentration in amla.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, 735

↑ *Back to this question in Part A*

@Neet_pg_bot

• [10_Nutrition and Health] 041 Recommended Dietary Allowances And Nutritional Health Programmes

« Back to Folder Directory

[10_Nutrition and Health] 041 Recommended Dietary Allowances And Nutritional Health Programmes — Quick Jump

Q1 (p. 1467) *Q2 (p. 1468)* *Q3 (p. 1469)* *Q4 (p. 1469)* *Q5 (p. 1470)* *Q6 (p. 1471)*
Q7 (p. 1472) *Q8 (p. 1473)* *Q9 (p. 1474)* *Q10 (p. 1475)* *Q11 (p. 1476)* *Q12 (p. 1477)*

Q1: Pick out the true statements regarding reference for Indian man and woman in the latest NIN-RDA guidelines. The age group considered is 19-39 for both men and women. According to the guidelines Ideal weight of an Indian man is 60 kgs and woman is 50kgs The guideline requires a person to rest for at least 8 hours daily. The guideline promotes not more than 10 hours of intense work every day. At Least 2 hours of recreational activities are mandated. The ideal BMI for men and women is 20-21 kg/m². (Q840803)

A. 1, 3, 5 & 6

B. 1, 2, 3 & 6

C. 3, 4, 5 & 6

D. 2, 3, 4 & 5

Correct Answer: A. 1, 3, 5 & 6

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The standard reference for Indian Man and woman in the latest NIN-RDA guidelines is used to calculate the ideal amount of energy and protein a person requires. (NIN- National Institute of Nutrition, RDA- Recommended dietary allowance) Category Reference Man Reference Woman Age (statement1) 19-39 years 19-39 years Weight (statement 2) 65 kg 55 kg Height 177 cm 162 cm BMI (statement 6) 20.74 kg/m² 20.95 kg/m² BMI (Asian Classification) 18.5 - 22.9 kg/m² Protein Requirement 0.83 g/kg/day Visible Fat Intake 25 g/day (Sedentary) 20 g/day (Sedentary) 30 g/day (Moderate) 25 g/day (Moderate) 40 g/day (Heavy) 30 g/day (Heavy) Activity Level 8 hours of sleep (statement 3) 8 hours of moderate work (statement 4) 4-6 hours of sitting/moving 2 hours of walking/recreation (statemnet 5)

References:

Revised Short Summary Report-2024, ICMR-NIN Expert Group on Nutrient Requirements for Indians, Recommended Dietary Allowances (RDA) and Estimated Average Requirements (EAR)-2020

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Priya is an Indian woman who weighs 60 kilograms. Calculate her daily protein requirement and determine which of the following dietary plans meets her protein needs (Protein in every meal is given in grams) MEAL PLAN A PLAN B PLAN C PLAN D Breakfast 2 eggs (12g) 1 banana (1g) 1 cup oats (6g), 1 slice of bread (3g) Lunch 1 cup dal (18g) 1 cup rice (4g) 200g paneer (14g) 1 cup pasta (7g) Dinner 1 chicken (25g) 2 chapatis (6g), 1 cup dal (18g) 1 cup lentils (18g) 1 cup yogurt (8g) 1 cup beans (15g) 1 apple (0.5g) (Q840806)

A. Plan A

B. Plan B

C. Plan C

D. Plan D

Correct Answer: A. Plan A

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Priya's daily protein requirement is approximately 49.8 g. Only dietary plan A meets and exceeds this requirement with 55g of protein among the given options. The Recommended Dietary Allowance (RDA) is the daily nutrient intake level that meets the needs of nearly all healthy individuals within a specific life stage and gender group. It is designed to guide supervised supplementation for individuals who are deficient or have certain conditions. Based on Indian RDA guidelines, an average Indian adult requires 0.83 grams of protein/kg/day. Priya's daily protein requirement: Protein requirement = Body weight × Protein requirement per kg Protein requirement = 60 kg × 0.83 g/kg = 49.8 g/day Evaluating each dietary plan: Option A: Total protein = 12 g + 18 g + 25 g = 55 g Option B: Total protein =1 g + 4 g + 6 g + 18 g = 29 g Option C: Total protein = 6 g + 14 g + 18 g + 8 g = 46 g Option D: Total protein = 3 g + 7 g + 15 g + 0.5 g = 25.5 g

References:

Revised Short Summary Report-2024, ICMR-NIN Expert Group on Nutrient Requirements for Indians, Recommended Dietary Allowances (RDA) and Estimated Average Requirements (EAR)-2020

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is the correct energy requirement for a moderately working Indian woman with an exclusively breastfed 8-month-old infant? (Q840810)

A. 2650kcal/day

B. 3550kcal/day

C. 2500kcal/day

D. 2670kcal/day

Correct Answer: A. 2650kcal/day

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Total energy requirement for a lactating mother: Total Energy Requirement (TER) = Energy Requirement for Average Woman + Additional Calories for Lactation TER = 2130 kcal/day + 520 kcal/day = 2650 kcal/day Total Energy Expenditure (TEE) = Basal Metabolic Rate (BMR) x Physical Activity Level (PAL) Category Men Women Energy Requirements Sedentary 2110 kcal/day 1660 kcal/day Moderate 2710 kcal/day 2130 kcal/day Heavy 3470 kcal/day 2720 kcal/day Energy Requirements Pregnancy Additional 350 calories Lactating (0-6m) Additional 600 calories Lactating (7-12m) Additional 520 calories Energy requirements for elderly (>65 years) 1700 kcal/day 1500 kcal/day

References:

Revised Short Summary Report-2024, ICMR-NIN Expert Group on Nutrient Requirements for Indians, Recommended Dietary Allowances (RDA) and Estimated Average Requirements (EAR)-2020

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: What are the Recommended Daily Allowances (RDA) of iron and folate for a pregnant woman? (Q840812)

A. 30 mg/day of iron and 400 mcg/day of folate

B. 27 mg/day of iron and 570 mcg/day of folate

C. 18 mg/day of iron and 600 mcg/day of folate

D. 25 mg/day of iron and 500 mcg/day of folate

Correct Answer: B. 27 mg/day of iron and 570 mcg/day of folate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The RDA is 27 mg/day of iron and 570 mcg/day of folate. The Tolerable Upper Limit (TUL -maximum daily nutrient intake unlikely to cause adverse health effects) is 45 mg/day for iron and 1000 mcg/day for folate. Group Iron RDA (mg/day) Folate RDA (µg/day) Calcium RDA (mg/dL) Iodine RDA (µg/day) Adult Men (>18yrs) 19 300 1000 140 Adult Women (>18yrs) 29 220 1000 140 Pregnant Ladies 27 570 1000 220 Lactating Ladies (0-12 months) 23 330 1200 280 The quantity of iron and folic acid in the tablets provided to a pregnant woman under the Anemia Mukt Bharat program is: 60 mg elemental iron 500 µg folic acid

References:

https://www.scribd.com/document/710013215/RDA-Revised-2024 Revised Short Summary Report-2024, ICMR-NIN Expert Group on Nutrient Requirements for Indians, Recommended Dietary Allowances (RDA) and Estimated Average Requirements (EAR)-2020

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: A pediatrician is assessing the dietary needs of two infants. One infant is 4 months old and the other is 10 months old. Determine if the following meal plans meet the requirements for each infant: Meal Plan of Infant 1 (4 months old): 750 Kcal/day with 9 g of protein Meal Plan of Infant 2 (10 months old): 900 Kcal/day with 12 g of protein (Q840813)

A. Both meal plans meet the energy and protein requirements

B. Infant 1's meal plan exceeds the protein requirement as a percentage of total energy intake.

C. Infant 2's meal plan exceeds the protein requirement as a percentage of total energy intake.

D. Neither meal plan meets the energy and protein requirements

Correct Answer: A. Both meal plans meet the energy and protein requirements

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Both meal plans meet the energy and protein requirements for their respective infants. Additionally, the protein percentage of total energy intake is 4.8% for Infant 1 and 5.3% for Infant 2, both well below the 15% threshold. Energy and Protein Requirements for Infants ENERGY PROTEIN 0-6 months have an estimated energy requirement (EER) of 500-900 kCal/day. 7-12 months have an EER between 650-1100 kCal/day. RDA for protein in infants: 0-6 months old: 8 g/day. 6-12 months old: 10.5 g/day. Protein requirements for infants should

not exceed 15% of their total energy.

References:

Revised Short Summary Report-2024, ICMR-NIN Expert Group on Nutrient Requirements for Indians, Recommended Dietary Allowances (RDA) and Estimated Average Requirements (EAR)-2020

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Who among the following is not a beneficiary of ICDS? (Q840816)

A. Pregnant women

B. Adolescent girls

C. Children aged less than 5 years

D. Women aged 49 years and above

Correct Answer: D. Women aged 49 years and above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Women aged 49 years and above are not beneficiaries of ICDS. The beneficiaries of ICDS are mentioned below: ICDS: Integrated Child Development Services Launched in 1975 Aims to develop India’s Human Resource by providing early childhood services Falls under the ministry of woman and child development Beneficiaries: Pregnant women Nursing mothers Other women 15-45 years Children <3 years Children 3-6 years Adolescent girls 11-18 years Benefits: Immunisation Health check-up Supplemental nutrition Nutrition and health education Referral services Non-formal preschool education ICDS is implemented through Anganwadi centres. Nutrition provided Calories Protein Children (6-72 months 500 Kcal 12-15g Severely Malnourished child (6-72 months) 800kcal 20-25g Pregnant women and Nursing Mothers 600kcal 18-20g



References:

Park's Textbook of Preventive and Social Medicine 27th ed Pg 673-5

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following is false for Anganwadi centres (AWC)? (Q840817)

A. It is used to run ICDS

B. AWC can be opened on demand

C. Anganwadi worker must be 10th pass

D. 1 AWC is for every 500-1000 people in plain areas

Correct Answer: D. 1 AWC is for every 500-1000 people in plain areas

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: 1 AWC is for every 400-800 people in plain areas Anganwadi centres (AWC): AWC Courtyard through which ICDS is run (Option A) Capacity Capacity of 1 AWC Plain areas: 400-800 population Hilly areas: 300-800 population Capacity of Mini-AWC: 150-300 population. Anganwadi on demand- in areas with 40 children under 6 years without an AWC. (Option B) Anganwadi worker (AWW) AWW is the grass root level worker in an AWC Works at field level Education: 10th pass (Option C) Duration of training: 4 months Work: Plain areas: 400-800 population Hilly areas: 300-800 population Mukhya sevika Supervises the work of AWWs Child/Community Development Project Officer (CDPO) Supervises the overall functioning of ICDS. 1 CDPO can supervise: 1 Block (1,00,000 population) 4 Mukhya sevikas. 100 AWWs

References:

Park's Textbook of Preventive and Social Medicine 27th ed Pg 673-5, 701 https://pubmed.ncbi.nlm.nih.gov/3391663/#:~:text=ICDS%20gives%20food%20supplements%2C%20primary,per%20village%20(child%20care) . https://wcd.nic.in/integrated-child-development-services-icds-scheme

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which approach is emphasized under the Anemia Mukt Bharat initiative to combat anemia? (Q840819)

A. Providing free healthcare to pregnant women

B. Conducting nationwide health camps

C. Implementing iron and folic acid supplementation programs

D. Distributing hygiene kits in rural areas

Correct Answer: C. Implementing iron and folic acid supplementation programs

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Anemia Mukt Bharat implements iron and folic acid supplementation as part of one of it interventions. Anemia Mukt Bharat: It follows a 6x6x6 strategy 6 beneficiaries 6 interventions 6 institutional mechanisms Under the Ministry of Health and Family Welfare (MOHFW) Prophylactic Iron and Folic acid supplementation are provided to 6 beneficiaries. Level of prevention: Primary prevention 6 INTERVENTIONS 6 STRATEGIES Prophylactic iron-folic acid supplementation. Deworming. Intensified year-round behaviour change communication campaign (solid body, smart mind), including ensured delayed cord clamping. Testing of anaemia using digital methods and point-of-care treatment. Mandatory provision of iron folic acid fortified foods in public health programmes. Addressing non-nutritional causes of anaemia in endemic pockets with a special focus on malaria, hemoglobinopathies, and fluorosis. National Anaemia Mukt Bharat Unit. Intra-ministerial coordination. Strengthening supply chain and logistics. Convergence with other ministries. National Centre of Excellence and Advanced Research on Anaemia Control. Anaemia Mukt Bharat dashboard and digital portal-One-stop shop for anaemia. 6 BENEFICIARIES Children, 6-59 months of age. Children, 5-9 years of age.

Adolescent girls & boys (10-19 years of age). Women of reproductive age group (20-24 years of age). Pregnant women. Lactating mothers (of 0-6 months child). Beneficiaries Elemental Iron Folic acid Schedule 6-59 month 20 mg 100 mcg Bi-weekly (Syrup) 5-9 years 45 mg 200 mcg Weekly (Pink tabs) 10-19 years 60 mg 400 mcg Weekly (Blue tabs) Reproductive age women 60 mg 400 mcg Weekly (Red tabs) Pregnant women 60 mg 400 mcg Daily (Red tabs) Lactating women 60 mg 400 mcg Daily (Red tabs)



References:

https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1448&lid=797

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which indicator is considered the principal impact indicator in the National Iodine Deficiency Disorders Control Program (NIDDCP), reflecting the effectiveness of salt iodization? (Q840822)

A. Median urinary iodine levels

B. Prevalence of goitre

C. Neonatal hypothyroidism

D. Salt iodine content at the production site

Correct Answer: A. Median urinary iodine levels

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In the NIDDCP, median urinary iodine levels are regarded as the principal impact indicator because they directly reflect the iodine status in the population following salt iodization programs. This indicator is crucial for monitoring the effectiveness of iodine supplementation efforts. National Iodine Deficiency Disorders Control Program (NIDDCP) Indicators to Monitor Success Process Indicators Salt iodine content at production site, point of packaging, wholesale and retail levels & in households (Option D) Manufacturing level: ≥30 ppm and Distribution level: ≥15 ppm on a dry weight basis Impact Indicators Urinary iodine excretion (Principal impact indicator) (Option A) Goitre rate (chronic/long-term impact indicator) (Option B) Neonatal hypothyroidism (sensitive indicator) (Option C) Sustainability Indicators Median urinary iodine levels in the target population Availability of adequately iodized salt at the household level Set of programmatic indicators Epidemiological Assessment Prevalence of goitre, cretinism, neonatal hypothyroidism Urinary iodine excretion Measurement of thyroid function (T4, TSH) Programmatic Goal <5% prevalence of IDD in 10-14 years age group <10% incidence of IDD

References:

https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1054&lid=230

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: What is the primary objective of the Kishori Shakti Yojana? (Q840826)

A. Promoting higher education among adolescent girls

B. Ensuring maternal healthcare for pregnant women

C. Empowering adolescent girls through nutrition and health education

D. Providing financial assistance for marriage expenses

Correct Answer: C. Empowering adolescent girls through nutrition and health education

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Kishori Shakti Yojana aims to empower adolescent girls through nutrition and health education. Part of the existing ICDS scheme Targets adolescent girls 11-18 years Provides education on health, hygiene, and nutrition Encourages girls to be in school Promoting higher education among adolescent girls (Option A): While the scheme encourages girls to stay in school, "Higher Education" (college/university) is the primary focus of

schemes like Beti Bachao Beti Padhao or specific scholarship programs. KSY focuses more on foundational health, nutrition, and life skills for girls aged 11–18. Ensuring maternal healthcare for pregnant women (Option B): This is the objective of the Pradhan Mantri Matru Vandana Yojana (PMMVY) or Janani Suraksha Yojana (JSY) . KSY targets adolescents before they reach motherhood to improve their future health outcomes. Providing financial assistance for marriage expenses (Option D): KSY actually aims to delay marriage by empowering girls with vocational skills and awareness.



References:

https://wcd.nic.in/kishori-shakti-yojana

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: What is the main focus of the Pradhan Mantri Poshan Scheme launched by the Government of India? (Q840829)

A. Empowering women through nutrition development programs

B. Improving nutritional outcomes among children

C. Promoting sustainable agriculture practices

D. Providing financial assistance for rural agricultural development

Correct Answer: B. Improving nutritional outcomes among children

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Pradhan mantri Poshan Sheme Formerly known as mid-day meal scheme Under the ministry of education Aims to prevent school dropouts and provide nutrition for children Rolled out in government schools For preschoolers up till class 8 Primary- 450 kcal, 12 gm protein Upper primary- 700 kcal, 20 gm protein POSHAN Abhiyan: PM's Overarching Scheme for Holistic Nourishment Also known as the National Nutrition Mission L aunched in 2018 by the Ministry of Women & Child Development . Targets: Reduce low birth weight (<2.5 kg) by 2% annually . Decrease stunting (chronic malnutrition) by 2% annually . Lower underweight (acute on chronic malnutrition) by 2% annually . Reduce anemia by 3% annually .



References:

https://pmposhan.education.gov.in/aboutus.html

https://pmposhan.education.gov.in/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Match the logos with their appropriate description LOGO DESCRIPTION (A) 1. Affiliated to a department that comes under the Ministry of Consumer affairs (B) 2. Regulated by the Ministry of Food Processing Industries (C) 3. Affiliated with the Ministry of Agriculture and Farmers Welfare (D) 4. Affiliated to a department that comes under the Ministry of Health and Family Welfare (Q840833)

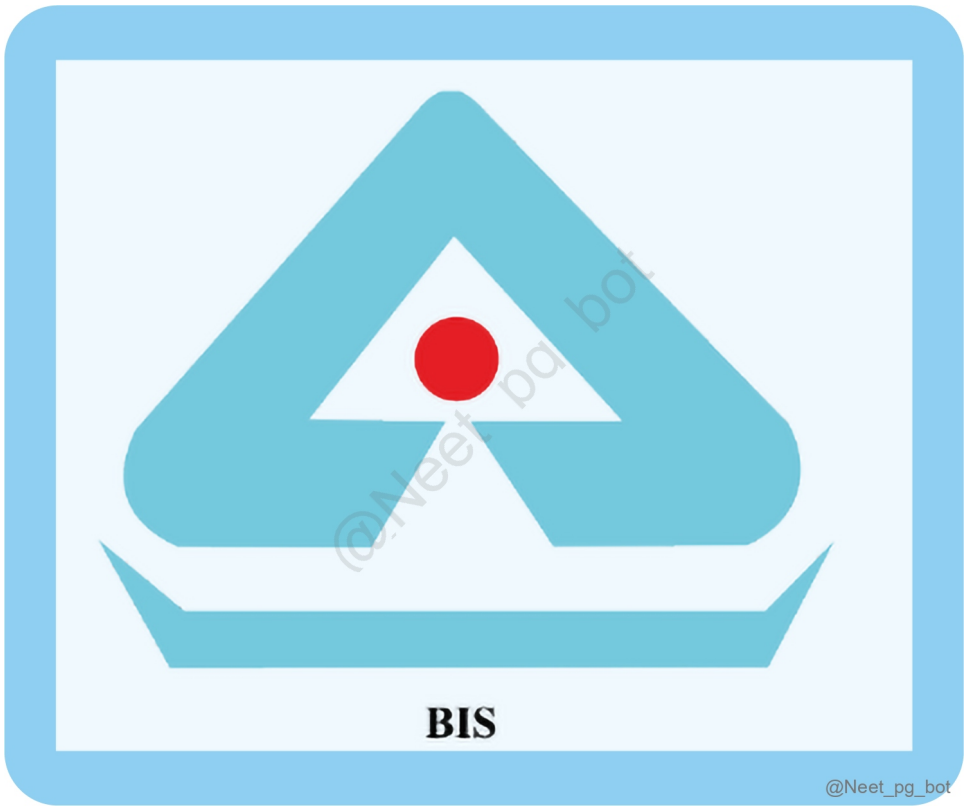
A. A-2 B-1 C-3 D-4

B. A-4 B-1 C-2 D-3

C. A-1 B-2 C-3 D-4

D. A-1 B-4 C-3 D-2





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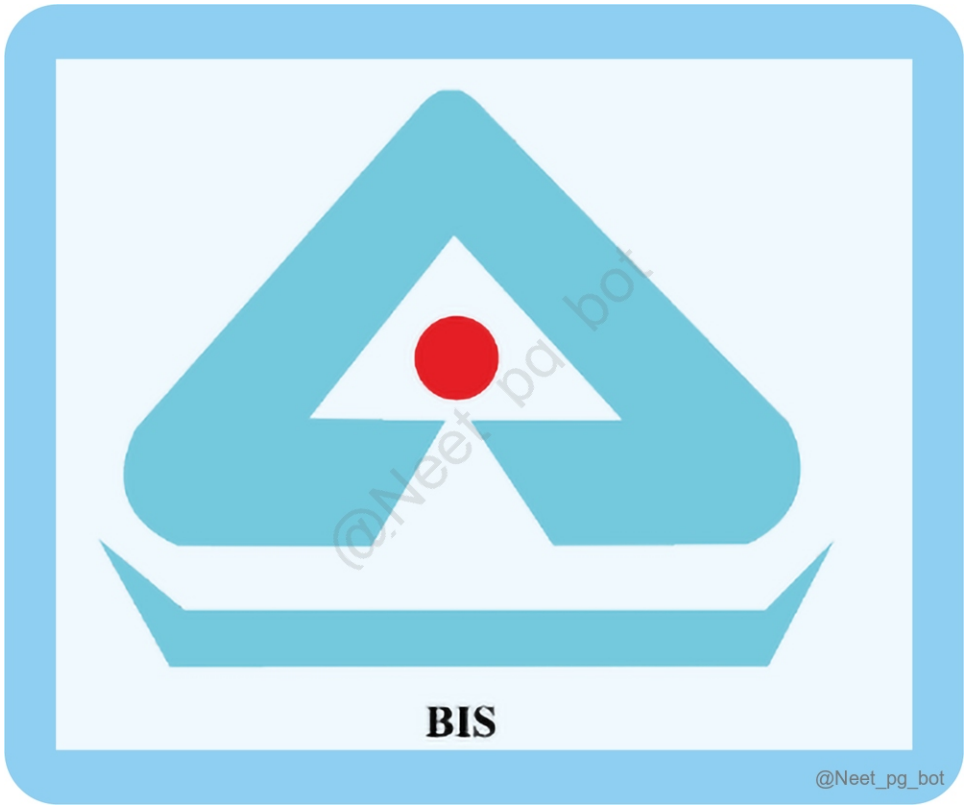


Correct Answer: B. A-4 B-1 C-2 D-3

- *Listen (English)*
- *Listen (Hindi)*

Explanation: LOGO DESCRIPTION (A) Food Safety and Standards Authority of India (FSSAI) Headquarters: New Delhi Ministry: Health and Family Welfare Role: Sets national food standards; adopts CODEX ALIMENTARIUS (by WHO - Geneva, FAO - Rome) Recent Initiative: Eat Right Campaign (B) Bureau of Indian Standards Ministry: Ministry of Consumer affairs PFA (Prevention of Food Adulteration) provides the Minimum quality of food products. BIS provides quality above the minimum standards of food products. (C) Fruit Product/Process Order. The Ministry of Food Processing Industries has created an online system for licensing and monitoring all activities related to the enforcement and administration of FPO. Regulates the quality of tinned fruit juices and tinned fruit cans. (D) This is administered by the Directorate of Marketing and Inspection (DMI) under the Ministry of Agriculture and Farmers Welfare for agricultural products. AGMARK is a certification mark indicating that agricultural produce meets a grade standard specified by DMI


fssai
Food Safety and Standards Authority of India
CODEX
ALIMENTARIUS
International Food Standards
World Health Organization
Food and Agriculture Organization of the United Nations
@Neet_pg_bot


BIS
@Neet_pg_bot





References:

https://fssai.gov.in/knowledge-hub-logos.php?pages=2

https://www.bis.gov.in/the-bureau/

↑ *Back to this question in Part A*

@Neet_pg_bot

• [10_Nutrition and Health] 042 Previous Year Questions

« Back to Folder Directory

[10_Nutrition and Health] 042 Previous Year Questions — Quick Jump

Q1 (p. 1484)	*Q2 (p. 1484)*	*Q3 (p. 1485)*	*Q4 (p. 1486)*	*Q5 (p. 1487)*	*Q6 (p. 1488)*
Q7 (p. 1489)	*Q8 (p. 1490)*	*Q9 (p. 1491)*	*Q10 (p. 1492)*	*Q11 (p. 1492)*	*Q12 (p. 1493)*
Q13 (p. 1493)	*Q14 (p. 1494)*	*Q15 (p. 1495)*	*Q16 (p. 1496)*	*Q17 (p. 1497)*	*Q18 (p. 1497)*
Q19 (p. 1498)	*Q20 (p. 1499)*	*Q21 (p. 1500)*	*Q22 (p. 1501)*	*Q23 (p. 1502)*	*Q24 (p. 1503)*
Q25 (p. 1504)	*Q26 (p. 1505)*	*Q27 (p. 1505)*	*Q28 (p. 1506)*	*Q29 (p. 1506)*	*Q30 (p. 1507)*
Q31 (p. 1508)	*Q32 (p. 1509)*	*Q33 (p. 1509)*	*Q34 (p. 1510)*	*Q35 (p. 1510)*	*Q36 (p. 1511)*
Q37 (p. 1512)	*Q38 (p. 1513)*	*Q39 (p. 1514)*			

Q1: Highest sodium content is present in which of the following foods: (Q857724)

A. Sugar cane

B. Barley

C. Canned soup

D. Fresh fruit juices

Correct Answer: C. Canned soup

Explanation: anned soup is known to have a very high sodium content because salt is often added as a preservative and for flavor enhancement. Sodium levels in canned soups can vary but are often significantly higher than in fresh or minimally processed foods. Micronutrients: Required in small amounts from a fraction of milligrams to several grams. Micronutrients consist of vitamins and minerals. Minerals classification: Major Minerals (PYQ): Calcium, Phosphorous, Sodium, Potassium, Magnesium Trace Elements: Required In Quantities Less Than A Few Milligrams/Day Eg Iron, lodine, Fluorine, Zinc, Copper, Cobalt, Chromium, Manganese, Molybdenum, Selenium, Silicon, Nickel, Tin Trace Contaminants With No Known Function: Lead, Mercury, Barium, Boron, Aluminum Sugar cane, barley, and fresh fruit juices (Options A, B, and D): naturally contain very little sodium

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC3678455/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: In a 30-year-old woman with a body weight of 55 kg, what is the recommended daily protein intake? (Q820670)

A. 45gm

B. 55gm

C. 60gm

D. 70gm

Correct Answer: A. 45gm

Explanation: Correct Option A - 45gm: The recommended daily protein intake can vary based on factors such as age, sex, physical activity level, and overall health. However, a commonly cited guideline is to consume around 0.8 grams of protein per kilogram of body weight per day. For a woman with a body weight of 55 kg, the recommended daily protein intake would be approximately 0.8 * 55 = 44 grams. This is very close to 45 grams. Incorrect Options: Option B - 55gm: This option is slightly higher than the commonly recommended 0.8 grams per kilogram. It's more than what is generally recommended for this person's body weight. Option C - 60gm: Similar to option B, this option is higher than the commonly recommended daily protein intake of 0.8 grams per kilogram for a person of this weight. Option D - 70gm: This option is significantly higher than the commonly recommended daily protein intake and is not in line with the 0.8 grams per kilogram guideline.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A patient presents with increased consumption of Bajra (pearl millet) roti and now complains of drowsiness and giddiness. What is the most likely diagnosis? (Q866768)

A. Epidemic Dropsy

B. Ergotism

C. Botulism

D. Fusarium Toxicity

Correct Answer: B. Ergotism

Explanation: Bajra (pearl millet) can be contaminated with Claviceps purpurea (ergot fungus), which produces ergot alkaloids. These alkaloids cause vasoconstriction and may lead to symptoms like giddiness, drowsiness, tingling, and, in severe cases, gangrene or convulsions. Ergotism is classically linked to the consumption of contaminated grains like millet, rye, or sorghum. Food intoxicants: Condition Toxin Food Source Prevention

Neurolathyrism Beta oxalyl amino alanine (BOAA) Lathyrus sativus (Khesari dal/grass pea) Vitamin C, steeping, parboiling Endemic Ascites Pyrrolizidine alkaloids Contaminated cereals with Crotalaria seeds Avoid contaminated grains Epidemic Dropsy Sanguinarine Mustard oil adulterated with Argemone oil Pre-testing (Nitric acid chromatography test), De-weeding Aflatoxicosis Aflatoxin B■ Mouldy groundnuts, maize Proper drying & storage Ergotism Ergot alkaloids Rye, bajra, wheat with ergot fungus Floating plant in 20% salt solution Epidemic dropsy (Option A): Caused by Argemone mexicana contamination of mustard oil → edema, diarrhea, cardiac failure; not related to Bajra. Botulism (Option C): Caused by Clostridium botulinum toxin from improperly canned food → descending flaccid paralysis, not drowsiness from grain consumption. Fusarium toxicity (Option D): From Fusarium fungi → alimentary toxic aleukia with pancytopenia; not typically linked to Bajra in this presentation.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: In a village, it is observed that several farmers have crossed gait and use a stick for support to stand up and walk. Due to poor yield from farms, they consume meals containing rice and pulses only. Supplementing their diet with which of the following vitamins could have prevented this? (Q855421)

A. Vitamin A

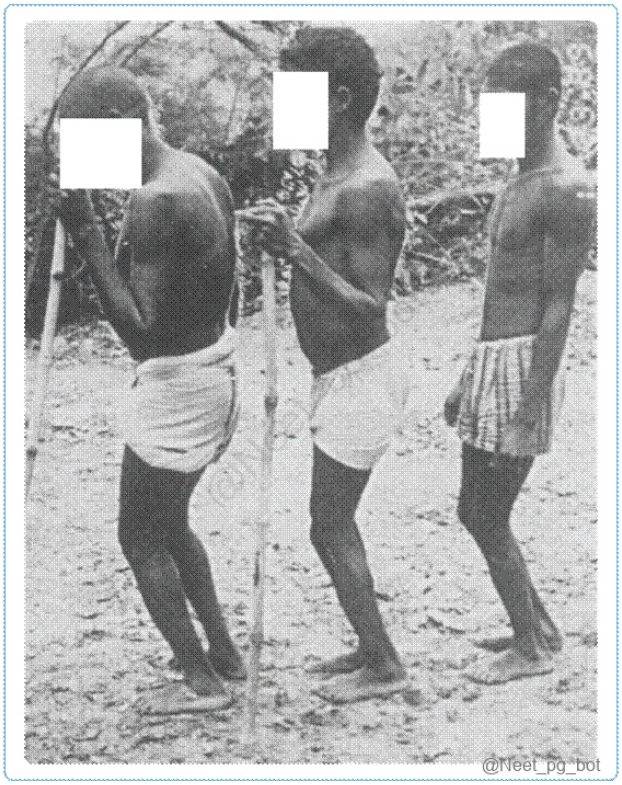
B. Vitamin D

C. Vitamin C

D. Vitamin B

Correct Answer: C. Vitamin C

Explanation: The people in this scenario are likely to be suffering from Neurolathyrism . As a method of prevention , the diet should be supplemented with Vitamin C 500-1000 mg/day for 1 week. Lathyrism: Causative agent Beta-oxalyl amino alanine (BOAA) present in Lathyrus sativus Significant exposure : >30% inclusion in diet over 2-6 months Clinical features Latent stage: preventive can be best implemented here No stick stage: most common point of diagnosis One-stick stage: muscular stiffness begins Two-stick stage: will need crutches Crawler stage: muscular atrophy sets in. Treatment Vitamin C prophylaxis: 500-1000 mg per day Banning the crop Toxin removal Steeping method: soaking in hot water for 2 hours, drained and sun-dried. Parboiling: overnight soaking in limewater. Genetic approach: selecting variants with less BOAA content and cultivating the same. Educating people. Bringing socio-economic changes. {{caption_text}}



References:

Park's Textbook of Preventive and Social Medicine 27th edition, page 759,760

https://www.google.com/url?q=https://www.researchgate.net/profile/Usha-Misra-2/publication/14998593/figure/fig1/AS:601643930370071@1520454499389/Patients-with-lathyrism.png&sa=D&source=docs&ust=1725598725946578&usg=AOvVaw3Ad_BDBOxPY3cWKALjXww6

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: In rural areas, delivery huts established to provide safe childbirth services are primarily managed by which of the following health workers? (Q855444)

A. ANM

B. AWW

C. Trained birth attendant

D. ASHA

Correct Answer: D. ASHA

Explanation: DELIVERY HUTS In rural areas managed by ASHA workers Disposable delivery kits, newborn care corner Delivery conducted by Trained birth attendant (TBA), ANM ASHA (Accredited Social Health Activist) ASHA is a woman (married, divorced, or widowed) resident of the village, aged 25-45 years, with education up to 8th grade. Population Norm for ASHA The general norm is 1 ASHA per 1000 population. In tribal, hilly, and desert areas, this may be relaxed to 1 ASHA per habitation. Role and Responsibilities of ASHA Health Activist: Create awareness and provide information on health determinants, existing services, and the importance of health and family welfare. Counselor : Provide counseling on birth preparedness, safe delivery, and family planning. Mobilizer: Help the community access health services, such as immunizations, sanitation, and nutrition. Provider: Offer basic care for common illnesses and first-aid, and act as a depot for essential medications. Community Engagement: Work with village health committees and panchayats for planning and awareness. Specific Responsibilities of ASHA Promote health and sanitation practices. Advise on child care, immunization, and reproductive health. Assist with family planning and treatment of minor ailments. Mobilize pregnant women and children to health services Provide basic medical care and support for diarrhea, fever, and tuberculosis (under DOTS). Serve as a depot holder for essential drugs and medical supplies. Role and Integration with Anganwadi The Anganwadi worker helps guide ASHA, particularly in organizing Health Day activities, mobilizing village women and children, and promoting nutrition and health education. Role and Integration with ANMs (Auxiliary Nurse Midwives) ANMs guide ASHA in areas like immunization, safe pregnancy, and health education, and assist in organizing Health Days. ANMs also help with training and monitor ASHA's performance.

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page 989,990

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A poor farmer with a history of successive crop failure develops progressive spastic paraparesis, signs of upper motor neuron paralysis, and gait instability. Name the toxin responsible for this condition. (Q855526)

A. Aflatoxin

B. Beta-oxalyl-amino-alanine

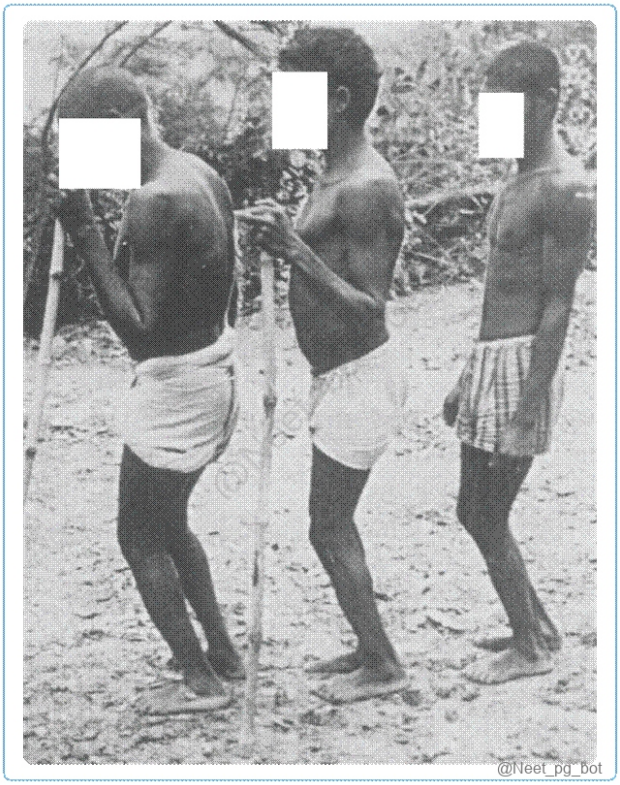
C. Ergot alkaloids

D. Fusarium toxin

Correct Answer: B. Beta-oxalyl-amino-alanine

Explanation: The condition in the given case scenario is called Lathyrism, which is due to the toxin beta-oxalyl-amino-alanine present in Lathyrus seeds. Lathyrism: Causative agent Beta-oxalyl amino alanine (BOAA) present in Lathyrus sativus Significant exposure : >30% inclusion in diet over 2-6 months Clinical features Latent stage: preventive can be best implemented here No stick stage: most common point of diagnosis One-stick stage: muscular stiffness begins Two-stick stage: will need crutches Crawler stage: muscular atrophy

sets in. Treatment Vitamin C prophylaxis: 500-1000 mg per day Banning the crop Toxin removal Steeping method: soaking in hot water for 2 hours, drained and sun-dried. Parboiling: overnight soaking in limewater. Genetic approach: selecting variants with less BOAA content and cultivating the same. Educating people. Bringing socio-economic changes. {{caption_text}} Aflatoxin (Option A): They are toxins produced by Aspergillus flavus and Aspergillus parasiticus and cause a condition called Aflatoxicosis. It is derived from infested grains and contaminated groundnuts. B1 and G1 are hepatotoxic and carcinogenic. Ergot alkaloids (Option C): They cause ergotism. They are derived from infested grains which are stored for a longer duration. They cause nausea, vomiting, and dizziness which may last for up to 24-48 hours. Sometimes it can cause peripheral gangrene and painful leg cramps. Fusarium toxin (Option D): It can cause contamination of sorghum. Rice is also considered as a substrate for this toxin.



References:

Park’s Textbook of Preventive and Social Medicine 27th edition, page 759,760

https://www.google.com/url?q=https://www.researchgate.net/profile/Usha-Misra-2/publication/14998593/figure/fig1/AS:601643930370071@1520454499389/Patients-with-lathyrism.png&sa=D&source=docs&ust=1725598725946578&usg=AOvVaw3Ad_BDBOxPY3cWKALjXww6

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: You are administering vitamin A supplements to an 8-month-old infant for two consecutive days. What is the recommended dose? (Q858095)

A. 25,000 IU

B. 50,000 IU

C. 100,000 IU

D. 200,000 IU

Correct Answer: C. 100,000 IU

Explanation: For infants 6-11 months old , the recommended dose of Vitamin A supplementation is 100,000 IU for two consecutive days. This is part of national immunization programs aimed at preventing Vitamin A deficiency, which can cause blindness and increase the risk of other infections. 25,000 IU (Option A) : is incorrect because 25,000 IU is the recommended dose for children aged 12-59 months, not for infants under one year. 50,000 IU (Option B) : is incorrect because 50,000 IU is not the standard dose for infants under 1 year. The appropriate dose for infants aged 6-11 months is 100,000 IU . 200,000 IU (Option D) : is incorrect because this dose is generally used for children aged 1-5 years, and is too high for an infant aged 6-11 months.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 706

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: What vitamin deficiency leads to xerophthalmia, a condition characterized by dryness of the eyes? (Q858097)

A. Vitamin A

B. Vitamin B

C. Vitamin C

D. Vitamin D

Correct Answer: A. Vitamin A

Explanation: Vitamin A deficiency is the primary cause of xerophthalmia, a condition that includes dry eyes and can progress to night blindness and corneal damage if untreated. Vitamin A plays a crucial role in maintaining the health of the cornea. Vitamin B (Option B) : is incorrect because vitamin B deficiencies, like B1, B6, or B12, do not cause xerophthalmia. These deficiencies are linked to neurological and hematological issues, not eye-related

conditions. Vitamin C (Option C) : is incorrect because vitamin C deficiency leads to scurvy, which is characterized by symptoms such as bleeding gums, poor wound healing, and skin problems, but not xerophthalmia. Vitamin D (Option D) : is incorrect because vitamin D deficiency primarily leads to rickets in children or osteomalacia in adults, conditions that affect bone health, not the eyes.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 706

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: What is the likely reason for the food poisoning experienced by the worker in the groundnut factory who consumed spoiled groundnuts that were stored in the facility? (Q857078)

A. Beta oxalyl amino alanine

B. Smoke from factory

C. Sanguinarine

D. Aflatoxins

Correct Answer: D. Aflatoxins

Explanation: flatoxins Aflatoxins are toxic compounds produced by Aspergillus flavus and Aspergillus parasiticus , fungi that grow on improperly stored food items such as groundnuts (peanuts), grains, and nuts in warm and humid conditions. Aflatoxicosis: Clinical features Features of hepatotoxicity (jaundice, hepatomegaly) Hepatocellular carcinoma Causative agent Infestation of Aspergillus flavus and Aspergillus parasiticus over stored rice, wheat, and corn Produce mycotoxins: aflatoxin B1 & G1 (both are hepatotoxic & carcinogenic) Risk factors Storage temperature of 11 to 37 degree Celsius Moisture content >16% Prevention Educating people Moisture content <10% during storage Beta oxalyl amino alanine (Option A): a neurotoxic compound in certain plants like Lathyrus sativus seeds, leads to Lathyrism when consumed excessively over time. It is not associated with groundnuts. Smoke inhalation (Option B): While exposure to smoke may cause health problems, it does not explain the specific symptoms of food poisoning experienced by the worker. Sanguinarine (Option C): is an alkaloid found in certain plants, including bloodroot and other members of the Papaveraceae family.

References:

Park's Textbook of Preventive and Social Medicine 27th edition, page 771,772

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: In a 30-year-old male presenting with bleeding gums and iron deficiency anemia, which vitamin deficiency would you anticipate? (Q830811)

A. Vitamin A

B. Vitamin B1

C. Vitamin C

D. Vitamin D

Correct Answer: C. Vitamin C

Explanation: Correct Option C - Vitamin C: Vitamin C deficiency, also known as scurvy, is characterized by symptoms such as bleeding gums, joint pain, and fatigue. Vitamin C is essential for collagen synthesis, and its deficiency leads to impaired connective tissue integrity, resulting in bleeding from the gums and other mucous membranes. Incorrect Options: Option A - Vitamin A: Vitamin A deficiency is known to cause night blindness and can affect vision. It is not directly associated with bleeding gums or iron deficiency anemia. Option B - Vitamin B1: Vitamin B1 deficiency can lead to conditions like beriberi, which primarily affects the nervous system and cardiovascular system. It is not directly linked to bleeding gums or iron deficiency anemia. Option D - Vitamin D: Vitamin D deficiency can result in conditions like rickets or osteomalacia, affecting bone health. It is not typically associated with bleeding gums or iron deficiency anemia.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: An 8-month-old baby on examination shows signs of vitamin A deficiency. What is the dose of vitamin A to be administered to the baby? (Q857733)

A. 25,000 IU IM

B. 25,000 IU orally

C. 100,000 IU orally

D. 100,000 IU IM

Correct Answer: C. 100,000 IU orally

Explanation: ay 2 50000 IU 1 lakh IU 2 Lac IU

References:

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pg 706

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: If Bajra is mixed with black seeds, what is used to separate them? (Q857758)

A. 20% salt water

B. Normal saline

C. 10% salt water

D. Water

Correct Answer: A. 20% salt water

Explanation: rgot is a fungus (Claviceps purpurea) that infects food grains such as bajra, rye, sorghum, and wheat during their flowering stages. Consumption of ergot-infested grains can lead to ergotism , characterised by acute symptoms such as nausea, repeated vomiting, giddiness, and drowsiness lasting up to 24 to 48 hours . In chronic cases, ergotism may cause painful cramps in limbs and peripheral gangrene due to vasoconstriction of capillaries . Modern high-yielding varieties of bajra are more susceptible to ergot infestation. Infested grains can be removed in 20% salt water, hand-picking, or air floatation. The upper safe limit for ergot alkaloids in food material is 0.05 mg per 100 grams.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 772

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: With regards to the pasteurization of milk, which of the following tests is not related? (Q855344)

A. Phosphatase test

B. Iodine test

C. Standard plate count

D. Methylene blue reduction test

Correct Answer: B. Iodine test

Explanation: The iodine test is not directly related to the pasteurization of milk. It is a test used to detect the presence of starch in a substance. It involves adding iodine solution to the sample, and if starch is present, the solution will turn blue-black. Incorrect Choices: Phosphatase test (Option A): The phosphatase test is indeed related to the pasteurization of milk. Phosphatase is an enzyme naturally present in raw milk but is inactivated during the pasteurization process. By measuring the activity of phosphatase in milk, it can be determined if proper pasteurization has occurred. Therefore, this option is incorrect as the phosphatase test is directly related to pasteurization. Standard plate count (Option C): The standard plate count is also related to the pasteurization of milk. It is a test used to determine the total number of viable microorganisms present in milk. By assessing the microbial load, the effectiveness of pasteurization in reducing bacterial contamination can be evaluated. This option is incorrect as the standard plate count is directly associated with assessing the pasteurization process. Methylene blue reduction test (Option D): The methylene blue reduction test is used to assess the bacteriological quality of milk and the efficiency of pasteurization. It evaluates the reduction of methylene blue dye by the metabolic activity of microorganisms in milk. This test helps determine if pasteurization has effectively inhibited bacterial growth. Therefore, this option is incorrect as the methylene blue reduction test is directly related to pasteurization.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 723

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which of the following factors contributes most directly to the precipitation or aggravation of malnutrition in children who already have inadequate dietary intake? (Q856049)

A. Child rearing

B. Infectious diseases

C. Food habits

D. Socioeconomic factors

Correct Answer: B. Infectious diseases

Explanation: Infectious diseases significantly contribute to malnutrition by increasing metabolic demands, reducing appetite, impairing nutrient absorption, and causing nutrient loss. Common infections such as diarrhea, tuberculosis, parasitic infections, and respiratory infections lead to weight loss, muscle wasting, and stunting. Recurrent infections create a vicious cycle where malnutrition weakens immunity, leading to more infections. Role of Infectious Diseases in Malnutrition: Infection Effect on Nutrition Diarrheal diseases Causes fluid and nutrient loss , leading to dehydration and malabsorption. Tuberculosis (TB) Increases catabolism (muscle breakdown) ,

leading to weight loss. Parasitic infections (e.g., hookworm, giardiasis) Causes iron deficiency anemia, protein loss, and malabsorption . Measles Leads to vitamin A deficiency , impairing immune function. Child rearing (Option A): While child rearing practices can influence nutrition (e.g., breastfeeding practices, introduction of complementary foods), it does not directly cause malnutrition in the same way infections can. Poor child rearing practices may contribute, but they are not a primary factor. Food habits (Option C): Food habits certainly play a role in nutrition, but they alone do not directly cause malnutrition unless they are extreme (e.g., insufficient intake of essential nutrients). In general, food habits are more of a contributing factor rather than a primary cause. Socioeconomic factors (Option D): Socioeconomic factors, such as poverty, can significantly affect access to adequate food and healthcare, contributing to malnutrition. However, socioeconomic factors are broader and often contribute in conjunction with other factors like food habits and infectious diseases.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 626

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 708, 709

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: What is the most relevant information that should be obtained from the medical history of a patient from Chhattisgarh who is experiencing gradual muscle weakness and spasms in the legs, and exhibits only motor impairment upon examination? (Q856050)

A. History of similar illness in the past

B. History of fever

C. History of vaccination

D. History of diet

Correct Answer: D. History of diet

Explanation: The patient is from Chhattisgarh , a region known for outbreaks of Lathyrism , a neurological disorder caused by the consumption of Lathyrus sativus (Khesari dal) . Lathyrism is characterized by gradual-onset spastic paraparesis (muscle weakness and spasms in the legs), with only motor impairment and no sensory loss. The toxin β-N-oxalyl-L-α,β-diaminopropionic acid (β-ODAP) in Khesari dal causes upper motor neuron (UMN) damage , leading to progressive spastic paralysis . Features of Lathyrism: Feature Findings Cause Excessive consumption of Lathyrus sativus (Khesari dal) Region Endemic in Chhattisgarh, Madhya Pradesh, Bihar, Odisha Symptoms Gradual-onset spastic paraparesis , hyperreflexia Sensory Involvement Absent (pure motor disorder) Prevention Dietary restriction, government bans on Khesari dal History of similar illness in the past (Option A): While a history of similar illness may be relevant in some cases, this patient's symptoms are more likely due to a dietary issue rather than a recurrent illness. History of fever (Option B): Fever could indicate an

infection or inflammation but isn't the primary concern given the gradual onset of symptoms . The absence of fever makes this less relevant in the current context. History of vaccination (Option C): While vaccination is important for preventing diseases like poliomyelitis , in this case, the gradual onset of muscle weakness and spasms suggests a nutritional or metabolic cause rather than a vaccine-preventable disease.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 701, 702

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 759

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Which statement is correct regarding the reference woman represents the average healthy woman's nutritional needs and is used as a standard for setting the RDA ? (Q856456)

A. Weight 55 kgs

B. Height 1.73 m

C. Works 10 hours/day

D. Age of 18-25 years

Correct Answer: A. Weight 55 kgs

Explanation: The reference woman represents the average healthy woman's nutritional needs and is used as a standard for setting the Recommended Dietary Allowance (RDA) . This reference is crucial for determining the nutrient requirements of the general population. Weight 55 kgs : The reference woman is typically assumed to have a body weight of 55 kg (121 lbs). This value is used to determine the average energy and nutrient requirements. Height 1.73 m (Option B) : While height is a factor in determining nutritional needs, the reference woman is generally assumed to have a height of around 1.60 m (not 1.73 m). Works 10 hours/day (Option C) : The reference woman is not assumed to work for a specific number of hours each day. Nutritional requirements can vary depending on physical activity, but the reference is typically for a woman with moderate activity levels. Age of 18-25 years (Option D) : The reference woman is not specifically limited to this age range. Nutritional needs are assessed based on a range of factors, including age, but the reference woman is generally used as an average for adult women (not limited to a specific age group).

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 747

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Which of the following food items contains the lowest amount of iron? (Q859456)

A. Liver

B. Spinach

C. Beans

D. Milk

Correct Answer: D. Milk

Explanation: Sources rich in iron: Two types: haem-iron and non-haem iron. Haem iron Haem iron is better absorbed than non-haem iron. Found in liver (Option A ruled out) , meat, poultry, and fish. Promotes absorption of non-haem iron in plant foods eaten concurrently. Non-Haem iron: It is found in plant-based foods such as cereals, green leafy vegetables (Option B ruled out) , legumes (Option C ruled out) , nuts, oilseeds, jaggery, and dried fruits. Additional Iron Sources : Cooking in iron vessels can significantly contribute to dietary iron in some areas. Iron Content in Milk : Low in all mammalian species. (Option D) Breast milk contains less than 0.2 mg/dL but has good bioavailability. Bioavailability and Absorption Inhibitors : Non-haem iron absorption is hindered by phytates, oxalates, carbonates, phosphates, and dietary fibre. Foods like milk, eggs, and tea also inhibit iron absorption. Indian vegetarian diets often contain high levels of these inhibitors (e.g., phytates in bran, phosphates in egg yolk, tannin in tea, and oxalates in vegetables).

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg. 737

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which of the following foods has the maximum biological value? (Q860032)

A. Pulses

B. Soyabean

C. Milk

D. Egg

Correct Answer: D. Egg

Explanation: Eggs are often regarded as the gold standard of protein due to their high biological value. They are considered a complete protein source as they contain all essential amino acids in optimal ratios. Egg protein is highly bioavailable and contains important nutrients such as vitamins, minerals, and antioxidants. Egg Importance Eggs are highly nutritious and rich in protein, essential vitamins, & minerals. They support muscle building, brain health, and overall wellness. NPU of egg is 96 (~ almost equal to 100) Rule of 6 6 grams of protein 6 grams of fat 60 calories per large egg 6 essential vitamins (A, B2, B12, D, E, K) 60 grams average weight Others: 6x5=30 mg Calcium 6x0.25=1.5mg Iron Eggs are easy to digest and have high bioavailability, meaning the body can efficiently absorb and utilise the protein. Net Protein Utilization (NPU): Digestibility coefficient (external indicator) x Biological value (internal indicator) / 100 Percentage of the ingested nitrogen retained in the body 1 gm protein = 6.25gm nitrogen NPU Indian diet: 50-80 Pulses (Option A): Pulses, such as lentils, chickpeas, and beans, are a rich source of plant-based protein. While they provide essential amino acids, they are generally considered to have lower biological value compared to animal-based proteins. This is because pulses are deficient in one or more essential amino acids, particularly methionine. Soybean (Option B): While soybean protein is of higher quality among plant-based sources, it still does not match the BV of animal-based proteins due to slightly lower digestibility and bioavailability. Milk (Option C): Milk has a high BV (around 85–90) because it contains all essential amino acids in a good ratio and is easily digestible. Milk protein, particularly casein and whey, is of high quality and supports tissue repair and growth effectively. However, its biological value is slightly lower than egg.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 725, 741-43, 745

IAPSM textbook of Community medicine, 2nd edition, Page 41

A review on plant-based proteins from soybean: Health benefits and soy product development - ScienceDirect

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Criteria of mid arm circumference in Shakir's tape for severe acute malnutrition ? (Q820608)

A. < 11.5

B. <12.5

C. <13.5

D. <14.5

Correct Answer: A. < 11.5

Explanation: Correct Option A - < 11.5: Mid-upper arm circumference (MUAC) is a measurement commonly used in assessing nutritional status, especially in identifying severe acute malnutrition (SAM) in children. Shakir's tape is a specific measuring tape used for this purpose. The measurement helps identify children who are at a higher risk of health complications due to malnutrition. Incorrect Options: Option B - <12.5: A MUAC measurement of

less than 12.5 cm might be indicative of moderate acute malnutrition, but for severe acute malnutrition, the cutoff is generally lower. Option C - <13.5: A MUAC measurement of less than 13.5 cm might be used as a cutoff for moderate acute malnutrition, but for severe acute malnutrition, the cutoff is lower. Option D - <14.5 . A MUAC measurement of less than 14.5 cm might be used as a cutoff for moderate acute malnutrition, but for severe acute malnutrition, the cutoff is lower.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: A patient whose diet mainly consists of pulses and rice presents with bowed legs (stick deformity). Which of the following vitamins could have prevented this condition? (Q866778)

A. Vitamin A

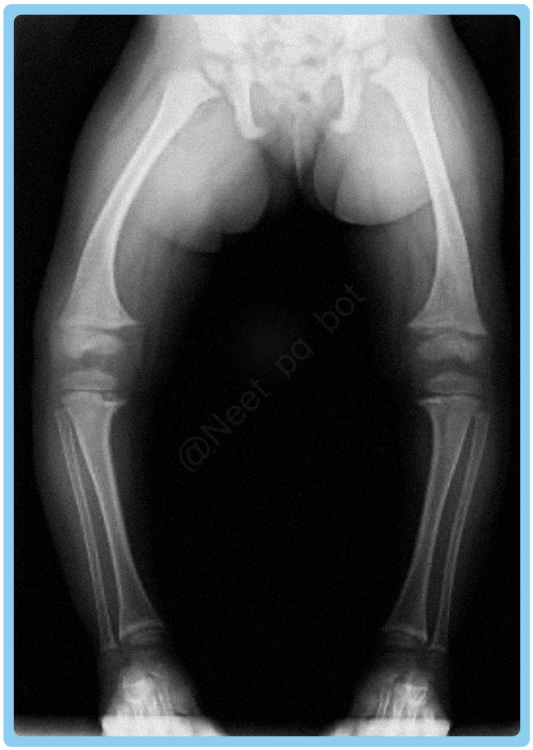
B. Vitamin B 12

C. Vitamin C

D. Vitamin D

Correct Answer: D. Vitamin D

Explanation: The patient's diet (mainly pulses and rice) is low in vitamin D and calcium-rich foods. Bowed legs ("stick deformity") in this context indicate rickets , a disease of defective bone mineralization in children caused primarily by vitamin D deficiency. Vitamin D is essential for calcium and phosphate absorption; its deficiency leads to soft bones and deformities. Vitamin D & Rickets: Sources: Endogenous synthesis in skin via sunlight (UVB rays). Dietary: fortified milk, egg yolk, fish liver oils. Functions: Enhances intestinal absorption of calcium and phosphate. Promotes bone mineralization. Modulates immune function. Deficiency Effects: In children → Rickets: bowed legs, rachitic rosary, widening of wrists/ankles, delayed closure of fontanelle. In adults → Osteomalacia. Risk Factors: Diet lacking in dairy/fortified foods. Limited sunlight exposure. Malabsorption syndromes. Prevention: Adequate sunlight exposure. Vitamin D supplementation in high-risk groups. Feature Rickets (Children) Osteomalacia (Adults) Cause Vitamin D deficiency Vitamin D deficiency Bone deformities Yes (bow legs, knock knees) No deformity, bone pain Growth plate Affected Not affected Vitamin A (Option A) – Deficiency causes night blindness, xerophthalmia; unrelated to bone deformities. Vitamin B12 (Option B) – Deficiency leads to megaloblastic anemia and neurological symptoms; not linked to rickets. Vitamin C (Option C) – Deficiency causes scurvy (bleeding gums, poor wound healing); does not cause bowed legs.



References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: According to the American Heart Association, what is the current recommendation regarding dietary cholesterol intake in the general population? (Q866459)

A. Strictly limit cholesterol intake to less than 200 mg per 1000 kcal per day

B. Avoid all foods containing cholesterol, regardless of total fat content

C. Focus on reducing saturated fat and overall dietary patterns rather than setting a specific cholesterol limit

D. Restrict cholesterol to less than 100 mg per day in all individuals

Correct Answer: C. Focus on reducing saturated fat and overall dietary patterns rather than setting a specific cholesterol limit

Explanation: The American Heart Association (AHA, 2023) no longer specifies a numerical daily cholesterol limit for the general population. Instead, it emphasizes: Reducing saturated fat (which influences serum LDL more strongly than dietary cholesterol itself), Following a heart-healthy diet pattern rich in fruits, vegetables, whole grains, lean proteins, and healthy fats. The AHA notes that foods containing cholesterol such as eggs and shellfish can fit into a healthy diet when not fried and consumed in moderation , especially if total saturated fat intake is low.

References:

https://www.heart.org/en/news/2023/08/25/heres-the-latest-on-dietary-cholesterol-and-how-it-fits-in-with-a-healthy-diet#:~:text=Dietary%20cholesterol%20also%20can%20be,relatively%20healthy%20when%20not%20fried.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Which of the following substances should be eaten to prevent thiamine deficiency? (Q844056)

A. Rice and wheat

B. Curd

C. Salad

D. Sabji (Aloo)



Correct Answer: A. Rice and wheat

Explanation: Correct Option A - Rice and wheat: While refined rice and wheat are not the best sources of thiamine, whole grains and fortified products are better at preventing thiamine deficiency. Rice and wheat, when consumed in their whole form (i.e., brown rice and whole wheat), provide a better source of thiamine and can help in preventing thiamine deficiency compared to the other options listed. Incorrect Options: Option B - Curd: While curd (yogurt) is a good source of various nutrients, including calcium and protein, it is not a significant source of thiamine. It does not play a major role in preventing thiamine deficiency. Option C - Salad: Salads typically consist of vegetables and fruits, which can provide a range of vitamins and minerals. However, thiamine content in salads varies depending on the specific vegetables and fruits used. In general, salad is not a primary source of thiamine. Option D - Sabji (Aloo): Aloo (potato) is commonly used in sabji (vegetable dishes) and is a good source of thiamine compared to some other foods. However, for a more substantial prevention of thiamine deficiency, other foods rich in thiamine should be included.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: A mother comes with her child who has papules on the extensor surfaces of the skin, which resolve with the administration of vitamins A and C and essential amino acids. What is your diagnosis? (Q844060)

A. Phrynoderma

B. Rickets

C. Kwashiorkor

D. Marasmus

Correct Answer: A. Phrynoderma

Explanation: Correct Option A - Phrynoderma: Phrynoderma is characterized by papular lesions on the extensor surfaces, which can improve with vitamin A supplementation. The resolution of symptoms with the administration of vitamins A and C, along with essential amino acids, is consistent with this diagnosis. Incorrect Options: Option B - Rickets: This is a condition resulting from vitamin D deficiency, leading to weak and soft bones in children. Symptoms include bone deformities and growth retardation, but it does not typically present with papules on the extensor surfaces. Option C - Kwashiorkor: This is a form of protein-energy malnutrition characterized by edema, irritability, and skin changes. It usually involves more generalized symptoms of malnutrition rather than isolated papules that resolve with vitamins and amino acids. Option D - Marasmus: This is another form of severe malnutrition caused by a deficiency in caloric intake, leading to severe weight loss and muscle wasting. It does not present with papules but rather with severe overall wasting.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 725-727

IAPSM textbook of Community medicine, 2nd edition, Pages 30,31

https://www.google.com/url?q=https://openi.nlm.nih.gov/detailedresult?img%3DPMC2854467_IJO-58-175-g001%26query%3Dphrynoderma%26it%3Dxg%26lic%3Dby%26req%3D4%26npos%3D1&sa=D&source=docs&ust=1725598974523732&usg=AOvVaw2pmVc81oBk4rcdkVUo-YxR

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: A man presented with bilateral swelling of his legs, diarrhoea, and dyspnea. He has a history of consuming mustard oil from a local vendor. Which test should be performed by the health inspector to check for the adulterant? (Q844124)

A. Paper Chromatography Test

B. Baudouin test

C. Methylene Blue Reduction Test

D. None of the above

Correct Answer: A. Paper Chromatography Test

Explanation: The above clinical scenario suggests epidemic dropsy , commonly occurring when mustard oil is contaminated with argemone oil. Paper chromatography is the most sensitive test for detecting the presence of argemone oil in edible oils. It helps identify the adulterant based on the separation and visualization of specific components. Epidemic dropsy: Clinical features Bilateral leg swelling, diarrhoea, dyspnoea, features of glaucoma and heart failure even up to death. Causative agent Sanguinarine (toxic alkaloid present in argemone oil). Detection of contamination Nitric acid test: the presence of a red-brown ring when added to the sample oil indicates the presence of argemone oil. Paper chromatography test. Most sensitive and better than nitric acid test Prevention Accidental contamination: removing argemone weeds growing among oilseed crops. Deliberate contamination: enforcing Prevention of Food Adulteration Act.

References:

Park’s Textbook of Preventive and Social Medicine 27th edition, page 772

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: Xeropthalmia is considered a public health problem if the prevalence of bitot's spot is more than: (Q860525)

A. 0.01%

B. 0.05%

C. 0.5%

D. 1%

Correct Answer: C. 0.5%

Explanation: Xerophthalmia results from vitamin A deficiency, especially in young children. WHO uses specific clinical signs to determine public health significance. Bitot’s spots are one of the key clinical markers. According to WHO, a prevalence of Bitot’s spots ≥0.5% in children aged 1–6 years indicates a public health problem. This cutoff reflects substantial deficiency in the community. Above this level, large-scale vitamin A supplementation and dietary interventions are recommended. Therefore, a prevalence of Bitot’s spots >0.5% meets the WHO threshold. Incorrect Options: 0.01% (Option A): Too low; not used as a cutoff by WHO. 0.05% (Option B): Still below the WHO-defined threshold for public health significance. 1% (Option D): This is above the threshold, but WHO defines the cutoff at 0.5% , not 1%.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: A mother of a breastfeeding child only eats vegetables. Which deficiency is common in this case? (Q860530)

A. Vitamin B12

B. Vitamin A

C. Vitamin D

D. Vitamin K

Correct Answer: A. Vitamin B12

Explanation: Vitamin B12 is mostly seen in vegetarians as it is predominantly present in animal sources. Cobalamin - vitamin B12 Sources Liver; Meat; Milk; Eggs; Cheese; Synthesised by gut bacteria (not found in food of vegetable origin) Absorption Absorbed in terminal ileum, bound to intrinsic factor. Uses It helps in the synthesis of fatty acid(myelin) and DNA. Deficiency Megaloblastic anemia Demyelinating lesion in the spinal cord Infertility Requirements Adults: 2-2 mcg/day. Pregnancy: extra 0.25 mcg. Lactation: extra 1 mcg. Infants and children: 1.2 mcg. Incorrect Options: Vitamin A (Option B): Vitamin A deficiency is ruled out as the cheapest source of vitamin A is from green leafy vegetables. Vitamin D (Option C): Vitamin D2 is derived from plant sources. Vitamin K (Option D): Vitamin K1 is derived from green vegetables.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 735 and751

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: Iron absorption is decreased in which of the following? (Q860542)

A. Amla

B. Sprouting

C. Tea

D. Lemon

Correct Answer: C. Tea

Explanation: Correct Option: C) Tea Tannin in tea interferes with iron absorption. Sources rich in iron: Two types: haem-iron and non-haem iron. Haem iron Haem iron is better absorbed than non-haem iron. Found in liver, meat, poultry, and fish. Promotes absorption of non-haem iron in plant foods eaten concurrently. Non-Haem iron: It is found in plant-based foods such as cereals, green leafy vegetables, legumes, nuts, oilseeds, jaggery, and dried fruits. Additional Iron Sources : Cooking in iron vessels can significantly contribute to dietary iron in some areas. Iron Content in Milk : Low in all mammalian species. Breast milk contains less than 0.2 mg/dL but has good bioavailability. Bioavailability and Absorption Inhibitors : Non-haem iron absorption is hindered by phytates, oxalates, carbonates, phosphates, and dietary fibre. Foods like milk, eggs, and tea also inhibit iron absorption. Indian vegetarian diets often contain high levels of these inhibitors (e.g., phytates in bran, phosphates in egg yolk, tannin in tea, and oxalates in vegetables). Incorrect Options: Amla (Option A): Vitamin C in Amla is the promoter of iron absorption Sprouts (Option B): Sprouting promotes iron absorption. Lemon (Option D): Vitamin C in Lemon is the promoter of iron absorption

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 737

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: What are the potential effects of folic acid deficiency during pregnancy? (Q860603)

A. Neural tube defects

B. Preterm labour

C. Pernicious anemia

D. Iron deficiency anemia

Correct Answer: A. Neural tube defects

Explanation: Adequate folic acid levels are crucial for the proper closure of the neural tube during early fetal development. If a pregnant woman does not have enough folic acid, it can lead to neural tube defects. Incorrect Options: Options B, C, and D are not caused by folic acid deficiency during pregnancy.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 783

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: Which of the following mineral deficiency is associated with sexual dysfunction? (Q839891)

A. Zinc

B. Copper

C. Magnesium

D. Molybdenum

Correct Answer: A. Zinc

Explanation: Correct Option A – Zinc: Zinc deficiency is associated with sexual dysfunction. Low levels of zinc can lead sexual infantilism in adolescents. Incorrect Options: Options B, C, and D are not associated with sexual dysfunction.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: A 5-year-old has the following anthropometric findings: Weight/age < -3.2 SD, Height/age < -2.5 SD, Weight/height < -1.7 SD. Under which of the following categories would this child be classified? (Q839896)

A. Acute malnutrition

B. Chronic malnutrition

C. Acute on chronic malnutrition

D. Severe malnutrition

Correct Answer: B. Chronic malnutrition

Explanation: Correct Option B - Chronic malnutrition: Weight/age < -3.2 SD : This indicates severe underweight. Severe underweight can result from chronic malnutrition because it reflects a long-term deficit in nutrient intake. Height/age < -2.5 SD : This indicates stunting. Stunting is a sign of chronic malnutrition, reflecting long-term inadequate nutrition and poor health conditions. Weight/height < -1.7 SD : This indicates wasting. Wasting is typically a sign of acute malnutrition, but in this context, it is less severe compared to the other measures. Given the severity of the indicators for weight/age and height/age, which are more pronounced, the primary issue appears to be chronic malnutrition. Incorrect Options: Option A - Acute malnutrition: Acute malnutrition is primarily

indicated by significant wasting (weight/height < -2 SD). Although the child has wasting (weight/height < -1.7 SD), the more severe indicators are weight/age and height/age, pointing more towards a chronic issue rather than an acute one. Acute on chronic malnutrition would be considered if both stunting (chronic) and wasting (acute) were severely present. In this case, the degree of wasting (weight/height < -1.7 SD) is not as severe as the stunting and underweight indicators, which suggests that the primary issue is chronic. Option C - Acute on chronic malnutrition: Acute on chronic malnutrition would be considered if both stunting (chronic) and wasting (acute) were severely present. In this case, the degree of wasting (weight/height < -1.7 SD) is not as severe as the stunting and underweight indicators, which suggests that the primary issue is chronic. Option D - Severe malnutrition: Severe malnutrition is a general term and could refer to either acute or chronic malnutrition. While the child is indeed severely malnourished, specifying chronic malnutrition is more accurate given the primary indicators of weight/age and height/age.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: Wasting in a child is assessed by which of the following measures? (Q859983)

A. Weight-for-height

B. Weight-for-age

C. Height-for-weight

D. Height-for-age

Correct Answer: A. Weight-for-height

Explanation: Weight-for-height is a key indicator used to assess wasting in a child. Wasting refers to a child who has a low weight compared to their height, indicating acute undernutrition. Weight-for-height assesses acute malnutrition (wasting). Height-for-age assesses chronic malnutrition (stunting). Weight-for-age is an overall indicator but does not differentiate between acute and chronic malnutrition, making it less specific for either. Head circumference is a general indicator that can reflect both acute and chronic malnutrition, but it's not the primary marker for either. Incorrect Options: Options B, C, and D are not the key indicators for wasting.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 723

↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: What concentration of fluoride is typically associated with causing crippling fluorosis? (Q859990)

A. > 10 mg/L

B. > 6 mg/L

C. > 3 mg/L

D. > 1.5 mg/L

Correct Answer: A. > 10 mg/L

Explanation: Crippling fluorosis is a severe form of skeletal fluorosis that results in significant disability. It typically occurs when the fluoride concentration in drinking water exceeds 10 mg/L. Fluoride (mg/L) Effects Less than 0.5 Dental cavities 0.5–1.0 Protection against dental cavities. Good for bone and teeth. 1.5–3.0 Dental fluorosis 3.0–10 Skeletal fluorosis 10 or more Crippling skeletal fluorosis and severe osteosclerosis Drinking Water Quality Aspect Recommended Value Microbiological Aspects Coliform Bacteria (E. coli) 0 coliforms per 100ml of potable water Chemical Properties Chlorides Maximum: 600 mg/L Hardness 100-300 mg/L Total Dissolved Solids (TDS) Less than 600 mg/L (good), permissible up to 1000 mg/L Lead 0.01 mg/L Fluoride 0.5-0.8 mg/L Nitrate < 50 mg/L Physical Properties Turbidity Up to 5 NTU (Nephelometric Turbidity Unit) Color Up to 15 TCU (True Color Unit) or 5 Hazen units

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 723, 848, 849

↑ *Back to this question in Part A*

@Neet_pg_bot

Q33: A woman develops edema, visual disturbances, and heart failure after consuming a food item. What is the most likely adulterant? (Q860003)

A. Sanguinarine

B. BOAA

C. Pyrrolizidine

D. Aflatoxin

Correct Answer: A. Sanguinarine

Explanation: Sanguinarine is a toxic alkaloid found in Argemone oil, which is derived from the seeds of the Argemone Mexicana plant, which is a common weed in mustard fields, and its seeds can accidentally get mixed with mustard seeds during oil extraction. Consumption of mustard oil contaminated with Argemone oil leads to a condition known as epidemic dropsy. It can present as: Sudden bilateral non-inflammatory pitting edema. Diarrhoea Dyspnoea Cardiac defects Glaucoma Incorrect Options: BOAA (Option B): BOAA is a neurotoxic amino acid found in the seeds of the Lathyrus sativus plant and leads to neurolathyrism. Pyrrolizidine (Option C): Pyrrolizidine alkaloids are hepatotoxic compounds found in various plants. Chronic exposure leads to veno-occlusive disease of the liver, causing hepatomegaly, jaundice, and ascites Aflatoxin (Option D): Aflatoxin causes aflatoxicosis, which typically results in liver damage, hepatocellular carcinoma, and acute hepatic failure.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 723

↑ *Back to this question in Part A*

@Neet_pg_bot

Q34: In endemic area what will be the dose of Vitamin A for 1-6 year old baby? (Q820567)

A. 2 lakh IU orally for 6 months

B. 1 lakh IU orally for 6 months

C. 2 lakh IU for 6 weeks

D. 2 lakh IU for 1 year

Correct Answer: A. 2 lakh IU orally for 6 months

Explanation: Correct Option A - 2 lakh IU orally for 6 months: Vitamin A supplementation is a crucial intervention in areas where vitamin A deficiency is endemic, as it helps prevent childhood blindness and reduce mortality rates. In regions with a high prevalence of vitamin A deficiency, the World Health Organization (WHO) recommends a high-dose vitamin A supplementation schedule for children aged 6 months to 5 years. Incorrect Options: Option B - 1 lakh IU orally for 6 months: It is not the recommended dose. The dose is typically higher. Option C - 2 lakh IU for 6 weeks: It is not in line with the standard supplementation schedule. The dose is given for a longer duration. Option D: 2 lakh IU for 1 year: It is not the recommended schedule. The supplementation period is shorter.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q35: A 3 year old child came in the opd with severe diarrhea , vomiting, skin, deeply sunken eyes and no urine output. On examination baby is severely dehydrated, lethargic,high respiratory rate and BP of 80/60mmHg. Which fluid is given for management? (Q820645)

A. ORS

B. Ringer lactate with 5% dextrose

C. Normal Saline

D. Dextrose

Correct Answer: B. Ringer lactate with 5% dextrose

Explanation: Correct Option B - Ringer Lactate with 5% dextrose : Ringer lactate (also known as lactated Ringer's solution) is an intravenous fluid that contains a combination of electrolytes (sodium, potassium, calcium, and chloride) along with lactate. It is commonly used for fluid resuscitation and correction of electrolyte imbalances in cases of severe dehydration, hypovolemia, and shock. The balanced electrolyte composition of Ringer lactate makes it a suitable choice for managing the described severely dehydrated child with low blood pressure. Incorrect Options: Option A - ORS (Oral Rehydration Solution): ORS is for mild to moderate dehydration or after initial IV resuscitation . Not suitable when child is lethargic, in shock, or unable to drink . Option C - Normal Saline: NS can be used for shock , but RL is often preferred in children with diarrhea because: NS can cause hyperchloremic metabolic acidosis if large volumes are used. RL has a more physiological electrolyte composition . Option D - Dextrose: Dextrose alone does not restore intravascular volume . It is used if hypoglycemia is present or added to maintenance fluids after resuscitation.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q36: What is the most prevalent cause of macrocytic anemia among the options provided? (Q793705)

A. Vitamin B12 deficiency

B. Bone marrow disorders

C. Alcohol

D. Drug-induced

Correct Answer: C. Alcohol

Explanation: Option c: Alcohol Macrocytic anemia, also known as megaloblastic anemia, is a type of anemia where the red blood cells (RBCs) are larger than normal. Alcohol use accounts for the majority, followed by deficiencies in folate and vitamin B12 and medications. Autoimmune causes are more common in middle-aged women. Hypothyroidism and primary bone marrow disease account for more cases of macrocytic anemia in older patients. Incorrect choices Option A : Vitamin B12 - this is 2nd most common cause. Option b: Bone marrow disorders: Bone marrow disorders like myelodysplastic syndrome can cause macrocytic anemia, but they are less common. Option d: Drug-induced: Certain medications, like chemotherapy and anticonvulsants, can cause macrocytic anemia, but they are not as common.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

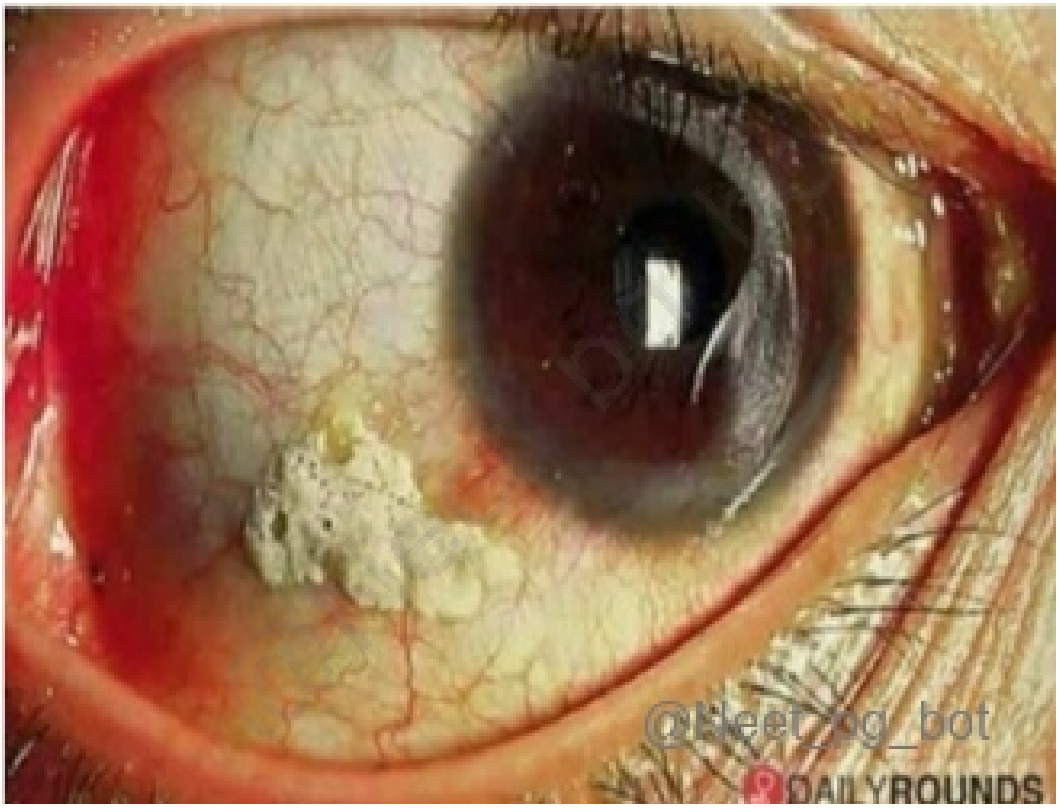
Q37: On ocular examination, a teenage girl with low body weight is observed to have the following finding. Which WHO grade corresponds to this finding? (Q793633)

A. 1A

B. 1B

C. 2A

D. 2B



Correct Answer: B. 1B

Explanation: Option B - 1B The ocular examination findings in this question suggest that the adolescent girl has Bitot's spots, which are a sign of vitamin A deficiency. Bitot's spots are characterized by small, raised, foamy patches on the conjunctiva, and are graded as 1B by the WHO. Incorrect choices: Option a : A normal optic disc that shows no signs of damage or abnormalities is referred to as WHO grade 1A. The optic disc, which is located where the optic nerve enters and leaves the eye, is in charge of carrying visual data from the eye to the brain. A grade 1A finding denotes the absence of any signs of disease or damage to the optic disc, and the likelihood that the visual function is normal. Option c: Individuals with mild visual impairment are given the WHO grade 2A. In their better eye, people with 2A visual impairment have a visual acuity between 6/18 and 6/24 after correction (such as glasses or contact lenses), according to the WHO. Option d: The WHO classifies moderate visual impairment as grade 2B. It is indicated by a central visual field diameter of less than 20 degrees in the better eye, or by visual acuity in the better eye ranging from 6/18 to 6/60 (inclusive). As a result, while someone with a 2B visual impairment may be able to see some detail, their visual field is constrained, and they may find it difficult to perform tasks that call for fine visual discrimination or mobility.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q38: Which of the following options can be employed for the treatment of Kesari dal toxicity? (Q793554)

A. Sodium bicarbonate

B. Vitamin A

C. Vitamin C

D. IV immunoglobulin

Correct Answer: C. Vitamin C

Explanation: Correct answer: Option C: Kesari dal (Lathyrus sativus) is a legume that is widely consumed in India and other countries. When consumed in large quantities over time, the dal contains a neurotoxin called beta-N-oxalyl-L-alpha-beta diaminopropionic acid (BOAA), which can cause a neurological disorder called lathyrism. Vitamin C, also known as ascorbic acid, plays a role in lathyrism due to its potential protective effects against the toxic effects of β-ODAP. β-ODAP is known to induce oxidative stress and damage to neurons. Vitamin C is an antioxidant that can counteract oxidative stress by neutralizing harmful free radicals and protecting cells from damage. Incorrect choices Option a : Some evidence suggests that sodium bicarbonate may exacerbate the effects of Kesari dal toxicity. This is due to the fact that bicarbonate can increase ODAP absorption from the gastrointestinal tract and thus increase its toxicity. As a result, using sodium bicarbonate to treat Kesari dal toxicity is generally not advised. Option b: There is no evidence that vitamin A has any effect on Kesari dal toxicity or Lathyrism. However, adequate vitamin A intake is required for healthy vision, immune system function, and cell growth and differentiation. Option d : Kesari Dal toxicity is not treated with IV immunoglobulin because it is not a viral or immune-mediated condition. It is most commonly used to treat autoimmune and immune-mediated disorders, as well as some cases of primary immunodeficiency disorders.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q39: What is the cause of the 40-year-old female patient's acute onset leg swelling and loose stools, considering her family members also have similar symptoms and mustard oil is a regular part of their diet? (Q793496)

A. Clavine alkaloids

B. Sanguinarine

C. BOAA

D. Pyrrolizidine alkaloids

Correct Answer: B. Sanguinarine

Explanation: Sanguinarine Sanguinarine is derived from Argemone Mexicana oil which is mixed in mustard oil which may lead to epidemic dropsy. MOA of Sanguinarine It inhibits oxidation of pyruvic acid which leads to accumulation of pyruvic acid in the blood. Clinical features of epidemic dropsy: Sudden bilateral non inflammatory pitting edema. Diarrhoea Dyspnoea Cardiac defects Glaucoma, thereby leads to death. Incorrect choices Option a : Clavine alkaloids are a type of natural compound found in plants, fungi, and animals. They have a variety of effects on the body, depending on the compound and the dose. Consumption of clavine alkaloids from contaminated grains, such as rye infected with the fungus Claviceps purpurea, can result in ergotism. Ergotism symptoms include vasoconstriction, gangrene, hallucinations, convulsions, and death. Option c : BOAA are toxic substances found in other plants, but they are not commonly associated with the symptoms described in this scenario. Option d: Pyrrolizidine alkaloids: causes Endemic Ascites Occur due to pyrrolizidine alkaloids which are derived from crotalaria plant (commonly used in MP & central parts in different food items)

↑ *Back to this question in Part A*

@Neet_pg_bot

• [11_Social Sciences and Health] 043 Social Sciences And Health

« Back to Folder Directory

[11_Social Sciences and Health] 043 Social Sciences And Health — Quick Jump

Q1 (p. 1516) *Q2 (p. 1517)* *Q3 (p. 1518)* *Q4 (p. 1518)* *Q5 (p. 1519)* *Q6 (p. 1520)*
Q7 (p. 1521) *Q8 (p. 1521)* *Q9 (p. 1522)* *Q10 (p. 1523)*

Q1: Which of the following is a permanent social group? (Q840870)

A. Herd

B. Mob

C. Band

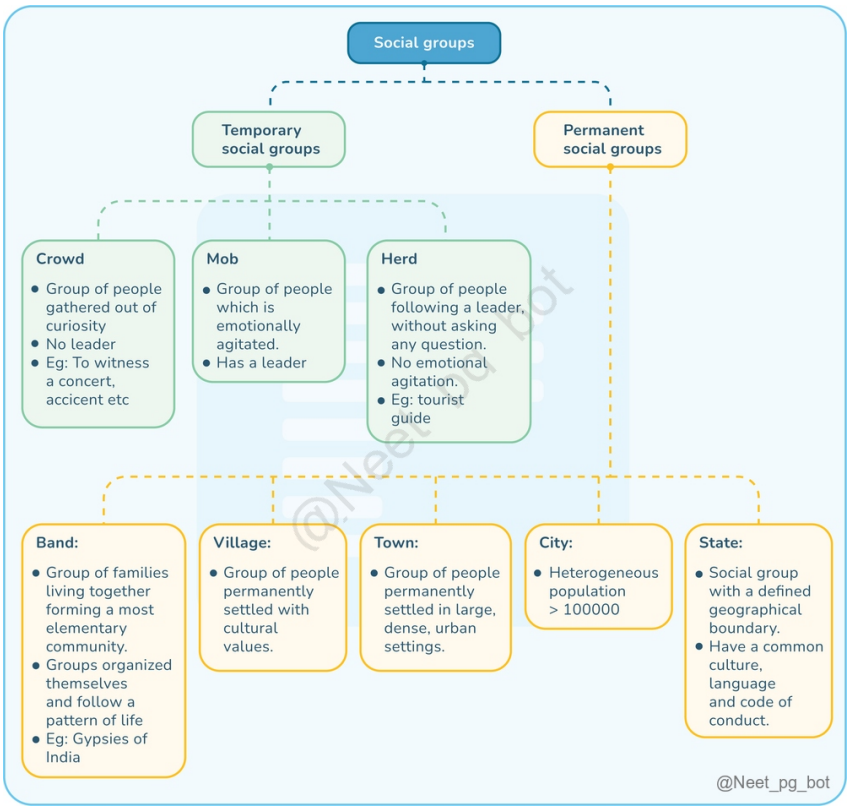
D. Crowd

Correct Answer: C. Band

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Group refers to several people that are located gathered or classed together. In sociological terms, groups can fundamentally be distinguished from one another by the extent to which their nature influences individuals and how. Types of social groups:



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page no: 797

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: “The risk of contracting a disease increases if profit is valued more than health”. This statement represents which of the following theories in sociology? (Q840872)

A. Feminist theory

B. Parsonian theory

C. Foucauldian theory

D. Marxist theory

Correct Answer: D. Marxist theory

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Theories in sociology Marxist theory Putting profit as a priority instead of health Eg: Alcohol and tobacco consumption is not completely banned as it leads to loss of revenue Parsonian theory Social factors like poverty, migration and industrialisation playing a role in disease etiology Eg, TB due to overcrowding from poverty Feminist theory Females are enforced by men to do particular roles Foucauldian theory By segregating the population into groups, they can be controlled easily Mckeown's theory of TB Changes in socio-environmental conditions lead to a reduction in TB

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447153/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A couple with three children lives in a small town. The couple's first and second child travel abroad for their studies. Which phase of the family cycle is the above family in? (Q840876)

A. Extension

B. Complete extension

C. Contraction

D. Dissolution

Correct Answer: C. Contraction

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Family life cycle Phases of Family Cycle Events taking place Beginning of phase End of phase 1. Formation Marriage Birth of 1st child 2. Extension (Option A) Birth of 1st child Birth of last child 3. Complete extension (Option B) Birth of last child 1st child leaves home 4. Contraction (Option C) 1st child leaves home Last child leaves home 5. Completed contraction Last child leaves home 1st spouse dies 6. Dissolution (Option D) 1st spouse dies Death of the survivor (extinction)

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 798

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following best describes a joint family? (Q840878)

A. A Family with husband, wife and biological/adopted children.

B. A family with Grandparents, parents and children.

C. A family with Grandparents, parents and children living along with uncle, aunt and their families.

D. A family with both parents are not together.

Correct Answer: C. A family with Grandparents, parents and children living along with uncle, aunt and their families.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Types of families Type of family People in the family Nuclear family Father, mother and children (Option A) New family A family <10 years old Joint family Grandparents, parents, children along with uncle, aunt and their family (Option C) Three generation family Grandparents, parents, children (Option B) Broken family Either of the parents has died, or the couple is divorced/separated (Option D) Problem family Family lagging behind the rest of the community Communal family A group of families or single people who live and work together sharing possessions and responsibilities Dysfunctional family A family where abuse/conflict is common for individuals, and the rest of the family is okay with it.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 798

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Match the following Socio-Economic Status (SES) scales with their respective contexts: A. Modified Kuppuswamy scale 1. Non-Indian SES scale B. Udai Pareek scale 2. Urban SES scale C. Bhardwaj scale 3. Rural SES scale D. Hollingshead scale 4. Student's scale (Q840880)

A. A-2, B-3, C-4, D-1

B. A-1, B-2, C-3, D-4

C. A-4, B-1, C-2, D-3

D. A-2, B-4, C-3, D-1

Correct Answer: A. A-2, B-3, C-4, D-1

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Socio-economic status scales: Urban SES scales: Modified kuppuswamy scale Kulshrestha scale Srivastava scale Jalota scale Gaur's scale Rural SES scale: Udai Pareek scale Modified B.G Prasad scale Rahudkar scale Shirpurkar scale Students' scale: Bhardwaj scale Non-Indian SES scales: Hollingshead (occupation-based) scale Henderson scale

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 804-806.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Mr. Sharma's family consists of four members. Mr. Sharma is a graduate working as a manager in a private company, earning a monthly income of INR 50,000. Mrs. Sharma is a high school graduate and a homemaker, and their two children are school students. Based on the Modified Kuppuswamy Scale, what is the socio-economic status of Mr. Sharma's family? (Q840882)

A. Upper Class

B. Upper Middle Class

C. Lower Middle Class

D. Upper Lower Class

Correct Answer: A. Upper Class

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Modified Kuppuswamy scale Purpose To assess the socio-economic status (SES) of urban families in India. Components 1. Education of the head of the family. 2. Occupation of the head of the family. 3. Monthly family income. Education Score Illiterate: 1 Primary school: 2 Middle school: 3 High school: 4 Intermediate/Post high school diploma: 5 Graduate/Postgraduate: 6 Profession or Honors: 7 Occupation Score Unemployed: 1 Unskilled worker: 2 Semi-skilled worker: 3 Skilled worker: 4 Clerical, Shop-owner, Farmer: 5 Semi-professional: 6 Professional: 10 Income Score The family income per month in Rs. The income scale has been recalculated using India's average consumer price index for Industrial workers for the year 2021. <100: 1 101-299: 2 300-499: 3 500-749: 4 750-999: 6 1000-1999: 10 =2000: 12 SES Classification Upper Class: 26-29 Upper Middle Class: 16-25 Lower Middle Class: 11-15 Upper Lower Class: 5-10 Lower Class: <5 Based on Mr. Sharms's components:

Education: 6 points Occupation: 10 points Monthly Family Income: 10 points Total Score: 6 + 10 + 10 = 26 points

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page804, 805.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following statements regarding the Udai Pareek Scale and the BG Prasad Scale is true? (Q840884)

A. The Udai Pareek Scale is based on per capita income.

B. The BG Prasad Scale includes parameters like caste and land.

C. The Udai Pareek Scale is used in rural areas.

D. The BG Prasad Scale is used in urban areas.

Correct Answer: C. The Udai Pareek Scale is used in rural areas.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Parameters Udai Pareek Scale BG Prasad Scale Target population Used in rural areas Applicable to both rural and urban areas Components Caste Occupation Education Land Social participation House Farm power Material possessions Family members Independent of income Based on per capita income Per capita income = Total family income/ Number of family members Divides into upper, middle, and lower classes.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10071936/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8797108/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A family living in rural India. They struggle to make ends meet, and their diet consists mainly of rice and lentils. They lack access to proper sanitation and healthcare. The family's income is inconsistent and often falls short of covering their basic needs. Based on the scenario, this family would most likely be classified as:

(Q840886)

A. Above Poverty Line

B. Below Poverty Line

C. Upper Middle Class

D. Middle Class

Correct Answer: B. Below Poverty Line

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Below Poverty Line (BPL) is defined based on criteria like insufficient calorie intake and low per capita income. While the scenario doesn't provide exact numbers, the family's struggles clearly align with these criteria. The scenario describes a family facing hardships indicative of poverty: Poor Diet: A diet primarily of rice and lentils suggests limited nutritional variety, which is common in poverty. Lack of Sanitation and Healthcare: These are significant indicators of low living standards often associated with poverty. Inconsistent Income: An inability to consistently afford basic needs is a strong characteristic of being below the poverty line. Criteria of BPL According to Tendulkar committee Rural areas Urban areas Per capita calorie intake <2400 kcal per day <2100 kcal per day Per capita Income <27/- INR per day <33/- INR per day According to Rangarajan committee Per capita income is <32/- INR per day in the rural area. <47/- INR per day in the urban area. As per World Bank If the per capita income is <2.15 US $ per day, this is an extreme poverty level.

References:

https://forumias.com/blog/upsc-current-affairs-news/poverty-measurement-in-india-approaches-and-challenges-explained-pointwise/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A doctor finds that many patients don't follow his advice regarding medication and lifestyle changes, even when he explains the scientific basis clearly and patiently. What communication factor should this doctor prioritise to improve his patient interactions in this context? (Q840887)

A. Sharing humorous anecdotes to ease the patients' anxiety.

B. Understanding the local cultural beliefs and practices related to health and illness.

C. Using complex medical terminology to establish his authority and expertise.

D. Focusing solely on conveying information about the latest advancements in medical science.

Correct Answer: B. Understanding the local cultural beliefs and practices related to health and illness.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This scenario emphasizes the importance of understanding and respecting the cultural and social context of the community a doctor serves. Recognizing local health beliefs and practices helps doctors appreciate why indigenous and folk medicine might be successful in rural areas and bridge the gap between scientific approaches and patients' lived experiences and cultural understanding of health. Forms of doctor-patient relationships: Aspect Paternalistic Approach Mutualistic Approach Consumeristic Approach Defaulter Approach Definition Doctor makes decisions for the patient Doctor and patient make decisions together Patient makes decisions with minimal input from the doctor Neither doctor nor patient is actively involved in decision-making Advantages Efficient in emergencies, reduces patient anxiety Builds trust, encourages patient engagement Empowers patient, respects patient autonomy Minimal effort required Disadvantages Can lead to patient dissatisfaction, lack of patient autonomy Requires time and good communication skills May result in poor medical decisions without a doctor's expertise Ineffective, poor health outcomes Examples Emergency surgery, critical care Chronic disease management, mental health care Elective procedures, cosmetic surgery Neglect in preventive care Levels of communication: Cultural: Doctors should be aware of the community's cultural patterns and concepts of health. Emotional: Doctors should listen sympathetically to the patient and their family. Intellectual: Doctors should bridge the social distance and communicate clearly. Sharing humorous anecdotes to ease the patients' anxiety (Option A): The issue at hand is a cultural gap, not just patient anxiety about using humour. Using complex medical terminology to establish his authority and expertise (Option C): In this scenario, complex medical terminology will likely widen the gap between doctors and patients. Focusing solely on conveying information about the latest advancements in medical science (Option D): This approach neglects the core issue of cultural understanding.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 807-808.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: In a clinical setting, a doctor is teaching an intern how to perform a knee reflex test. This type of learning primarily involves: (Q846613)

A. Cognitive learning

B. Affective learning

C. Psychomotor learning

D. Experiential learning

Correct Answer: C. Psychomotor learning

Explanation: The correct answer is Psychomotor learning, as the intern is developing a physical skill (performing a knee reflex test) through practice. This type of learning focuses on motor abilities, unlike cognitive, affective, or experiential learning. Types of learning: Cognitive Learning (Knowledge-based): This type of learning focuses on acquiring knowledge, understanding concepts, and developing problem-solving skills through experience or practice. Example: A medical student learns the scientific principles behind HIV transmission. Affective Learning (Action-based or Attitude-based): Affective learning involves changes in attitudes, values, or emotions. It focuses on how individuals feel or perceive issues, and how these emotions influence their behavior. Example: If you have a patient who is HIV-positive and he is requesting you to not tell this to his wife. You have to convince the patient. Psychomotor Learning (Skill development): This type of learning is centered around developing physical skills and motor abilities through practice and repetition. Example: Teaching a child proper hand-washing techniques or an intern learning how to perform a knee reflex test.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 766

↑ *Back to this question in Part A*

@Neet_pg_bot

• [11_Social Sciences and Health] 044 Previous Year Questions

« Back to Folder Directory

[11_Social Sciences and Health] 044 Previous Year Questions — Quick Jump

Q1 (p. 1525) *Q2 (p. 1526)* *Q3 (p. 1527)* *Q4 (p. 1527)* *Q5 (p. 1528)* *Q6 (p. 1529)*
Q7 (p. 1529) *Q8 (p. 1530)* *Q9 (p. 1531)* *Q10 (p. 1531)*

Q1: A couple with one child welcomes a second child, increasing the total number of children in the household. What is this specific type of change in the family called? (Q866774)

A. Family initiation

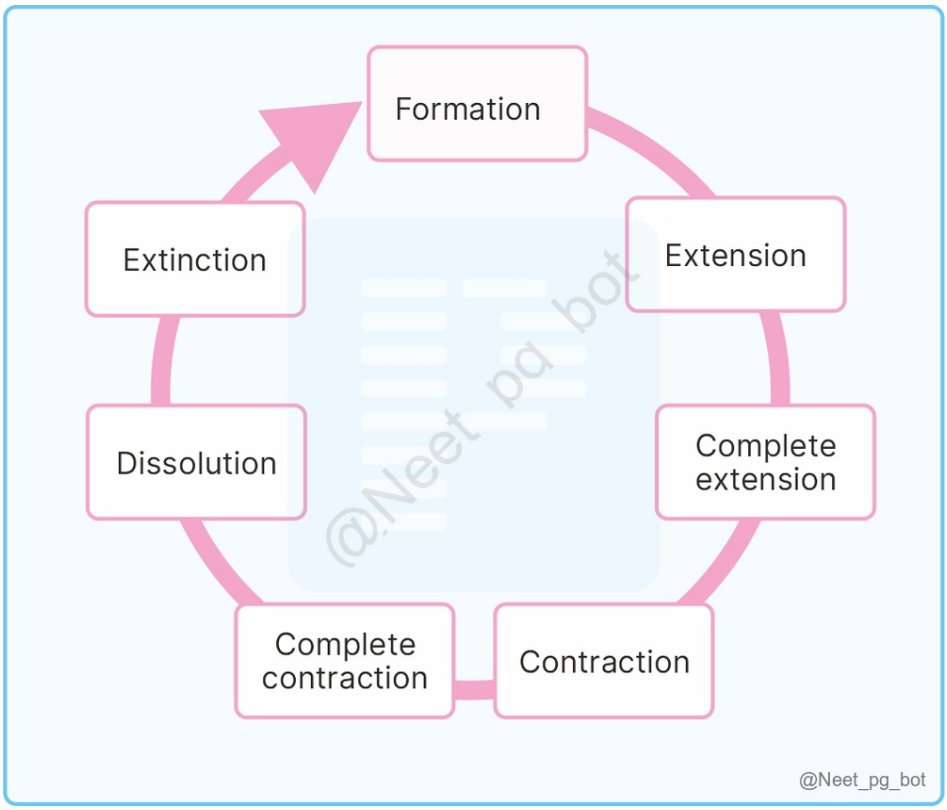
B. Household contraction

C. Complete extension

D. Kinship enlargement

Correct Answer: C. Complete extension

Explanation: The specific type of change in the family when a couple with one child welcomes a second child, increasing the number of children in the household, is best described as "complete extension. Family life cycle: Sequence of changes a family undergoes over time. The main stages are: Formation : Creation of a new family unit (usually marriage or cohabitation). Extension: Addition of new members (e.g., birth of a child) without losing existing members. Complete Extension: Addition of members from multiple generations (e.g., grandparents moving in + birth of grandchildren). Contraction: Loss of members (e.g., children leaving home, death of elderly) without replacement. Complete Contraction: Loss of members leaving only one or two people in the family unit. Dissolution: The family unit breaks due to the death of one spouse (widow/widower remains). Extinction: Death of the last surviving family member. Family initiation (Option A) refers to the formation of a new family (e.g., marriage). Household contraction (Option B) refers to a decrease in family members. Kinship enlargement (Option D) is a general term for adding relatives beyond the nuclear family, not the specific sociological concept.



References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which is not the component of PQLI? (Q844113)

A. Life expectancy at 1 year

B. Literacy rate

C. Infant mortality rate

D. Gross national product

Correct Answer: D. Gross national product

Explanation: Correct Option D - Gross national product: The Physical Quality of Life Index (PQLI) is an indicator used to measure the quality of life or well-being in a country. Unlike the Human Development Index (HDI), which considers economic factors, the PQLI focuses solely on basic physical needs. It is calculated using three key indicators: Life Expectancy at Age One : Reflects overall health and longevity in the population, excluding infant

mortality. Infant Mortality Rate : Measures the number of infants who die before their first birthday per 1,000 live births, indicating healthcare quality and child health. Literacy Rate : The percentage of people aged 15 and above who can read and write, reflecting education and access to knowledge. Incorrect Options: Options A, B and C are incorrect as given above.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Identify the correct sequence regarding the family cycle? (Q860547)

A. Formation, extension, complete extension, contraction, complete contraction, dissolution, extinction

B. Formation, extension, complete extension, complete contraction, contraction, dissolution, extinction

C. Extension, Formation, complete extension, contraction, complete contraction, dissolution, extinction

D. Formation, extension, complete extension, contraction, complete contraction, extinction, dissolution

Correct Answer: A. Formation, extension, complete extension, contraction, complete contraction, dissolution, extinction

Explanation: A family cycle is a cycle that shows the various phases of a family: Formation Marriage to the birth of the 1 st child. Extension Birth of the 1 st child to birth of the last child. Complete extension Birth of the last child to 1 st child leaving home. Contraction The child leaving home to the last child leaving home. Complete contraction The last child leaving home to the 1 st spouse dying. Dissolution Death of the 1 st spouse to the death of the survivor.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 930

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which barrier is the doctor addressing when a male patient expresses concern about potential impotency from the recommended vaccine during a vaccination drive? (Q858024)

A. Physical barrier

B. Environmental barrier

C. Physiological barrier

D. Cultural barrier

Correct Answer: D. Cultural barrier

Explanation: The concern raised by the male patient regarding impotency due to a vaccine reflects a cultural barrier . This is a belief or misconception rooted in social and cultural influences that may cause hesitation or reluctance toward vaccination, even when scientific evidence supports the vaccine's safety and effectiveness. Cultural barriers can stem from misinformation, myths, and stigmas related to vaccines that may be prevalent in a community or group. Physical barrier (Option A): is incorrect because a physical barrier would refer to an actual, tangible impediment, such as poor access to healthcare facilities, not misconceptions or fears about side effects. Environmental barrier (Option B): is incorrect as environmental barriers refer to external factors like pollution, poor infrastructure, or geographical challenges that hinder access to healthcare, which is not the case here. Physiological barrier (Option C): is incorrect because physiological barriers would involve biological factors that prevent proper functioning or access to healthcare, such as allergies or medical conditions, not the cultural beliefs affecting the patient's attitude toward vaccination.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 952

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: What kind of family would the surveyor categorize the household as, considering it consists of a 35-year-old man, his 6-week pregnant wife, a 3-year old child, and the temporary presence of the man's brother and his wife during their winter vacation? (Q858055)

A. Joint family

B. Nuclear family

C. Extended family

D. Third generation family

Correct Answer: B. Nuclear family

Explanation: A nuclear family consists of parents and their children living together in the same household. In this scenario, the 35-year-old man , his 6-week pregnant wife , and their 3-year-old child form the core of the family, which is characteristic of a nuclear family. Although the man's brother and his wife are temporarily staying with them, their presence is temporary and does not alter the classification of the family type. Joint family (Option A): is incorrect because a joint family typically includes multiple generations (e.g., grandparents, uncles, aunts) living

together. In this case, only the nuclear family members are mentioned, and the brother's presence is temporary. Extended family (Option C): is incorrect because an extended family usually refers to a family structure that includes additional relatives beyond the nuclear family, such as uncles, aunts, grandparents, and cousins, either living together or in close proximity. The brother's presence is temporary and does not fit this definition. Third generation family (Option D): is incorrect because this term generally refers to families that consist of the grandparents , parents , and children living together. There is no indication in the scenario that grandparents are involved, so it does not fit the description.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 773, 774

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: In which of the following situations is confidentiality upheld? (Q858101)

A. Group discussion

B. Counselling

C. Panel discussion

D. Seminar

Correct Answer: B. Counselling

Explanation: In counselling , confidentiality is a fundamental principle where personal information shared by the client is kept private, fostering trust and open communication. Exceptions apply only in situations involving harm or legal requirements. Group discussion (Option A) : is incorrect because group discussions involve multiple participants sharing information openly, making confidentiality difficult to maintain. Panel discussion (Option C) : is incorrect because panel discussions are typically public forums where multiple speakers discuss a topic openly in front of an audience. Seminar (Option D) : is incorrect because seminars are educational or informational gatherings where confidentiality is not inherently protected as discussions occur publicly.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 959

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A couple brought their son to the doctor. They were worried because their son prefers eating food from multinational companies instead of traditional, home-made foods. What do we call this shift from consumption of traditional natural food to western fast foods? (Q857065)

A. Food transition

B. Social pathology

C. Acculturation

D. Demographic change

Correct Answer: C. Acculturation

Explanation: cculturation refers to the process of cultural change and adaptation that occurs when individuals or groups come into contact with a different culture. In this case, it describes the shift in food habits from traditional natural foods to the consumption of western fast foods. Examples of Culture contact can occur through. o Marriage o Trade & Commerce o Conquest o Education o Industrialization o Propagation of religion. Incorrect options: Food transition (Option A): might refer to the general change in diet, but it doesn't fully capture the cultural aspect. Social Pathology (Option B): Study of social problems that undermine the social, psychological, or economic health of populations; describes the relationship between disease and social conditions Demographic (Option D): change refers to changes in population size or structure, which doesn’t relate to food habits.

References:

https://www.sciencedirect.com/topics/neuroscience/acculturation

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A couple has given birth to their first child. Based on the nuclear family cycle, which phase is the family entering into? (Q857702)

A. Extension

B. Complete extension

C. Contraction

D. Completed contraction

Correct Answer: A. Extension

Explanation: eath of survivor (extinction)

References:

https://portal.ct.gov/-/media/ocpd/child_protection/training/day2/familydevelopmentlifecyclepdf.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following is responsible for maintaining the births and deaths in India? (Q857750)

A. Vital registration system

B. Census

C. Death certificate

D. Lay reporting

Correct Answer: A. Vital registration system

Explanation: ause of death in India is noted by multiple methods, including: Sample registration system: It is a demographic survey conducted by the Registrar General of India. It collects data on births and deaths through a representative sample of households, including information on the cause of death. Census: (Option B) The census is primarily focused on population enumeration and demographic details. It does not directly record causes of death. During the decennial Census, information on deaths that occurred during the census year is collected. Census enumerators gather data from households, including details of the causes of death reported by family members. Death declaration & medical certificate: (Option C) When a person dies, a medical certificate of cause of death (MCCD) is typically issued by a qualified medical practitioner who attended to the deceased during their last illness. The MCCD provides information about the immediate cause of death, underlying causes, and contributing factors. Lay reporting: (Option D) Lay reporting refers to the reporting of deaths by individuals or non-medical personnel.

References:

https://www.mospi.gov.in/sites/default/files/publication_reports/vital_statistics_2010_0.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: A study was done on the Family Health Education Model. Which of the following is/are the roles of the Family in health other than biological reproduction? 1. Provide a

hygienic environment 2. Close monitoring of the sexual activities of children 3. Take care when ill 4. Passing down cultural beliefs that affect health (Q879050)

A. 1, 2, 3

B. 1, 3, 4

C. 2, 3, 4

D. 1 and 4

Correct Answer: B. 1, 3, 4

Explanation: In the Family Health Education Model , the family performs several important health-related functions that go beyond merely producing children . These functions broadly include: 1) Providing a Hygienic Environment (Statement 1) : A healthy family ensures: Proper sanitation Safe drinking water Clean surroundings Food hygiene Safe waste disposal These directly reduce infections and improve physical well-being. 2) Taking Care When Ill (Statement 3) : The family is the first line of care when a member becomes sick. This includes: Providing emotional support Administering home remedies Taking the person to healthcare institutions Ensuring medication adherence Providing rest, nutrition, and comfort 3) Passing Down Cultural Beliefs That Affect Health (Statement 4) : Families transmit: Dietary habits Lifestyle practices Health-related rituals and taboos Attitudes toward hygiene, illness, and healthcare-seeking Traditional remedies and medical beliefs These can be positive (e.g., hand-washing, breastfeeding) or negative (food taboos, delaying treatment). Health models emphasize guidance, education, and value-based decision-making, not strict surveillance. Monitoring sexual activity invasively is considered a privacy intrusion and not a standard health function. The goal is to provide age-appropriate sex education, emotional security, and correct information, not policing (Statement 2) .

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 799.
https://pmc.ncbi.nlm.nih.gov/articles/PMC9847418/

↑ *Back to this question in Part A*

@Neet_pg_bot

• [12_Environment and Health] 045 Water Ii Disinfection Chlorination

« Back to Folder Directory

[12_Environment and Health] 045 Water Ii Disinfection Chlorination — Quick Jump

Q1 (p. 1533)	*Q2 (p. 1534)*	*Q3 (p. 1535)*	*Q4 (p. 1536)*	*Q5 (p. 1536)*	*Q6 (p. 1537)*
Q7 (p. 1538)	*Q8 (p. 1539)*	*Q9 (p. 1540)*	*Q10 (p. 1541)*	*Q11 (p. 1542)*	*Q12 (p. 1544)*
Q13 (p. 1545)	*Q14 (p. 1546)*	*Q15 (p. 1547)*	*Q16 (p. 1548)*		

Q1: Which of the following statements is true regarding shallow and deep wells? (Q840734)

A. Shallow wells tap water from underneath the first impervious layer and are not liable for contamination.

B. Deep wells yield limited quantities of water and usually dry up during summer.

C. Shallow wells are more likely to get contaminated and yield limited quantities of water.

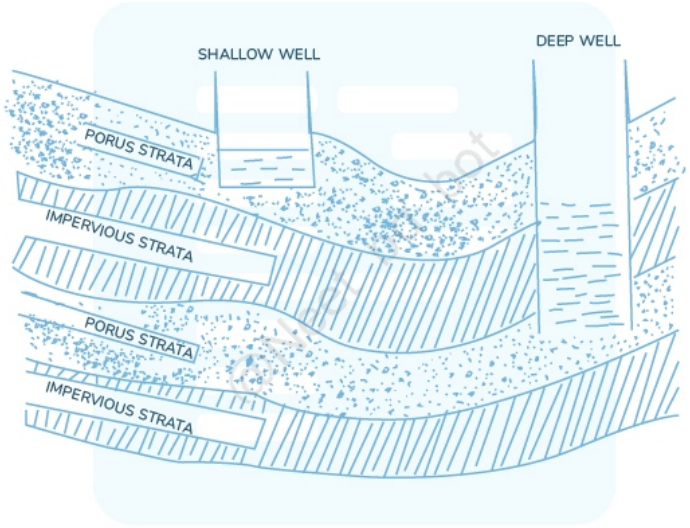
D. Deep wells are easier and cheaper to construct compared to shallow wells.

Correct Answer: C. Shallow wells are more likely to get contaminated and yield limited quantities of water.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Shallow wells tap water from above the first impervious layer, making them more susceptible to contamination and often yield limited quantities of water. In contrast, deep wells tap water from underneath the first impervious layer, providing purer water in sufficient quantities and a constant supply, even during summer. Porous layer: made of sand, gravel and allows water to pass through it. Impervious layer: made of clay, mud and does not allow water to pass through it. Shallow well vs Deep well: Shallow well Deep well Taps water from above first impervious layer Taps water from underneath the first impervious layer Moderately hard water Very hard water More likely to get contaminated Not liable for contamination yielding purer water Yield limited quantities of water Yield sufficient quantities of water providing source of constant supply Easy and cheaper to construct Difficult and expensive to construct



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References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg.836

↑ *Back to this question in Part A*

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Q2: You are required to disinfect a well using Horrock's apparatus. The well has a diameter of 1.5 meters and a depth of 10 meters. Considering 2 grams of bleaching powder (calcium hypochlorite) is needed per cubic meter of water for effective disinfection, how much bleaching powder is required to disinfect this well? (Q840735)

A. 28 grams

B. 35 grams

C. 42 grams

D. 50 grams

Correct Answer: B. 35 grams

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: 1. Calculate the volume of the well : Volume of a cylinder = π × (radius)² × height Radius = Diameter / 2 = 1.5 meters / 2 = 0.75 meters Height = Depth of the well = 10 meters Volume = π × (0.75 meters)² × 10 meters → Volume ≈ 3.14 × 0.5625 × 10 → Volume ≈ 17.67 cubic meters 2. Calculate the amount of bleaching powder needed : Bleaching powder required = Volume of the well × Amount of bleaching powder per cubic meter ⇒ 17.67 cubic meters × 2 grams per cubic meter Bleaching powder required ≈ 35.33 grams Rounding off, the required amount of bleaching powder is approximately 35 grams.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg 844-845

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following diseases is primarily classified as a water-washed disease? (Q840736)

A. Cholera

B. Dracunculiasis (Guinea worm disease)

C. Trachoma

D. Malaria

Correct Answer: C. Trachoma

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Water Washed disease also known as Water scarcity disease is associated with inadequate amount of water to maintain personal hygiene. Examples include trachoma , scabies, conjunctivitis, worm infestations. Type of Disease Definition/Transmission Examples Water Borne Caused by ingestion of pathogens in contaminated water. Cholera, Typhoid, Diarrhea, Hepatitis A and E, GI infections, Polio. Water Washed Due to lack of clean water for washing, leading to poor hygiene and sanitation. Infective trachoma, Scabies, Conjunctivitis, Bacillary Amoebic dysentery, Worm infestations. Water Based Due to the intermediate host in water - Contact with or ingestion of water containing the organisms. Dracunculiasis (Guinea worm disease), Schistosomiasis Water related/Breeding Diseases that are transmitted by vectors which breed in or near water such as mosquitoes. Malaria, Dengue fever, Japanese Encephalitis, Chikungunya.

References:

www.scirp.org/journal/paperinformation?paperid=109142

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following microbiological tests is considered confirmatory evidence for recent fecal contamination of water? (Q840741)

A. Total Coliform Test

B. Fecal streptococci

C. Clostridium perfringens Test

D. Heterotrophic Plate Count

Correct Answer: B. Fecal streptococci

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Fecal streptococci are considered as the confirmatory evidence for recent fecal contamination of water. Drinking water should be free from pathogenic microorganisms and fecal contamination. There are bacterial indicators that suggest fecal contamination of water. These are Coliform bacteria - includes both fecal and nonfecal organisms. The most common fecal organism is E.coli - the most reliable evidence of fecal contamination Fecal streptococci - confirmatory evidence for recent fecal contamination E. coli: The most reliable and specific indicator of fecal pollution. Clostridium perfringens - evidence of remote fecal contamination. Eijkman Test: It is specifically designed to differentiate "fecal" coliforms from "non-fecal" coliforms by utilizing their ability to grow at elevated temperatures. The test involves incubating the sample in a specialized medium (like Eijkman broth) at a temperature of 44 ± 0.5°C . Most environmental coliforms cannot survive this heat, but E. coli thrives and produces gas and acid from lactose fermentation at this temperature. Result: Production of gas at 44°C is considered a "positive Eijkman test," confirming the presence of fecal coliforms.

References:

K.Park’s Textbook of Preventive and Social Medicine 27th Edition. Pg.847-848

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following statements regarding the Presumptive Coliform Test is TRUE? (Q840743)

A. Membrane filtration technique confirms the presence of E.Coli in water

B. Suitable growth medium is key in multiple tube method

C. Coliforms must be detected in 1000mL of sample of drinking water

D. 1-3 coliforms in 100 cc of water is satisfactory water

Correct Answer: D. 1-3 coliforms in 100 cc of water is satisfactory water

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Water Quality Category Coliform Count (per 100 cc of water) Excellent No coliforms - Ideal Potable Water Satisfactory 1-3 coliforms Suspicious 4-10 coliforms Unsatisfactory More than 10 coliforms Membrane filtration technique confirms the presence of E.Coli in water (Option A): There are two types of Presumptive Coliform test: These are screening tests, so they can't confirm E.coli presence in water. Suitable growth medium is key in multiple tube method (Option B): Suitable growth medium is required for the membrane filtration method and not the multiple tube method. Coliforms must be detected in 1000mL of sample of drinking water (Option C): Coliforms must be detected in 100mL (not 1000ml) of a sample of drinking water Confirmatory test for E coli- Eijkman test, Indole production, Citrate utilization

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 853. Guidelines for drinking-water quality

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following statements is true ? A) Evidence of remote contamination of water: Clostridium perfringens B) Evidence of recent contamination of water: Streptococcus/ Enterococcus faecalis C) Multiple Tube Method is used for detection and estimation of coliform in water samples D) The presumptive coliforms test is a confirmatory test for E. coli detection in water E) Most reliable evidence of faecal contamination of water: Coliform organism (E.Coli) (Q840745)

A. A,B,C

B. A,B,D

C. B,C,D,E

D. A,B,C,E

Correct Answer: D. A,B,C,E

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: E. Coli confirmatory test (EIC test) Description Eijkman test Detects the production of stable acids (such as lactic acid) from glucose fermentation. Methyl red indicator doesn't change color in acid medium Indole production Indole production is a characteristic E. coli from Tryptophan. A positive result is indicated by a cherry red color in addition to Kovac's reagent. Citrate Utilization A positive result is indicated by a change in the color of the medium from green to blue, suggesting that E. coli has utilized citrate Presumptive Coliform Test is a screening test for presence of E. Coli in potable water. (Statement D)

References:

https://www.ajol.info/index.php/bajopas/article/view/219079

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2199795/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4651089/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following is false regarding WHO recommended drinking water quality? (Q840746)

A. Turbidity: Up to 5 NTU (Nephelometric Turbidity Unit)

B. Color: Up to 15 TCU (True Color Unit)

C. Potable water ideally should have zero coliforms per 100ml

D. Nitrate: < 100 mg/L

Correct Answer: D. Nitrate: < 100 mg/L

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Nitrate < 50 mg/L, If more than 50 mg/L high risk for Infantile methemoglobinemia. WHO recommends to check for drinking water quality in three different aspects - Microbiological aspects, Chemical and Physical properties Drinking Water Quality Aspect Recommended Value Microbiological Aspects Coliform Bacteria (E. coli) 0 coliforms per 100ml of potable water Chemical Properties Chlorides Maximum: 600 mg/L Hardness 100-300 mg/L Total Dissolved Solids (TDS) Less than 600 mg/L (good), permissible up to 1000 mg/L Lead 0.01 mg/L Fluoride 0.5-0.8 mg/L Nitrate < 50 mg/L Physical Properties Turbidity Up to 5 NTU (Nephelometric Turbidity Unit) Color Up to 15 TCU (True Color Unit) or 5 Hazen units

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 848, 849

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following statements regarding the hardness of water is false? (Q840748)

A. Sodium carbonate can remove temporary and permanent hardness of water

B. Temporary hardness of water is the presence of Calcium and Magnesium sulfates

C. 1 meq/L hardness = 50 mg CaCO3 (50ppm) per liter of water

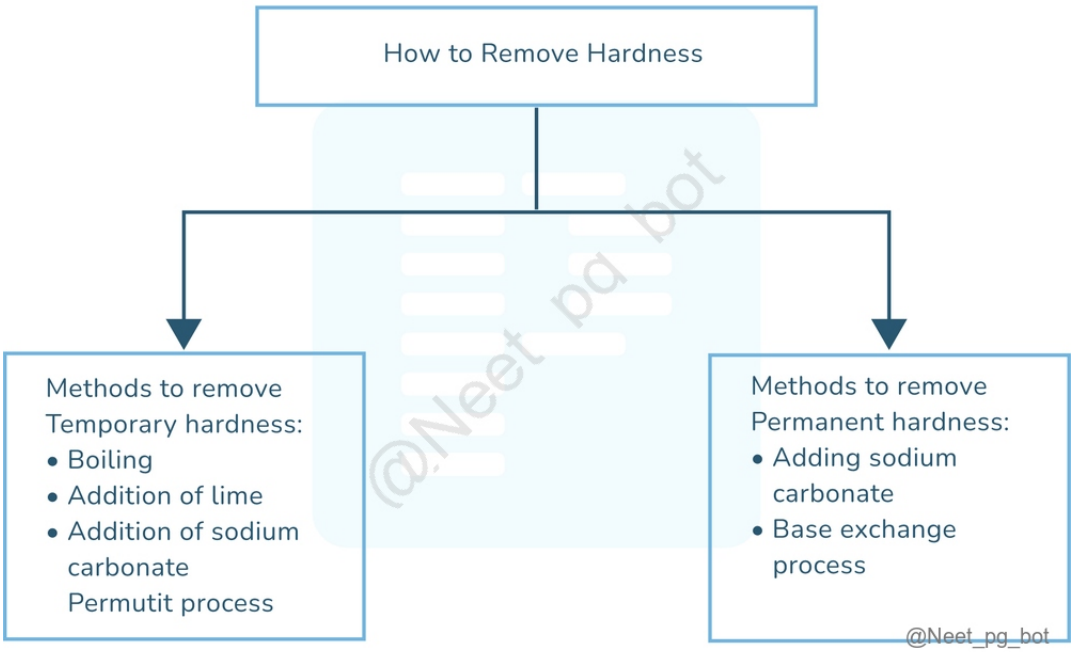
D. Hardness of water protects from cardiovascular disease

Correct Answer: B. Temporary hardness of water is the presence of Calcium and Magnesium sulfates

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Hardness of water : Temporary hardness is caused by calcium and magnesium bicarbonates Permanent hardness is caused by calcium and magnesium sulfates, chlorides, and nitrates . Incorrect Options: Option B: Sodium carbonate (washing soda) removes: Permanent hardness by precipitating Ca^{2}■/Mg^{2}■ as carbonates Temporary hardness indirectly (though boiling is preferred) Option C: 1 meq/L hardness = 50 mg/L as CaCO■ Option D: Hard water, rich in calcium and magnesium, is associated with lower cardiovascular disease risk .



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 854

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following are the features of Rapid Sand filter ? i) Large storage is required ii) Needs skilled operations iii) Effective size of sand 0.4-0.7 mm iv) Ideal for smaller towns for rapid purification of water v) Functions by utilizing the concept of gravity and pressure. (Q840749)

A. i, iii, iv

B. i, ii, iii

C. ii, iii, v

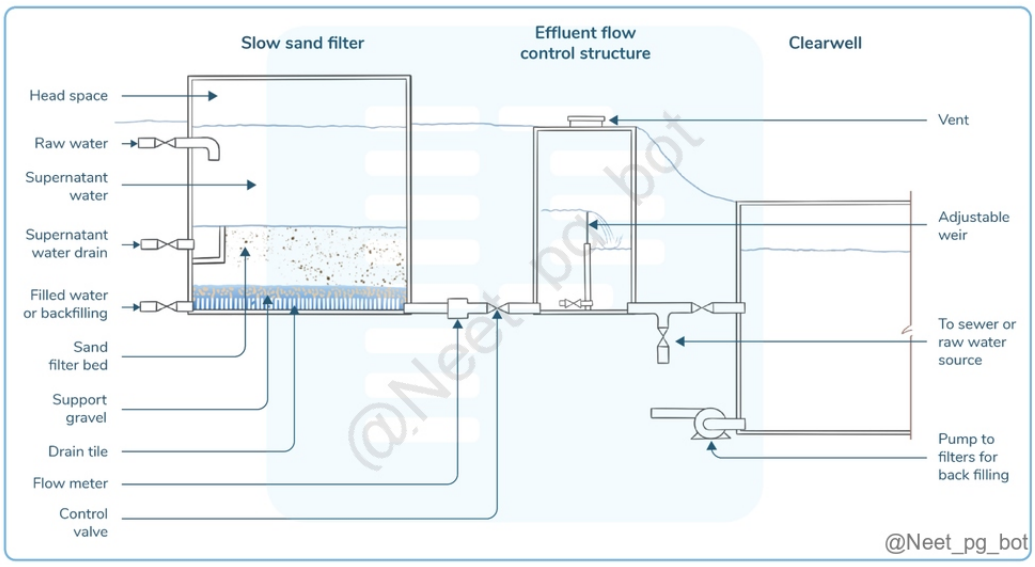
D. ii, iii, iv

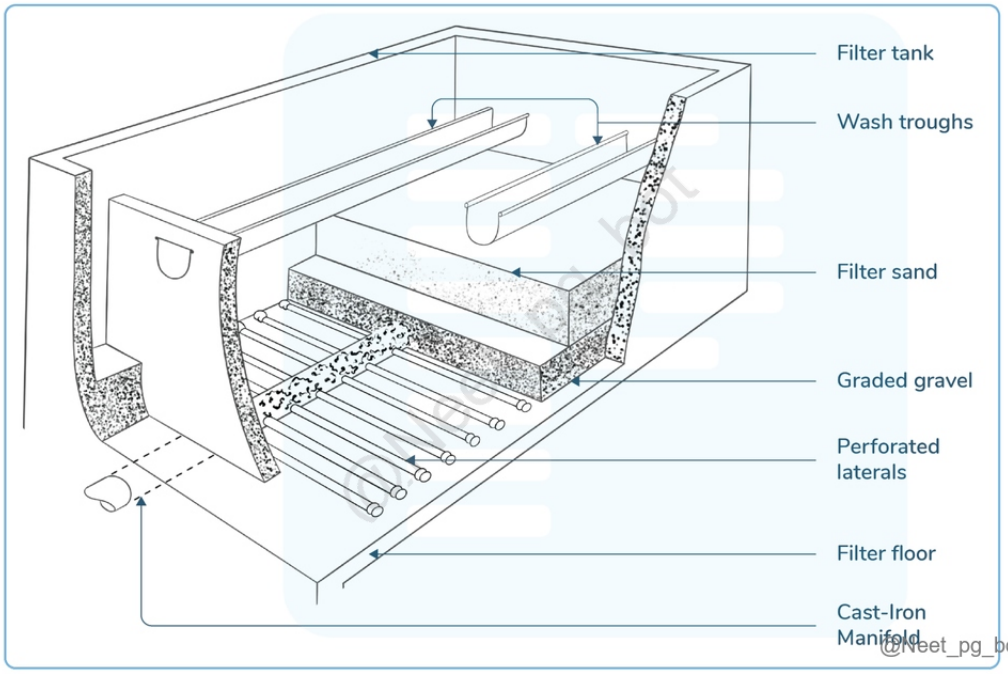
Correct Answer: C. ii, iii, v

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Feature Slow Sand Filter Rapid Sand Filter Type Biological Mechanical Mechanism Uses a Schmutzdecke layer, to remove organic matter, bacteria, and oxidize ammoniacal nitrogen into nitrates. Uses gravity and pressure to filter water. Rate of Filtration Slow Fast Space Requirements Occupies more space Occupies less space Preliminary Storage Required Not required Washing Cleaned by scraping the sand bed, which is a less frequent and more labor-intensive process. Cleaned by backwashing , a frequent and relatively easy process. Effective Size of Sand 0.2-0.3 mm 0.4-0.7 mm (iii) Operation Does not require skilled operation Requires skilled operation Turbidity Removal Fair Good Ideal For Smaller towns Preferred for use in large cities Image





References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 841

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: John & his 10-year-old son set off on a camping trip to a remote area for its beautiful streams and scenic views. They spot a river flowing with clear water however

John warns his son to not drink from it directly and rather purify it first. Which of the following statements is true regarding the purification of water on a small scale? (Q840751)

A. Boiling water is preferred over chlorination because it is cost-effective and provides long-term residual activity.

B. Boiling is not preferred as a mode of water purification because it requires re-treatment every 4-6 hours.

C. Chlorination is less effective than boiling because it lacks residual activity and requires frequent re-treatment.

D. Water should be turbid for chlorination to effectively take place.

Correct Answer: B. Boiling is not preferred as a mode of water purification because it requires re-treatment every 4-6 hours.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This statement is true because boiling water is Costly as it consumes a lot of gas. It requires boiling water every 4-6 hours (re-treatment). Therefore it has no residual activity. Hence it is not the preferred method of purification. Boiling water is costly and provides no residual activity, hence it is not preferred over chlorine. However, it is still the best method available for purification (Option A ruled out) Chlorine is a more effective mode of water purification than boiling (Option C ruled out) due to : It has high residual activity and does not require frequent re-treatment of water. This residual activity is also known as Free chlorine. This makes it very cost-effective as well. The most commonly used form of chlorination is bleaching powder 100g of bleaching powder releases 33 grams of chlorine. However, it is the 2nd best method available for water purification on a small scale. For water to be chlorinated, water should be free from turbidity as turbidity impedes efficient chlorination (Option D ruled out)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pages 841, 842, 843

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which statement best describes the disinfecting property of chlorine when used in water purification? (Q840752)

A. The major disinfecting property of chlorine is due to the hypochlorite ion (OCl-).

B. The residual activity of chlorine, known as free chlorine, is mainly due to hydrogen chloride (HCI) in water.

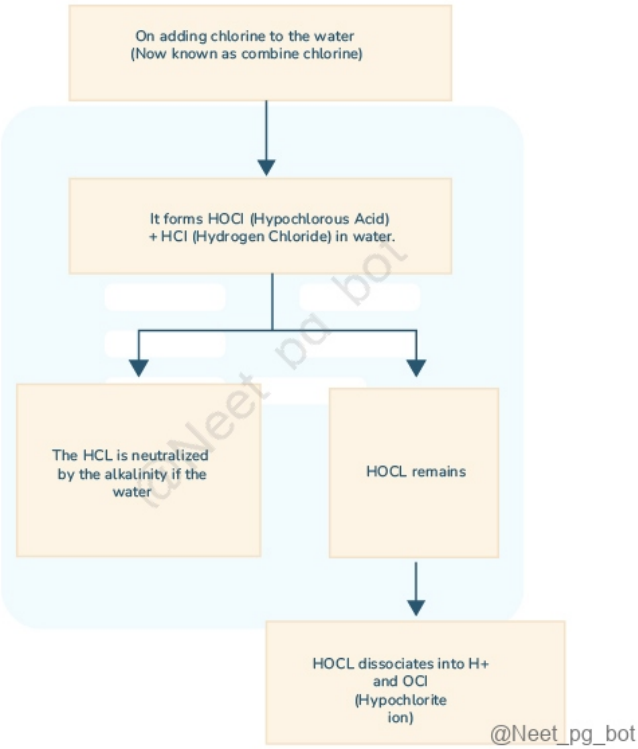
C. Chlorination is the primary method for water purification due to its ability to kill all types of microorganisms without altering taste and smell.

D. The disinfecting property of chlorine is primarily due to hypochlorous acid (HOCl).

Correct Answer: D. The disinfecting property of chlorine is primarily due to hypochlorous acid (HOCl).

- *Listen (English)*
- *Listen (Hindi)*

Explanation: This is true because: Disinfecting property of chlorine - 90% is due to HOCl (Hypochlorous acid) and 10% due to OCl- (Hypochlorite ion). Hence, the Major disinfecting property of chlorine is due to Hypochlorous acid. The major disinfecting property of chlorine is due to the hypochlorite ion (OCl-) (Option A): The major disinfecting property is due to the HOCl (90%) and not OCl- (10%). The residual activity of chlorine, known as free chlorine, is mainly due to hydrogen chloride (HCI) in water (Option B): HCl gets neutralized by the alkalinity of water and has no role to play in the disinfection. Chlorination is the primary method for water purification due to its ability to kill all types of microorganisms without altering taste and smell (Option C): Boiling is considered to be the best method of water purification as it kills spores, ova, cyclops, and other resistant microorganisms. Also, to kill Poliovirus/Cyclops, the dose of chlorine needs to be increased, leading to an alteration in the taste and smell of water.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 841

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: All of the following are true regarding the components of the given apparatus except: (Q840754)

A. It contains 1 black cup and 6 white cups.

B. The 6 white cups are of 200ml capacity each

C. The indicator used in this is starch iodide.

D. It has 1 glass stirring rod



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Correct Answer: D. It has 1 glass stirring rod

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The image given is that of Horrocks apparatus. It is an apparatus used to estimate the chlorine demand of water (or the dose of Bleaching powder that is required for disinfecting water). Contents of the

apparatus 1 black cup 6 white white cups (200 ml capacity each) 2 metal spoons 7 glass stirring rods 1 special pipette Starch-iodide solution 2 droppers Procedure: A stock solution is made by mixing 2g (1 spoonful) of bleaching powder with water in the black cup and filling up to the brim. The 6 white cups are to be filled with water to be disinfected up to about a cm below the brim. With a special pipette provided, 1 drop of stock solution is added to the 1st cup, 2 drops to the 2nd, 3 drops to the 3rd cup, and so on. Water is stirred in each cup using a SEPARATE glass rod. After 30 minutes, 3 drops of the indicator are added to each white cup and stirred again. Interpretation: The first cup that shows a blue colour will tell us how much bleaching powder is required. (n*2) where n = first cup which shows the blue colour change. n× 2 is the amount of bleaching powder required to disinfect 455 litres of water. Hence 7 separate glass rods are necessary for performing this method correctly, not 1.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 856.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following statements is true regarding the OT and OTA tests used for chlorination of water? (Q840755)

A. The OT test can detect both free and combined chlorine separately, making it superior to the OTA test.

B. OTA test is better than the OT test as it detects both free and combined chlorine separately

C. The OTA test is unable to detect combined chlorine

D. OT Test cannot detect free Cl separately

Correct Answer: B. OTA test is better than the OT test as it detects both free and combined chlorine separately

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Ortho toluidine (OT)test and OTA test measure free/residual chlorine Carried out by adding 0.1 ml of reagent to 1ml of water The product is matched against suitable standards or colored discs yellow colour Take reading within 10-15 secs OTA test is better than the OT test as it detects both free and combined chlorine separately OT Test can detect free Cl separately

References:

Park Textbook of Preventive and Social Medicine, 27th edition, Pg 842.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A major earthquake has struck a densely populated coastal city, causing widespread infrastructure damage. The city's water supply system is severely compromised, leading to contamination of water sources. How much residual chlorine would be required to purify water in this scenario? (Q840757)

A. >0.5mg/L for a contact period of 1 hour

B. >1 mg/L and contact period of 1 hour

C. >2 mg/L for a contact period of 1 hour

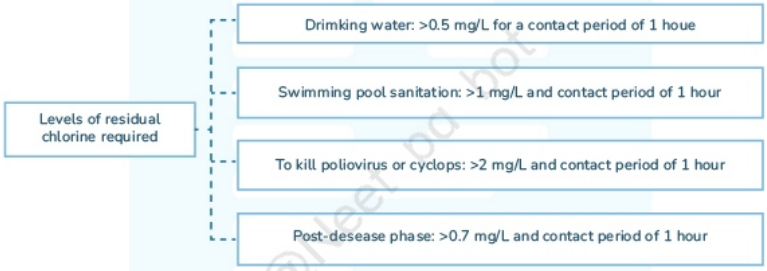
D. ≥ 0.7 mg/L for a contact period of 1 hour.

Correct Answer: D. ≥ 0.7 mg/L for a contact period of 1 hour.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: For a post-disaster scenario, the residual chlorine level required to keep the water purified is ≥ 0.7 mg/L for a contact period of 1 hour. Levels of residual chlorine required for various cases:



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References:

www.ncbi.nlm.nih.gov/books/NBK234590/

www.nitt.edu/home/students/facilitiesnservices/sportscenter/swimmingpool/SwimmingPoolMaintenance.pdf

www.ncbi.nlm.nih.gov/books/NBK234590/

www.ncbi.nlm.nih.gov/pmc/articles/PMC3148630/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Near your home, there is an overhead water tank that needs disinfection. The sanitation officer decides to prepare a solution using high-test hypochlorite. Which of the following is true regarding high-test hypochlorite? (Q840758)

A. A single tablet of 0.5 g is sufficient to disinfect 20 liters of water.

B. It contains 60-70% available chlorine.

C. It is available as Nesfield's and Bursoline's tablets.

D. It is no longer recommended for water disinfection.

Correct Answer: B. It contains 60-70% available chlorine.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: High-Test Hypochlorite(HTH) or Perchloron is a calcium compound that contains 60-70% of available chlorine. It is more stable than bleaching powder and deteriorates much less in storage Solutions prepared from HTH are also used for water disinfection. A single tablet of 0.5 g is sufficient to disinfect 20 liters of water (Option A): A single Chlorine (not HTH) tablet of 0.5g is sufficient to disinfect 20 liters of water. It is available as Nesfield's and Bursoline's tablets (Option C): Nesfield's and Bursoline's tablets are Iodine tablets. Iodine is used for emergency disinfection of water. 2 drops of 2% ethanol solution of iodine will suffice for one liter of clear water, contact time of 20-30 min. It is no longer recommended for water disinfection (Option D): HTH is still recommended for water disinfection. Rather, Potassium permanganate, a powerful oxidizing agent, once widely used for disinfection, is now no longer recommended.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 843, 844

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A 27-year-old male from a rural village presented to the PHC complaining of blister formation and worms coming out of it, accompanied by fever. The condition was diagnosed as guinea worm disease. This condition is a common public health problem that is attributed to the use of? (Q882171)

A. Dug well

B. Sanitary well

C. Artesian well

D. Step well

Correct Answer: D. Step well

Explanation: Option D: Step well Guinea worm disease is quite a public health problem in areas where step wells are in use. Step Wells: STEP WELLS are a kind of pucca wells that are becoming obsolete, fortunately. In these wells, there is considerable personal contact between the user and the water. Steps are constructed into these wells to enable people to descend into the well to fetch water or quench their thirst. Some people may even wash their faces, hands, and feet which is a common Indian custom. The open-dug wells and step wells are a health hazard to the community. Option A: Dug well Most common well in India. The unlined Katcha well and the masonry or pucca well. The katcha well is a hole dug into the water-bearing stratum. Option B: Sanitary well A sanitary well is one which is properly located, well constructed, and protected against contamination with a view to yielding a supply of safe water. Option C: Artesian well ARTESIAN WELLS is a kind of deep well in which the water rises above the level of groundwater because it is held under pressure between two impervious strata. Artesian wells are not common in India.

References:

Park 25/e p-769

↑ *Back to this question in Part A*

@Neet_pg_bot

• [12_Environment and Health] 046 Air Light Sound And Radiation

« Back to Folder Directory

[12_Environment and Health] 046 Air Light Sound And Radiation — Quick Jump

Q1 (p. 1549)	*Q2 (p. 1549)*	*Q3 (p. 1550)*	*Q4 (p. 1551)*	*Q5 (p. 1552)*	*Q6 (p. 1552)*
Q7 (p. 1553)	*Q8 (p. 1554)*	*Q9 (p. 1558)*	*Q10 (p. 1558)*	*Q11 (p. 1559)*	*Q12 (p. 1560)*
Q13 (p. 1563)	*Q14 (p. 1565)*	*Q15 (p. 1569)*	*Q16 (p. 1569)*	*Q17 (p. 1570)*	*Q18 (p. 1571)*

Q1: Match the loudness of noise in decibels (dB) with their corresponding situation. 1. 60 dB a. Auditory fatigue 2. 90 dB b. Rupture of tympanic membrane 3. 160 dB c. Noise threshold for pain 4. 140 dB d. Normal conversation (Q841178)

A. 1:d , 2:a, 3:b , 4:c

B. 1:b , 2:d, 3:a , 4:c

C. 1:d , 2:a, 3:c , 4:b

D. 1:a , 2:d, 3:b , 4:c

Correct Answer: A. 1:d , 2:a, 3:b , 4:c

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Situation Loudness (dB) 1. Whispering 20 to 30 dB. 2. Quiet library 40 dB. 2. Normal conversatio n 60 to 65 dB. 3. Heavy street traffic 60 to 80 dB. 4. Tolerable daily exposure/ threshold to noise without hearing damage 85 dB. 5. Auditory fatigue 90 dB. 6. Permanent deafness (repeated or continuous exposure to noise) Around 100 dB 7. Boiler factories 120 dB. 8. Noise threshold for pain 140 dB. 9. Jet take-off 150 dB 10 . Rupture of tympanic membran e Above 160 dB.

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 868-869

↑ *Back to this question in Part A*

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Q2: Which of the following statement about strength of sewage is incorrect? (Q845073)

A. COD estimation is best estimated by potassium dichromate.

B. BOD is the most important test that is done on sewage.

C. Normal range of suspended solids is 100-500 mg/L.

D. Strong sewage will have BOD of >100 mg/L.

Correct Answer: D. Strong sewage will have BOD of >100 mg/L.

Explanation: Strong sewage will have BOD of >300 mg/L Strength of sewage is expressed in three terms: Biological Oxygen Demand (BOD): Amount of oxygen absorbed by a sample of sewage during a specific period (usually 5 days) at a specified temperature of 20°C for aerobic destruction or use of organic matter by living organisms. BOD is the most important test that is done on sewage. (Option B) Normal range: BOD is 100-300 mg/L. Strong sewage: BOD of >300 mg/L. Weak sewage: BOD of <100 mg/L. Chemical Oxygen Demand (COD): Measure of oxygen equivalent to that portion of organic matter in a sample which is susceptible to oxidation by a strong chemical oxidizer. COD estimation is best estimated by potassium dichromate. (Option A) Suspended solids: Normal range of suspended solids: 100-500 mg/L. (Option C) Strong sewage: > 500 mg/Lof suspended solids. Weak sewage: <100 mg/Lof suspended solids.

References:

Park’s textbook of preventive and social medicine 27th edition, page: 889

↑ *Back to this question in Part A*

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Q3: Which of the following statements accurately describes the trench method of refuse disposal in sanitary landfills? (Q845072)

A. The trench method involves digging a trench, burying solid waste in it, and covering it with soil.

B. The trench method entails digging a trench, filling it with refuse and covering it with a layer of supplemental earth from outside sources to manage waste.

C. Decomposition begins as refuse heats to 60°C within 4-6 weeks, killing pathogens.

D. Refuse cools immediately after burial, starts decomposition at ambient temperature, and rises to 60°C after 2-3 months.

Correct Answer: A. The trench method involves digging a trench, burying solid waste in it, and covering it with soil.

Explanation: Trench Method (most commonly used method of Controlled tipping/ Sanitary landfill): Dig a trench on level ground, bury solid waste, and cover with mud. 2-3 meter deep with 4-12 meters width trench is dug. For 10,000 people, a 2 meter deep trench requires one acre of land Method: Refuse reaches 60°C in 7 days, starting decomposition and killing pathogens . (Option C) Organic matter fully decomposes into innocuous soil within 4-6 months. The refuse cools down within 2-3 weeks. (Option D) The final product is used as manure in farming. In Ramp method and Area method (Option B) supplemental earth is used to cover refuse in land depressions. The trench method - Most commonly used. In this method, the ground is dug and the solid waste is buried in it. The solid waste is then covered with mud. The solid waste is then covered with mud. A trench is dug where level ground is available. A 2-3-meter-deep with 4-12-meter-wide trench is dug. For a population of 10,000, a two-meter-deep trench is dug, and one acre of land is required. Ramp method: Suited for moderately sloping terrain Area method : Land depressions, disused quarries and clay pits are filled with refuse Disadvantage: it requires supplemental earth from outside source.

References:

Park’s textbook of preventive and social medicine 27th edition, page: 881

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A 31-year-old male who wants to set up a radio diagnostic centre consults you regarding the possible health hazards his radio technicians might face. What is the minimum thickness of lead aprons you advise him to provide his employees to prevent them from radiation hazards? (Q841193)

A. 0.26 mm

B. 0.34 mm

C. 0.4 mm

D. 0.5 mm

Correct Answer: D. 0.5 mm

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The ideal thickness of lead aprons to prevent the technicians from radiation hazards is ≥ 0.5 mm Radiation exposure is hazardous (dose-dependent), ranging from acute radiation sickness up to genetic mutations, fetal anomalies and carcinogenesis. Radiation dose Biological effects 50-100 rads GI effects, blood cell changes 150-1000 rads Acute radiation sickness: Intense symptoms, capillary leaks, hemorrhage, organ damage >1000 rads

Multiple organ dysfunctions, genetic level changes

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 871,872

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following is considered overcrowding? (Q841192)

A. 1 person: 80 sq ft

B. 1 person: 90 sq ft

C. 2 persons: 120 sq ft

D. None of the above

Correct Answer: D. None of the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Overcrowding: A situation where more people live in a space less than recommended can affect their physical (poor hygiene standards, spread of infections). psychosocial health (difficult sleep, inadequate privacy). Accepted standards: Persons Per Room Floor Space (1 sq.m. = 10 sq.ft.) 1 room - 2 persons 2 rooms - 3 persons 3 rooms - 5 persons 4 rooms - 7 persons 5 or more rooms - 10 persons (2 per each room) Not recommended: <50 sq.ft. ½ person : 50-70 sq. ft. 1 person: 70-90 sq. ft. 1 ½ persons: 90-100 sq. ft. 2 persons : >110 sq. ft. A baby <12 months of age are not counted as a person A child aged 1-10 years is counted as half a unit

References:

Park’s textbook of preventive and social medicine 27th edition, page : 879

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Identify the correct statements regarding ideal housing standards. Built-up area of houses should not exceed 2/3rd in urban areas Roof of a house should be at least 10 meters in height Window area should be at least 1/5th of the floor area Cattle sheds should be at least 25 feet from the housing area Doors and window: >25% of total floor area (Q841189)

A. 1,2 and 5

B. 2,4 and 5

C. 1,3,4 and 5

D. 1,2 and 3

Correct Answer: C. 1,3,4 and 5

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Recommended housing standards: Urban: Site: elevated from surroundings, pollution-free, not near mosquito-breeding sources Set Back: built-up area should not exceed 2/3rd in urban areas (statement 1) Floor: plinth height should be 2-3 ft; if mud, should be crack-free Walls: should use 9-inch bricks, low heat transmittance Roof: should be more than 10 ft, low heat transmittance (statement 2) Rooms: as per standards to avoid overcrowding Floor Area : living area: at least 100 sq. ft. for 1 person, 120 sq. ft for >1 person room: as per standards to avoid overcrowding Windows: at least 2 windows per room, height not more than 3 ft, should be ■ th of floor area (statement 3) , Doors and window: >25% of total floor area (statement 5) Lighting: Daylight factor >1% over half of the floor area Kitchen: well lit, dust & smoke-free, good water supply Privy: accessible, with water facilities Adequate waste disposal facilities Facilities for washing and bathing with proper water supply Rural: At least 2 living rooms The built-up area should not exceed 1/3rd in rural Windows: at least 10% of floor area Proper water, sanitation and waste disposal facilities Cattle sheds should be 25 feet away from housing areas (statement 4)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 878

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following units is used to measure the luminous intensity of a light source? (Q841186)

A. Lumen

B. Lux

C. Candela

D. Lambert

Correct Answer: C. Candela

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The luminous intensity of a light source is measured in candela. Parameter Description Unit of measurement Luminous intensity Brightness of a light source Candela Luminous flux Light flow Lumen (Option A) Illumination/illuminance Measure of light reaching a surface Lux (Option B) Brightness/luminance Measure of light reflected from a surface Lambert (Option D) Daylight measure Intensity of daylight illumination Daylight factor

References:

Park’s textbook of preventive and social medicine 27th edition, page : 867

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following is a primary use of this instrument? (Q841180)

A. Measuring octave band frequencies.

B. Measuring occupational noise exposure over a period of time

C. Measuring the intensity of sound in dB

D. Evaluation of hearing ability



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Correct Answer: B. Measuring occupational noise exposure over a period of time

- *Listen (English)*
- *Listen (Hindi)*

Explanation: Instrument Uses 1. Noise dosimeter (Option B) Sound level meter. To measure noise exposure of a person over a period of time Eg: Occupational exposure 2. Audiometer (Option D) Used for evaluation of hearing ability 3. Hand-held microphone (Option C) To measure the intensity of sound in dB 4. Octave band analyser (Option A) To measure sound in octave bands Reflects sound spectrum ranging from low-pitched to high-pitched frequencies.



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References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 870

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following is considered a type of mechanical ventilation? (Q841179)

A. Plenum

B. Perflation

C. Diffusion

D. Temperature inequality

Correct Answer: A. Plenum

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Types of Ventilation Natural Mechanical 1. Wind: Perflation (Option B) : wind blows through a room Aspiration : wind bypasses and exerts a suction Cross-ventilation. 2. Diffusion (Option C) : Air passes through small openings 3. Temperature Inequality (Option D) : Air movement from high to low density due to temperature difference. 1. Exhaust : air is extracted outside by exhaust fans 2. Plenum (Option A) : fresh air blown inside by centrifugal fans 3. Balanced : Combination of exhaust and plenum 4. Air conditioning: control of all air factors affecting physical and chemical conditions of the atmosphere

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 866

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Identify the primary air pollutants among the following options: Carbon Monoxide (CO) Methane (CH4) Sulfur Dioxide (SO2) Nitrogen Dioxide (NO2) Ozone (O3) Lead (Pb) (Q841162)

A. 1, 3, 4, and 5

B. 2, 3, 4, and 6

C. 1, 3, 4, and 6

D. 1, 2, 4, and 5

Correct Answer: C. 1, 3, 4, and 6

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Air Pollutants are substances in the air that can adversely affect human health, the environment, and the climate. They can be solid particles, liquid droplets, or gases. Air pollutants are typically categorised into: Primary Pollutants are emitted directly from a source into the atmosphere. Secondary Pollutants are not emitted directly. Instead, they form in the atmosphere through chemical reactions between primary pollutants and other atmospheric components. Primary Secondary Carbon Monoxide (CO) Sulfur Dioxide (SO■) Nitrogen Oxides (NO■) Particulate Matter (PM■■, PM■.■) Volatile Organic Compounds Lead (Pb) Ozone (O■) Methane (CH4) Sulfates Nitrates Secondary Particulate Matter

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page. 860-863

IAPSM textbook of Community medicine (2nd edition) Page.76

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following is true about global warming? (Q841177)

A. It is primarily caused by increased solar radiation.

B. Paris Agreement aimed to reduce greenhouse gas emissions in developed countries

C. Kyoto Protocol called for a 50% reduction in greenhouse emissions.

D. Water vapour is one of the important greenhouse gases.

Correct Answer: D. Water vapour is one of the important greenhouse gases.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Global warming: The rise in the earth’s temperature is primarily due to human activities increasing greenhouse gases. (Option A) Important greenhouse gases: Water vapour, Carbon dioxide (mc), Nitrous oxide, Methane, Ground level ozone (Option D) Chlorofluorocarbons decrease the stratosphere ozone layer and enter harmful radiations released from the sun. International initiatives for climate change: 1. Kyoto protocol: ■■■■■■■ Linked to United Nations Framework Convention on Climate Change Framed on 11th December 1997, executed from 16th February 2005 Meant for developed countries Gave defined targets: Reduce greenhouse gas emission by 18% (Option C) Reduce global warming by 2° 2. Paris agreement: International treaty on climate change Adopted by 196 parties at UN climate change conference (COP21) in Paris Framed on 12th December 2015, came into action on 4th November 2016 Meant for all countries (including developing countries) ■■■■■■■(Option B) Overall, maintain the global temperature rise <2°C above preindustrial levels Limit further reduction to 1.5°C Deals with greenhouse gas emission mitigation, adaptation, and financial stability by the year 2020 3. Montreal protocol: Related to depletion of atmospheric ozone layer which is protective

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 875

↑ *Back to this question in Part A*

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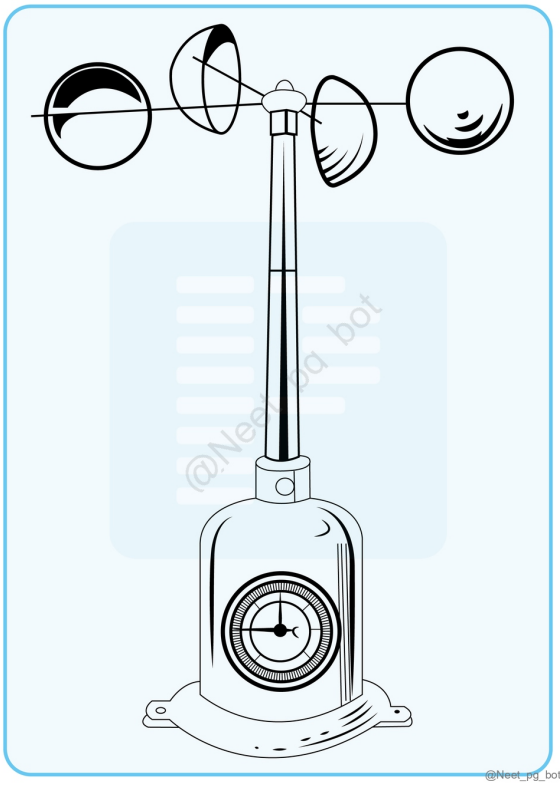
Q12: All of the following instruments can be used to measure air humidity except? (Q841176)

Correct Answer: Unknown

■ *Listen (English)*

■ *Listen (Hindi)*

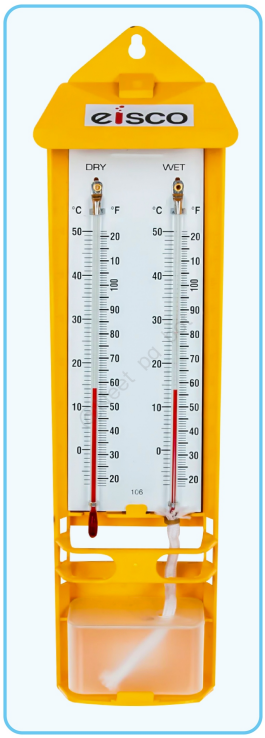
Explanation: The image shows an anemometer , used to measure air velocity (wind speed), not air humidity.. The velocity of the wind is indicated on a counter called the cyclometer, placed in the anemometer box. Velocities are measured in metres per second (m/s): When the wind speed is 0.5 m/s, it is described as complete calm with smoke rising vertically; When it is 3.3 m/s, it is described as slight breeze with leaves rustling; When it is 10 m/s, it is described as strong wind with larger branches of trees moving; When it is 15–20 m/s, it is called storm; When it is 25–30 m/s, it is called gale; and Over 30–50 m/s, it is called hurricane. Air humidity measuring instruments Hygrometer Readings from 0-100 Used to measure air humidity The dial indicates a functional range of -35°C to +65°C . Sling or whirling psychrometer It consists of two mercury thermometers (wet and dry bulb) mounted on a frame with a rotating handle. The wet bulb is moistened with distilled water and the instrument is whirled (about 4 revolutions/second) to expose it to air at ~5 m/s. The wet bulb reading is taken repeatedly until two consecutive readings are the same, then the dry bulb reading is noted. Relative humidity is then calculated using standard tables. Assman psychrometer This is a portable instrument designed to accurately measure the wet and dry bulb temperatures of the air. Air is drawn in this at a speed higher than 5 metres per second by a clock-work fan. The bulbs are protected from the effects of solar radiation so that the instrument can be used even in strong sunshine. Dry and wet bulb hygrometer Most widely used It has two thermometers: a dry bulb (measures air temperature) and a wet bulb (covered with moist wick). The wet bulb temperature is usually lower than the dry bulb. Same readings in both (dry and wet) bulbs indicate 100 per cent saturation with moisture


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20
40
60
80
0
100
- 35 + 65 °C
%
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References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 875-877

↑ *Back to this question in Part A*

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Q13: Which of the following statements regarding the following device are not true? It measures radiant heat flux. It is used to assess thermal comfort in indoor environments. It measures a lower temperature than the ordinary air temperature It measures air temperature directly. It is not used to measure the cooling power of air. (Q841175)

A. 3 and 4

B. 2 and 3

C. 4 and 5

D. 3, 4 and 5



Correct Answer: A. 3 and 4

- *Listen (English)*
- *Listen (Hindi)*

Explanation: Globe thermometers commonly used to evaluate thermal comfort in indoor environments represent the average temperature of the room surface, including radiant heat exchange. Air quality measurement Globe thermometer Thick, wide and hollow copper bulb coated with matt black paint. Used to measure corrected effective temperature or mean radiant heat (convection/ transferred heat). (Statement 1) While the globe thermometer does measure a component of air temperature, it primarily measures the mean radiant temperature, which is a combined effect of air temperature, radiant heat, and air movement (Statement 4). Registers higher temperature than the ordinary air temperature (Statement 3) Influenced by air movement velocity and temperature A wet globe thermometer consists of a blackened copper sphere completely covered with wet black cloth that exchanges heat by conduction, convection, evaporation and radiation (like sweating). The cooling power of the air is measured by a kata thermometer (Statement 5).



References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 873-874

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: What is the instrument's name, shown below, for measuring low air velocity? (Q841174)

A. Globe thermometer

B. Kata thermometer

C. Wet bulb hygrometer

D. Anemometer



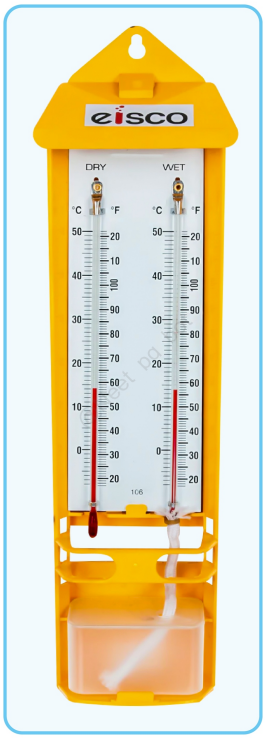
Correct Answer: B. Kata thermometer

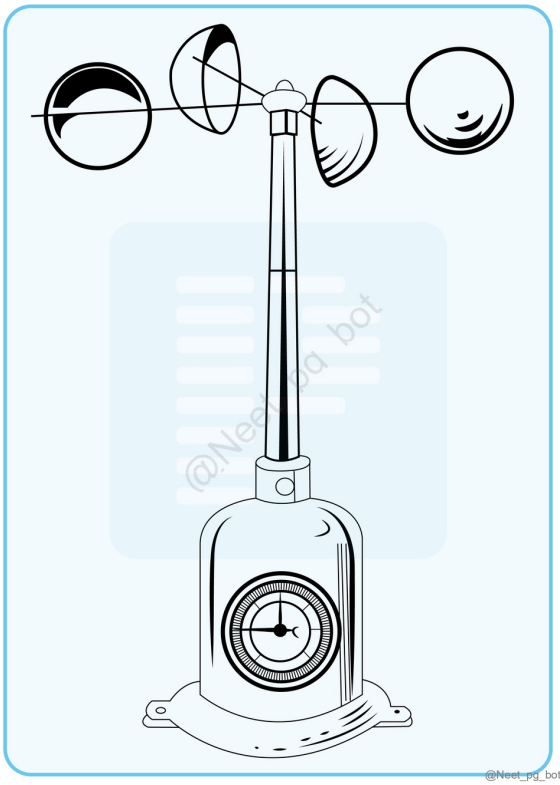
- *Listen (English)*
- *Listen (Hindi)*

Explanation: Kata thermometer: Identification: It has a narrow and thin bulb that is red-coloured. Used to measure Low air velocity. Cooling power of air (rarely) as it does not provide reliable estimates. The cooling power of air is an indicator of air comfort. A dry Kata reading of more than 6 and a wet Kata reading of more than 20 indicate thermal comfort. Globe thermometer (Option A): Identification: A thick and wide bulb is present. Used to measure corrected effective temperature or radiant heat. It is sensitive to the heat radiated from surrounding surfaces (like walls or machinery) rather than just the air temperature. Wet bulb hygrometer (Option C): Used to measure the relative humidity of the atmosphere. Components: Two identical thermometers mounted side-by-side. Dry Bulb: Measures the actual air temperature. Wet Bulb: The bulb is covered with a muslin wick dipped in distilled water. Working Principle: Evaporation from the wet wick cools the bulb. In dry air, water evaporates quickly (lowering the temperature significantly); in humid air, it evaporates slowly. The difference between the two readings is called the Wet-bulb Depression . Anemometer (Option D): Used to measure air velocity in the early days. It is a mechanical or electronic device, often featuring rotating cups or a vane (propeller).


38 C
35







References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.874

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following is best measured by McArdle's Index? (Q841168)

A. Cooling power of air

B. Heat stress

C. Predictable 4 hours sweat rate

D. Corrected effective temperature

Correct Answer: C. Predictable 4 hours sweat rate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The McArdle’s index measures the predictable 4 hours sweat rate. McArdle’s index: Measures air comfort and predictable 4 hours Sweat Rate (P4SR). P4SR classifies thermal comfort levels as: Comfort zone: 1 to 3 litres. Just tolerable: 3 to 4.5 litres. Intolerable: >4.5 litres.

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page.

IAPSM textbook of Community medicine (2nd edition) Page.

↑ *Back to this question in Part A*

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Q16: Match the following question Indoor Air Pollutants and their Sources: Pollutant Source 1. Polyaromatic hydrocarbons a. Destruction of construction materials 2. Asbestos b. Adhesives, Solvents and Aerosol sprays 3. Aldehydes c. Fuel consumption 4. Benzene d. Furnishings and Construction materials (Q841166)

A. 1-c, 2-a, 3-d, 4-b

B. 1-b, 2-c, 3-a, 4-c

C. 1-d, 2-a, 3-c, 4-b

D. 1-a, 2-b, 3-d, 4-c

Correct Answer: A. 1-c, 2-a, 3-d, 4-b

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Indoor air pollution refers to the contamination of indoor air quality within enclosed spaces, typically caused by various pollutants and contaminants. These pollutants can originate from both indoor and outdoor sources and can significantly impact human health, comfort, and well-being. Source Pollutant Fuel consumption Carbon monoxide, Polyaromatic hydrocarbons, Nitrogen oxides Tobacco consumption Carbon monoxide, Polyaromatic hydrocarbons Coal combustion Sulphur oxides, arsenic, and fluorine Furnishings, construction materials, cooking Aldehydes Remodelling and destruction of construction materials Asbestos Remodelling/demolition of painted surfaces, leaded fuels, smelting Lead Building and construction materials Radon Adhesives, solvents, aerosol sprays, resin products Organic vapours like benzene, toluene Incineration, coal burning, petroleum burning Hydrocarbons

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page. 862,863

IAPSM textbook of Community medicine (2nd edition) Page.76

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: A patient resides in an area with an AQI of 250. What does it indicate? (Q841165)

A. Very Poor

B. Moderate

C. Satisfactory

D. Poor

Correct Answer: D. Poor

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Central Pollution Control Board's Air Quality Standards Air Quality Index (AQI) Category 0-50 Good 51-100 Satisfactory 101-200 Moderate 201-300 Poor 301-400 Very Poor 401-500 Severe/Hazardous

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page. 863

IAPSM textbook of Community medicine (2nd edition) Page.77

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which of the following is not an indicator of air pollution? (Q841164)

A. SO 2

B. Soiling index

C. Air Quality Index (AQI)

D. McArdle's index

Correct Answer: D. McArdle's index

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Indicators of air pollution Sulphur Dioxide (SO 2) A gas emitted from burning fossil fuels and industrial processes; causes respiratory problems and acid rain. Most important indicator of air pollution. Soiling Index Measures the accumulation of particulate matter (dirt) on surfaces. Specific amount of air is filtered through a filter paper and the stain is measured by a photoelectric meter. Grit and Dust Measurement Quantifies the concentration of dust, grit deposits and small particulate matter present in the air. Coefficient of Haze Measures smoke and other aerosols in air. Air Pollution Index (API) Composite measure of overall air quality based on concentrations of various pollutants. McArdle's index is an indicator to measure: Air comfort. Predictable sweat rate in 4 hours.

References:

Park's Textbook of Preventive and Social Medicine (27th edition) Page. 863

IAPSM textbook of Community medicine (2nd edition) Page.77

↑ *Back to this question in Part A*

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• [12_Environment and Health] 047 Entomology - I

« Back to Folder Directory

[12_Environment and Health] 047 Entomology - I — Quick Jump

Q1 (p. 1572) *Q2 (p. 1575)* *Q3 (p. 1578)* *Q4 (p. 1581)* *Q5 (p. 1583)* *Q6 (p. 1584)*
Q7 (p. 1586) *Q8 (p. 1587)* *Q9 (p. 1588)* *Q10 (p. 1589)* *Q11 (p. 1590)* *Q12 (p. 1592)*
Q13 (p. 1593)

Q1: Which of the following diseases can be spread by the mosquito, as shown in the image below? (Q841211)

A. Filariasis

B. Malaria

C. Chickungunya

D. Yellow fever



Correct Answer: A. Filariasis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The above image shows a Culex mosquito, which spreads filariasis. Anopheles Culex Aedes Mansonoides Rest: angled inclination to surface Rest: Hunchback position Rest: hunchback position Rest: squatting position Wings spotted No white stripes White stripes all over the body White spots on legs Both sexes: long palpi Short palpi in females Malaria Japanese encephalitis, Filariasis, West Nile fever Dengue, Chikungunya, Rift valley fever, Zika virus, Yellow fever Brugian filariasis Culex Anopheles Mansonia Aedes

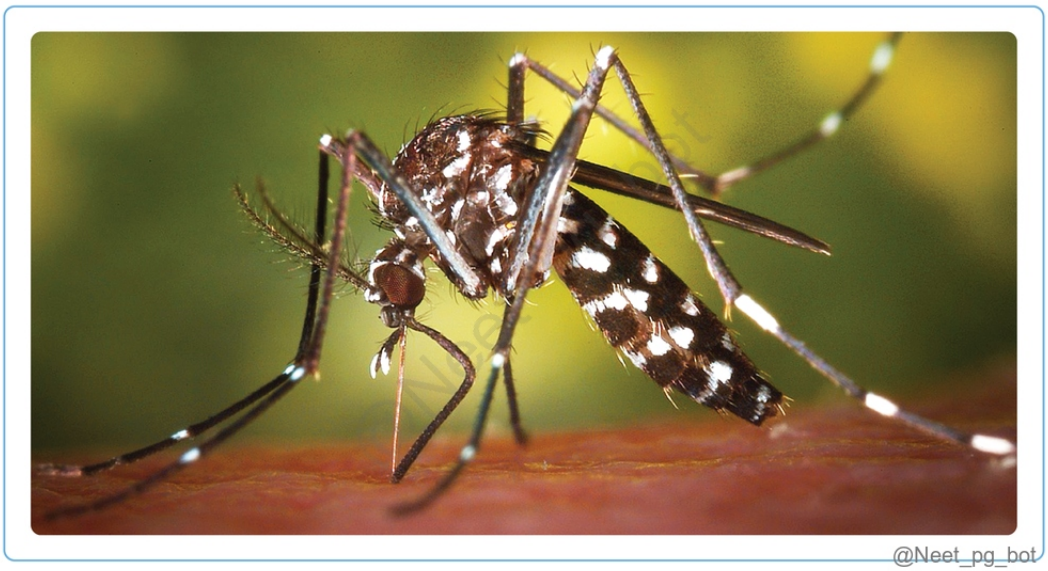




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References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 897,898

↑ *Back to this question in Part A*

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Q2: Identify the genus of the mosquito, the eggs of which are collected from the water source of a street and subjected to microscopic examination as given in the image below. (Q841212)

A. Aedes

B. Anopheles

C. Culex

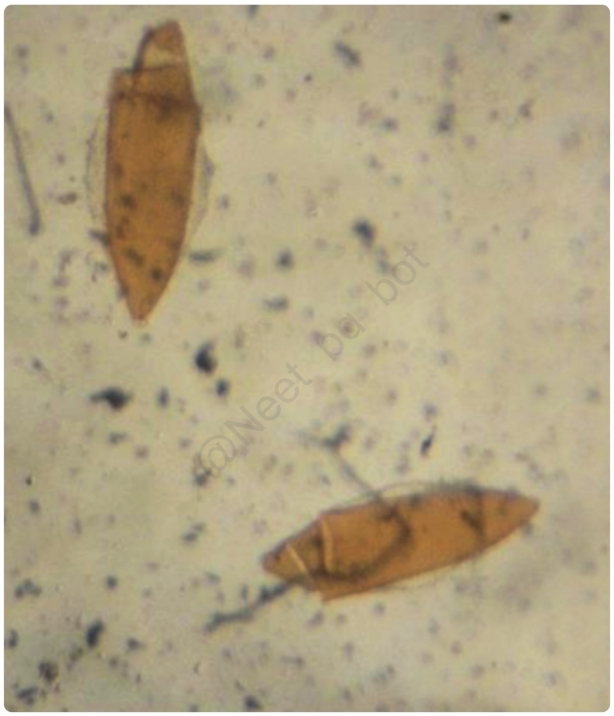
D. Mansonoides



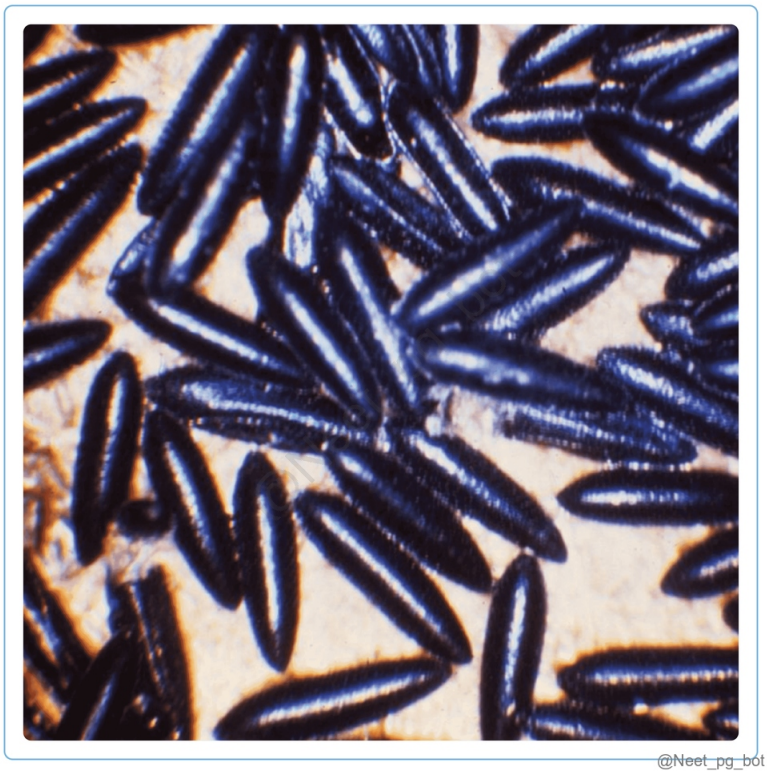
Correct Answer: B. Anopheles

- *Listen (English)*
- *Listen (Hindi)*

Explanation: The above image shows the eggs of an Anopheles mosquito (boat-shaped with lateral floats). ANOPHELES CULEX AEDES MANSONOIDES EGGS Lays singly Boat shaped Lateral floats Lays in clusters (100-250 in a single cluster) Lays singly Cigar shaped Lays in clusters Star-shaped LARVAE No siphon tube Rests parallel to water surface Longer siphon tubes Rests at an angle to water surface Shorter siphon tubes Rests at an angle to water surface HABITAT Exophilic: outside house Clean stagnant water Anopheles known as a sophisticated mosquito Exophilic: day Endophilic: night Dirty polluted water (ponds) Endophilic: inside house Artificial Collected water Exophilic- Aquatic vegetation (Pistia plants) Culex Egg: Aedes egg:


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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 897,898

↑ *Back to this question in Part A*

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Q3: A 45-year-old male from Bihar, India, presents with a 3-month history of intermittent fever, significant weight loss, and enlargement of the spleen and liver. Physical examination reveals darkening of his skin on the face and extremities. He was bitten by the organism given in the image below. What is the disease and the organism? (Q841213)

A. Visceral leishmaniasis - sandfly

B. Trypanosomiasis - Tsetse fly

C. Dengue fever-Aedes mosquito

D. Lyme disease - Ixodes tick



Correct Answer: A. Visceral leishmaniasis - sandfly

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Leishmaniasis: Leishmaniasis is caused by protozoan parasites of the genus Leishmania. Transmitted through the bite of infected sandflies(Phlebotomus argentipes) during blood feeding. Types of Leishmaniasis: Visceral (kala-azar), cutaneous, and mucocutaneous forms Drug of choice - LAMB (Liposomal Amphotericin B) Visceral Leishmaniasis (VL or Kala-azar)By L. donovani Irregular bouts of fever, splenomegaly, hepatomegaly, anaemia, and weight loss. Family history is common Darkening of skin on the face, hands, feet, and abdomen. Cutaneous Leishmaniasis Cutaneous leishmaniasis aka Oriental sore caused By L.tropica Results in skin lesions, mainly ulcers, on exposed body parts. Leaves lifelong scars Mucocutaneous Leishmaniasis By L.braziliensis Destroys mucous membranes of the nose, mouth, and throat. It can cause severe facial disfigurement and social stigma. Sandfly: Insects smaller than mosquitoes Brown in color Hairy body Hops around Trypanosomiasis - Tsetse fly (Option B): Also known as tik-tik flies, they are of 6-15 mm in length They occur only in tropical Africa and are important as vectors of African trypanosomiasis (protozoa) in both humans and animals The tsetse are obligate parasites that live by feeding on the blood of vertebrate animals Tsetse also have a long proboscis, which extends directly forward Dengue fever - Aedes mosquito (Option C): Aedes mosquito belongs to the Family Culicidae. It is also known as the Tiger mosquito because of white stripes on its body. Way of sitting: Hunch back It breeds in artificial collection of water Eggs: S ingle, cigar-shaped ■■■■■eggs It flies upto 100m. . Larvae: Shorter siphon tube Hanging from the water surface Diseases transmitted: Dengue, dengue haemorrhagic fever, chikungunya fever, rift valley fever, filaria & yellow fever (not in India) Lyme disease - Ixodes tick (Option D): Ixodes is a genus of hard-bodied ticks. Ticks have 4 pairs of legs but no wings. They have chitin on exoskeleton. Head is visible Rapid life cycle, Adult in 1-2 months Feeds all the time Will die once outside the body Diseases transmitted: Lyme disease Babesiosis Rocky Mountain Spotted Fever (RMSF) Kyasanur Forest Disease (KFD)

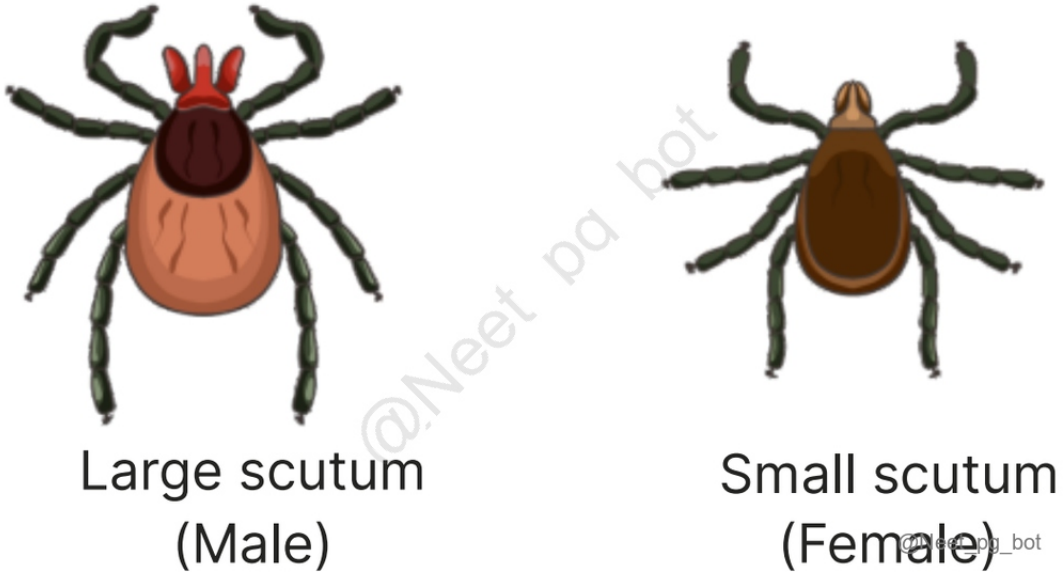


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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pages 351-356, 901

↑ *Back to this question in Part A*

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Q4: Given below is the image of a parasite. From the options pick a disease that is not transmitted by it. (Q841214)

A. Epidemic typhus

B. Relapsing fever

C. Trench fever

D. Oriental sore



Correct Answer: D. Oriental sore

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The parasite given in the image is a louse . Oriental sore is transmitted by sandflies, and lice transmit the rest. Types of Lice Head louse (Pediculus capitis) Body louse (Pediculus corporis) Pubic or crab louse (Phthirus pubis) Transmission Direct contact with infested persons. Indirect contact through clothing, bedding, combs, or brushes. Lice can be blown by wind from heavily infested individuals. Diseases Transmitted Epidemic typhus (caused by Rickettsia prowazekii) Epidemic relapsing fever (caused by Borrelia recurrentis) Trench fever (caused by Rickettsia quintana) Dermatitis due to scratching and secondary infection. Control Measures Malathion Personal hygiene Mass delousing

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 903-904

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: What does this insect transmit? (Q841215)

A. Epidemic relapsing fever

B. Trench fever

C. Epidemic typhus

D. Endemic typhus



Correct Answer: D. Endemic typhus

- *Listen (English)*
- *Listen (Hindi)*

Explanation: Fleas Morphology Small bilaterally compressed, wingless insects covered with backwardly directed bristles. Diseases transmitted Plague (bubonic) Endemic or murine typhus Chiggerosis Hymenolepis diminuta Importance in Public Health Rat fleas are significant vectors of plague and typhus. Control measures DDT, gamma-HCH, dieldrin, carbaryl, diazinon, or malathion Diethyltoluamide (DEET) and benzyl benzoate Rodent control Epidemic relapsing fever (Option A) is caused by Borrelia recurrentis Trench fever (Option B) is caused by Rickettsia quintana Epidemic typhus (Option C) is caused by Rickettsia prowazekii

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pages 904-905

↑ *Back to this question in Part A*

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Q6: Which of the following statements is true about the parasite shown in the image (Q841216)

A. Ornithodorus moubata is an important species of this parasite

B. Transmit relapsing fever

C. Has 5 years of nymphal stage

D. Cannot stand starvation



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Correct Answer: D. Cannot stand starvation

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The image is of a hard tick. Feature Hard Ticks (Ixodidae) Soft Ticks (Argasidae) Scutum Covers the entire back in males; only a small portion in front in females Absent Head Situated at the anterior end Lies ventrally; not seen from above Habits Cannot stand starvation; feed night and day Can stand starvation for a year or more Diseases transmitted Tick typhus, Viral encephalitis, Haemorrhagic fever, Tularaemia, Tick paralysis,

Human babesiosis Relapsing fever Important species Dermacentor andersoni Haemophysalis spinigera Ornithodorus moubata Image Ornithodorus moubata is an important species of this parasite (Option A): Ornithodoros moubata is a soft tick , not a hard tick. It belongs to Argasidae , not Ixodidae. Therefore, it is not a species related to hard ticks. Transmits relapsing fever (Option B): Incorrect because relpasing fever is transmitted by soft tick (like Argasidae) . Not hard ticks Has 5 years of nymphal stage (Option C): Hard ticks can live for several years, but a 5-year-long nymphal stage is not typical . Nymphal stages in ticks generally last weeks to months , sometimes up to a year, depending on the species and environment. 5 years is an exaggeration and not a standard developmental duration



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References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 907

↑ *Back to this question in Part A*

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Q7: A 35-year-old hiker presents with sudden onset fever, severe headache, and a macular rash that appeared around the 5th day of illness. On examination, there is generalised lymphadenopathy and an eschar on his abdomen. What is the most likely diagnosis? (Q841217)

A. Epidemic typhus

B. Scrub typhus

C. Relapsing fever

D. Dengue fever

Correct Answer: B. Scrub typhus

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Clinical features given in the scenario are of Scrub Typhus. Trombiculid mite Scrub Typhus Causative bacteria Orienta (Rickettsia) tsutsugamushi Transmission Trombiculid mite Clinical Features: Acute onset with high fever (104°-105°F), chills, severe headache, malaise, and prostration. A macular rash appears around the 5th day of illness. Generalised lymphadenopathy and lymphocytosis are common. The presence of an eschar (punched-out ulcer with a blackened scab) at the site of the mite bite is characteristic. Diagnostic Test Weil-Felix reaction (Heterophile antigen-antibody reaction) Treatment Tetracycline Prophylaxis Impregnating clothes and blankets with miticidal chemicals (e.g., benzyl benzoate) and mite repellents (e.g., diethyltoluamide) on exposed skin surfaces.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 347

↑ *Back to this question in Part A*

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Q8: A 30-year-old woman presents with severe itching, particularly worse at night, and skin lesions on her hands and wrists. On examination, there are follicular lesions and evidence of secondary infection with crusted papules and pustules. She reports that her husband and children also have similar symptoms. Which of the following is

used exclusively as a preventive measure against this disease? (Q841218)

A. Use of chlordane

B. Applying benzyl benzoate

C. Using gamma-HCH (lindane) on the skin

D. Administering tetmosol solution daily

Correct Answer: A. Use of chlordane

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Given is a scenario of scabies. Chlordane is used as a preventive measure, and rest is used as a treatment measure. Scabies Treatment Benzyl Benzoate- Applied thoroughly to the entire body below the chin, including the soles of feet, and repeated after 12 hours. Gamma-HCH (Lindane) Tetmosol Sulfur Ointment Preventive Measures Insecticidal Control Effective insecticides: DDT, chlordane, dieldrin, lindane, malathion, toxaphene. Environmental Control Fill cracks and crevices near buildings and paths. Reduce wild rodents and dogs. Protection of Workers Wear protective clothing with insect repellents (indalone, diethyltoluamide, benzyl benzoate). Regularly check for and remove ticks during breaks, and after work, remove ticks by painting them with petrol or paraffin and brushing them off. If necessary, extract with forceps, avoiding breaking mouthparts.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pages 907-908

↑ *Back to this question in Part A*

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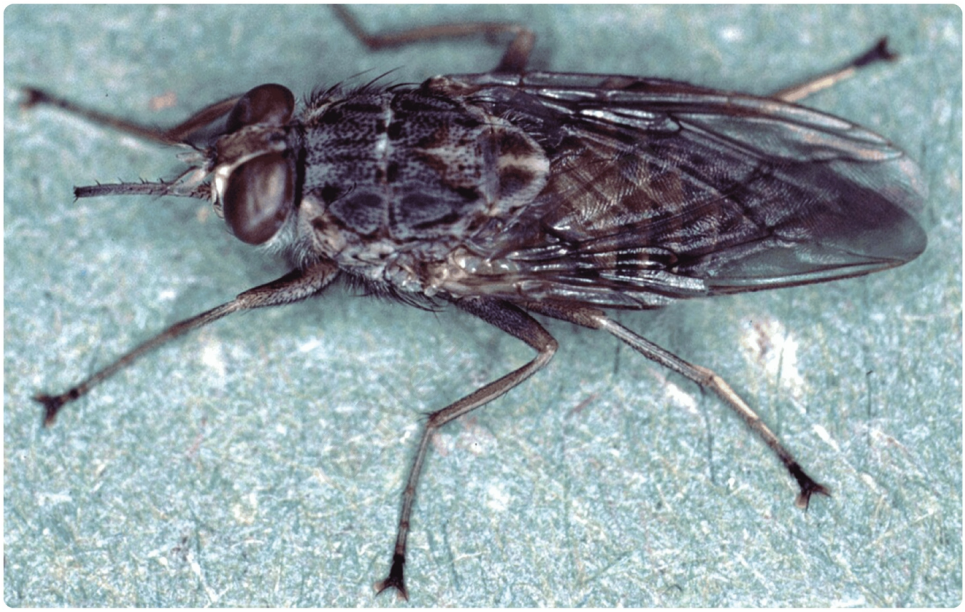
Q9: The image of a fly is given below. Which disease does it transmit? (Q841219)

A. Q fever

B. Relapsing fever

C. Sleeping sickness

D. Lyme disease



Correct Answer: C. Sleeping sickness

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The insect given in the image is the Tsetse fly, it is a vector of trypanosomiasis/sleeping sickness. Tsetse fly Synonym Glossina Location African continent Morphology Resembles houseflies Yellow/dark brown Half an inch long Health impact Vectors for trypanosomiasis, causing "sleeping sickness" Control measures 1. DDT and dieldrin 2. Removing vegetation where tsetse flies breed Q fever (Option A): Caused by: Coxiella burnetii Transmission: Inhalation of contaminated animal aerosols (sheep, goats, cattle) Vector: No insect vector required Not transmitted by any fly It is a zoonotic airborne infection , not vector-borne. Relapsing fever (Option B): Two types: Louse-borne relapsing fever Vector: Body louse (Pediculus humanus corporis) Caused by Borrelia recurrentis Tick-borne relapsing fever Vector: Soft tick (Ornithodoros) Not transmitted by Tsetse fly. Lyme disease (Option D): Caused by: Borrelia burgdorferi Vector: Hard tick (Genus Ixodes) Classic sign: Erythema migrans Not transmitted by any fly.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 902

↑ *Back to this question in Part A*

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Q10: A 37-year-old man is complaining of heart palpitations, nausea, and facial flushing after being bitten by the insect shown in the image. What is the diagnosis? (Q841220)

A. Chagas disease

B. Scrub typhus

C. Tularaemia

D. Sleeping sickness



Correct Answer: A. Chagas disease

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The image is of the Reduviid bug, and the disease transmitted is Chagas disease. Reduviid bug Synonyms Cone-nose bugs Location Mexico, Central America, and South America Morphology An inch or more in length Adults have wings Feeding Exclusively on the blood Habitat Cracks, fissures, and other hiding places in walls, ceilings, and animal habitations Health impact Transmit Trypanosoma cruzi [a protozoa], the causative agent of Chagas' disease, causes intense itching, nausea, flushed face, and palpitations of the heart. Control measures Insecticides like HCH or dieldrin Scrub typhus (Option B): Incorrect because it is transmitted by chiggers (larval mites), not Reduviid bugs. Tularaemia (Option C): Incorrect because it is transmitted by ticks, deer flies, or direct contact with infected animals, not Reduviid bugs. Sleeping sickness (Option D): Incorrect because it is transmitted by tsetse flies (Glossina species), not Reduviid bugs.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 906

↑ *Back to this question in Part A*

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Q11: Mr. Smith, a 50-year-old farmer from rural Africa, presents with severe itching and a "leopard skin" appearance on his legs. He complains of worsening vision with photophobia and conjunctivitis. Examination reveals papular dermatitis, skin depigmentation, and early signs of corneal scarring. He gives a history of being bitten by a fly given in the image below. What is the diagnosis? (Q841221)

A. Onchocerciasis

B. Trench fever

C. Loiasis

D. Scrub typhus



Correct Answer: A. Onchocerciasis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The insect in the image is a black fly, the disease transmitted is Onchocerciasis [river blindness]. Black fly Synonyms Simuliidae. Morphology Small with short legs and proboscis and large, broad wings Black in colour. Health impact Bloodsucking and causes river blindness (onchocerciasis). In contrast - loiasis doesn't cause vision loss , it is present in subconjunctival tissues. (Option C) Control measures Abate Onchocerciasis symptoms: Skin Manifestations: Recurrent severe pruritus Papular dermatitis Lichenified dermatitis Areas of skin

depigmentation, especially around the shins, lead to the characteristic "leopard skin" appearance. Ocular Manifestations: Recurrent conjunctivitis Punctate keratitis Photophobia Progressive visual loss. Drug Of Choice - Ivermectin Loiasis (African eye worm disease) : Causative agent: Loa loa (filarial nematode) Vector: Chrysops (deer fly / mango fly) Geography: West & Central Africa Key features: Transient, itchy Calabar swellings (subcutaneous angioedema) Adult worm migrating across conjunctiva (“eye worm”) Peripheral eosinophilia Microfilariae show diurnal periodicity (seen in daytime blood smear) Diagnosis: Peripheral blood smear (day sample). Treatment: Diethylcarbamazine (DEC). High microfilarial load → risk of encephalopathy after treatment.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 903

https://www.ncbi.nlm.nih.gov/books/NBK559027/

↑ *Back to this question in Part A*

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Q12: All of the following are transmitted by houseflies except? (Q841222)

A. Tularaemia

B. Yaws

C. Trachoma

D. Anthrax

Correct Answer: A. Tularaemia

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Tularaemia is transmitted by hard ticks. Diseases transmitted by houseflies: Systemic infections like typhoid fever and paratyphoid fever. Eye infections such as conjunctivitis and trachoma. Skin infections, including anthrax and yaws. Parasitic diseases like helminthic infestations. Viral infections such as poliomyelitis. Tularaemia (Option A): Pathogen: Caused by the bacterium Francisella tularensis . Vector: It is primarily transmitted to humans through the bites of ticks (such as the Wood tick) and deer flies (Chrysops), or through direct contact with infected animals like rabbits. It is not transmitted by houseflies Yaws (Option B): Pathogen: Caused by the bacterium Treponema pallidum pertenue . Transmission: This is a non-venereal tropical infection. Houseflies (and specifically "eye gnats") can mechanically transfer the bacteria from the skin sores of an infected person to the skin of a healthy person. Trachoma (Option C): Pathogen: Caused by Chlamydia trachomatis . Transmission: This is the world's leading cause of preventable blindness. It is transmitted through contact with eye and nose discharge from infected people. Houseflies are a major vector for Trachoma. They are attracted to the moisture in human eyes and easily carry the bacteria from face to face. Anthrax (Option D): Pathogen: Caused by Bacillus anthracis. Transmission: Usually occurs through contact with infected livestock or spores in the soil. Houseflies can act as mechanical vectors by feeding on the carcasses of animals that died of anthrax and then

transporting the spores to human food or skin lesions.

References:

Park's Preventive and Social Medicine, 27th edition, pages 900-901

↑ *Back to this question in Part A*

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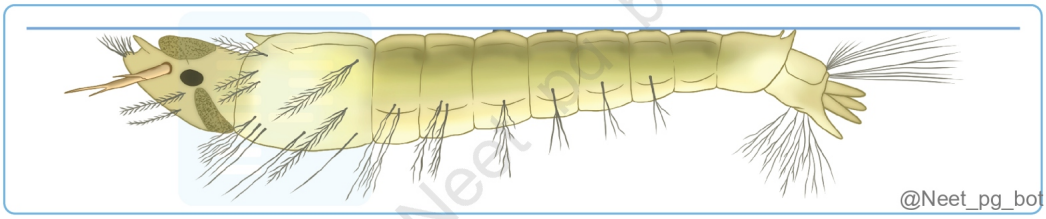
Q13: The mosquito larvae collected from a local water source have been examined. Based on the features observed under the microscope, which genus of mosquito is identified? (Q846619)

A. Aedes

B. Anopheles

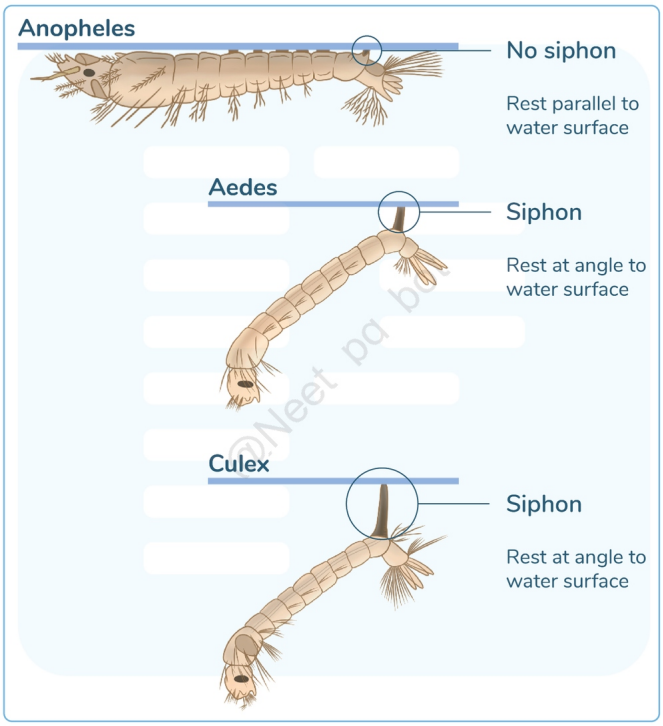
C. Culex

D. Mansonoides



Correct Answer: B. Anopheles

Explanation: The above image shows the larvae of an Anopheles mosquito (Rests parallel to water surface with no siphon tube). ANOPHELES CULEX AEDES MANSONOIDES LARVAE No siphon tube Rests parallel to water surface Longer siphon tubes Rests at an angle to water surface Shorter siphon tubes Rests at an angle to water surface EGGS Lays singly Boat shaped Lateral floats Lays in clusters (100-250 in a single cluster) Lays singly Cigar shaped Lays in clusters Star-shaped HABITAT Exophilic: outside house Exophilic: day Endophilic: night Endophilic: inside house Exophilic Mosquito larvae:



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 897,898

↑ *Back to this question in Part A*

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• [12_Environment and Health] 048 Previous Year Questions

« Back to Folder Directory

[12_Environment and Health] 048 Previous Year Questions — Quick Jump

Q1 (p. 1595)	*Q2 (p. 1596)*	*Q3 (p. 1596)*	*Q4 (p. 1598)*	*Q5 (p. 1599)*	*Q6 (p. 1600)*
Q7 (p. 1603)	*Q8 (p. 1603)*	*Q9 (p. 1604)*	*Q10 (p. 1605)*	*Q11 (p. 1606)*	*Q12 (p. 1606)*
Q13 (p. 1614)	*Q14 (p. 1614)*	*Q15 (p. 1615)*	*Q16 (p. 1616)*	*Q17 (p. 1617)*	*Q18 (p. 1618)*
Q19 (p. 1618)	*Q20 (p. 1619)*	*Q21 (p. 1620)*	*Q22 (p. 1620)*	*Q23 (p. 1621)*	*Q24 (p. 1622)*
Q25 (p. 1622)	*Q26 (p. 1623)*	*Q27 (p. 1624)*	*Q28 (p. 1625)*	*Q29 (p. 1626)*	*Q30 (p. 1627)*
Q31 (p. 1627)	*Q32 (p. 1630)*	*Q33 (p. 1630)*	*Q34 (p. 1631)*	*Q35 (p. 1631)*	*Q36 (p. 1632)*

Q1: What is the classification of the air quality index in Delhi station on November 23, based on the provided air pollution index chart for 4 consecutive days? Date AQI November 21 350 November 22 340 November 23 407 November 24 356 (Q856091)

A. Moderately polluted

B. Poor

C. Very poor

D. Severe

Correct Answer: D. Severe

Explanation: While the average pollution level for the week may be in the "Very Poor" range, on November 23 the AQI was 407 , which falls in the Severe category (401-500). This indicates serious respiratory health effects and necessitates urgent measures to reduce exposure to pollution. AQI Range Category Health Impact 0-50 Good Minimal impact 51-100 Satisfactory Minor discomfort to sensitive people 101-200 Moderate Discomfort to people with respiratory diseases 201-300 Poor Breathing discomfort for most people 301-400 Very Poor Respiratory illness on prolonged exposure 401-500 Severe Severe health impacts, emergency conditions

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC4213258/

https://pmc.ncbi.nlm.nih.gov/articles/PMC7182097/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: While measuring a patient's blood pressure at a primary health center, the sphygmomanometer accidentally fell and broke, resulting in spilled mercury on the ground. Which of the following is the most appropriate step to clean this spillage? (Q855294)

A. Collect it by using a card on a sheet of paper and put the mercury into a jar

B. Collect it by sweeping it with a broom and throwing outside

C. Collect it by sweeping it and flush it in the toilet

D. Collect it by hand and then wash hands with water

Correct Answer: A. Collect it by using a card on a sheet of paper and put the mercury into a jar

Explanation: This is the most appropriate and safest way to collect spilled mercury. Mercury forms small droplets, and using a card or a piece of stiff paper allows you to gently gather the mercury and place it in a sealed container (such as a jar). This method ensures that the mercury is contained safely, preventing further exposure to it or its vapor. Collect it by sweeping it with a broom and throwing it outside (Option B): This is not a safe option. Sweeping the mercury with a broom would break the droplets into smaller pieces and increase the risk of inhaling toxic mercury vapors. Throwing it outside also poses a danger to the environment. Collect it by sweeping it and flush it in the toilet (Option C): Flushing mercury down the toilet is hazardous. Mercury is toxic and can contaminate water supplies, causing environmental harm. It is also difficult to remove mercury from plumbing systems, leading to long-term pollution. Collect it by hand and then wash hands with water (Option D): Handling mercury directly with hands is very dangerous. Mercury can be absorbed through the skin and is highly toxic. Additionally, washing hands with water after handling mercury is not effective, as mercury does not dissolve in water.

References:

https://pubmed.ncbi.nlm.nih.gov/25086412/

https://cdn.who.int/media/docs/default-source/wash-documents/wash-in-hcf/training-modules-in-health-care-waste-management/module-20---management-and-storage-of-mercury-waste.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Water from a broken septic tank is collected in a container and breeding mosquitoes are seen. The image of the larva is given below. Identify the species of the mosquito. (Q855127)

A. Anopheles

B. Aedes

C. Mansonia

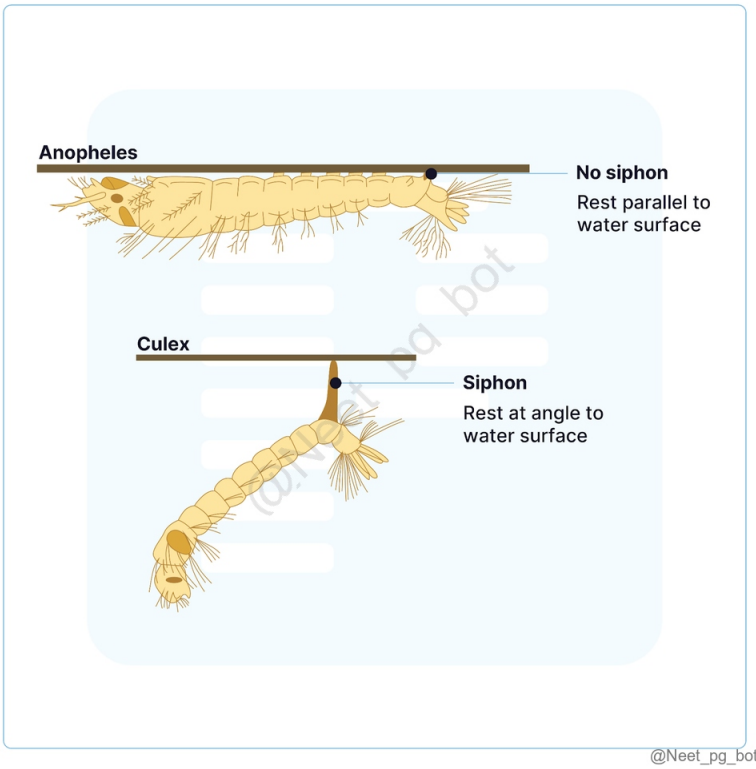
D. Culex



@Neet_pg_bot

Correct Answer: A. Anopheles

Explanation: These larvae rest parallel to the water surface, and their bodies have a characteristic "arched" shape. Their siphon tube is absent, and they typically lie flat against the water surface when they feed. ANOPHELES CULEX AEDES MANSONOIDES LARVAE No siphon tube Rests parallel to water surface Longer siphon tubes Rests at an angle to water surface Shorter siphon tubes Rests at an angle to water surface EGGS Lays singly Boat shaped Lateral floats Lays in clusters (100-250 in a single cluster) Lays singly Cigar shaped Lays in clusters Star-shaped HABITAT Exophilic: outside house Exophilic: day Endophilic: night Endophilic: inside house Exophilic Images of mosquito larvae:



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References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 897, 898

↑ *Back to this question in Part A*

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Q4: Under which category of disaster management does the modification of building codes to construct earthquake-resistant buildings fall? (Q855137)

A. Disaster response

B. Disaster reconstruction

C. Disaster rehabilitation

D. Disaster mitigation

Correct Answer: D. Disaster mitigation

Explanation: Modifying building codes to construct earthquake-resistant buildings is a preventive measure taken to reduce the impact of potential disasters. Disaster mitigation involves steps to minimize risks and vulnerabilities,

such as structural improvements and planning. Disaster response (Option A) : This refers to actions taken immediately after a disaster occurs, such as search and rescue, providing medical aid, and emergency relief. Modifying building codes does not fall under this category. Disaster reconstruction (Option B) : This involves rebuilding and restoring infrastructure and communities after a disaster has occurred. Building earthquake-resistant structures during reconstruction could be part of this phase but does not pertain to modifying codes as a proactive measure. Disaster rehabilitation (Option C) : Rehabilitation focuses on restoring normalcy and providing long-term support to affected individuals and communities, such as psychological care and restoring livelihoods. It does not include modifying building codes.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 923

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Orthotolidine test is used to determine (Q857084)

A. Nitrates in water

B. Nitrites in water

C. Free chlorine in water

D. Ammonia content in water

Correct Answer: C. Free chlorine in water

Explanation: : are typically measured using other specific methods, such as colorimetric tests involving reagents specific to nitrate detection. Nitrites (Option B): can be detected using different tests, such as the Griess reagent test, which produces a different color change than the OTA test. Ammonia (Option D): is typically measured using specific ammonia testing methods, such as the Nessler's reagent test or ion-selective electrodes, which produce distinct color changes or electrical signals in the presence of ammonia. The orthotolidine test: Colorimetric method commonly used to measure the concentration of free chlorine in water. This test is often used to assess the effectiveness of water treatment processes, particularly those involving chlorination. In the OT test, orthotolidine reagent is added to a water sample containing free chlorine. If free chlorine is present, a greenish-yellow color will appear, indicating the presence of free chlorine. The intensity of the color change is proportional to the concentration of free chlorine in the water sample. This allows for a quantitative measurement of the chlorine residual.

References:

Park’s Textbook of Preventive and Social Medicine 27th ed. Pg 842.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A 45-year-old man living in Nellore, Andhra Pradesh presents with the following lesions on his teeth. What is the most likely diagnosis? (Q857147)

A. Selenosis

B. Plumbism

C. Fluorosis

D. Lathyrism



Correct Answer: C. Fluorosis

Explanation: : there is mottling as well as loss of teeth. Burton's lines (Option B): are seen in plumbism along with dental caries. Lathyrism (Option D): is a neurological disorder due to consumption of Lathyrus sativus and is characterised by paralysis of lower limbs.


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References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg.739.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7312808/

Image Source:(Crippling fluorosis) Choubisa, Shanti. (2022). Status of chronic fluoride exposure and its adverse health consequences in the tribal people of the scheduled area of Rajasthan, India.. 55. 8-30.

↑ *Back to this question in Part A*

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Q7: What is the maximum number of persons allowed to live in a household with 2 rooms without causing overcrowding? (Q857720)

A. 2 people

B. 3 people

C. 4 people

D. 5 people

Correct Answer: B. 3 people

Explanation: 3 people In India, a 2-room house can accommodate a maximum of 3 persons without overcrowding, considering persons-per-room, floor space, and sex-separation guidelines. Overcrowding: Overcrowding refers to the situation in which more people are living within a single dwelling than there is space for, so that movement is restricted, privacy secluded, hygiene impossible, rest and sleep difficult. Criteria for overcrowding: Person per room criteria Floor space per person criteria Sex separation criteria. Number of Rooms Maximum Number of Persons Recommended 1 2 2 3 3 5 4 7 5 10 >5 Add 2 persons to 2 for each additional room after 5

References:

https://en.wikipedia.org/wiki/Overcrowding#:~:tex

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: What is the standard unit for measuring the brightness of light emitted from a single point source? (Q856064)

A. Candela

B. Lux

C. Lambert

D. Lumen

Correct Answer: A. Candela

Explanation: Candela is the standard unit for measuring the brightness of light emitted from a single point source . It measures the intensity of light emitted in a particular direction. It is one of the seven base units in the International System of Units (SI) and is used to describe the luminous intensity of light. Photometry and Measurement of Light Photometry is the branch of physics that deals with the measurement of visible light, considering human eye sensitivity. Light measurement is crucial in various applications, including illumination engineering, display technology, medical imaging, and astronomy . Photometric Quantities and Their Units Photometric Quantity Definition SI Unit Common Usage Luminous Intensity Brightness of a light source in a specific direction Candela (cd) Used in lighting design, LED specifications Luminous Flux Total light emitted in all directions Lumen (lm) (Option D ruled out) Used in bulb ratings, projector brightness Illuminance Light received per unit area Lux (lx) (lm/m^2) (Option B ruled out) Used in workplace lighting standards, photography Luminance Perceived brightness of a surface emitting or reflecting light Nit (cd/m^2) or Lambert (Option C ruled out) Used in display screens, road signs

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 800

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 867

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which type of thermometer is employed to assess the low air velocity rather than the cooling efficiency of the air? (Q856078)

A. Kata thermometer

B. Globe thermometer

C. Wet globe thermometer

D. Dial thermometer

Correct Answer: A. Kata thermometer

Explanation: Kata thermometer is specifically designed to measure low air velocity. It is an alcohol-based thermometer that is heated before use, and the time taken for the temperature to drop from a higher set point to a lower set point is recorded . This cooling time is then used to calculate air movement in still air environments , such as indoor ventilation studies and occupational health assessments . Unlike other thermometers, it does not measure air temperature directly but rather the effect of air movement on heat loss . Comparison of Thermometers

Thermometer Purpose Measures Kata thermometer Low air velocity Rate of heat loss from a heated bulb Globe thermometer Radiant heat Temperature considering radiation from surroundings Wet globe thermometer Thermal comfort index Combination of air temperature, humidity, and radiant heat Dial thermometer General temperature Direct air or surface temperature Globe thermometer (Option B) : A globe thermometer is used to measure the radiant heat in the environment, typically in the context of assessing the mean radiant temperature (MRT). It is not designed to assess air velocity. Wet globe thermometer (Option C) : A wet globe thermometer measures the cooling efficiency of the air, specifically by assessing both the ambient air temperature and the effect of humidity on heat loss from the body through evaporation. It is used in environmental health studies but focuses on cooling, not air velocity. Dial thermometer (Option D) : A dial thermometer is used to measure temperature, typically in laboratory settings, and does not assess air velocity or cooling efficiency.

References:

Park's Textbook of Preventive and Social Medicine, Edition 25, Page 792, 806, 807.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Sickness absenteeism of workers in the industry is used to evaluate (Q858128)

A. Health of the worker

B. Health of the family

C. Industrial environment

D. Community health

Correct Answer: A. Health of the worker

Explanation: Sickness absenteeism refers to workers being absent from work due to health-related issues. It is a direct indicator of the health status of the worker and helps to evaluate patterns of illness and health hazards faced by workers in an industry. This metric is commonly used in occupational health studies. Health of the family (Option B): is incorrect because sickness absenteeism measures individual worker absenteeism and does not directly assess the health status of their family members. Industrial environment (Option C): is incorrect because, although poor industrial environments may contribute to absenteeism, the metric specifically evaluates the health of the worker rather than environmental conditions. Community health (Option D): is incorrect because absenteeism in an industrial setting is specific to workers and does not provide a comprehensive measure of overall community health.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 905

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: The Pathanamthitta district of Kerala was affected by floods and the government distributed doxycycline tablets for prophylaxis. Which other chemical will be distributed along with it? (Q856092)

A. Zinc phosphide

B. Malathion

C. Lindane

D. Paris green

Correct Answer: B. Malathion

Explanation: Doxycycline is given as prophylaxis against Leptospirosis , a common infection after floods due to contaminated water exposure . Floods also increase mosquito breeding , leading to a rise in vector-borne diseases like malaria and dengue . Malathion is an organophosphate insecticide used for mosquito control , making it the appropriate choice for distribution alongside doxycycline. Other options (Zinc phosphide, Lindane, Paris green) are not relevant for mosquito control in flood conditions. Chemicals Used in Public Health Disease Control Chemical Use Relevance in Floods Malathion Mosquito control (insecticide) Prevents malaria, dengue Zinc phosphide Rodenticide (kills rats) Not used for mosquitoes Lindane Treats lice and scabies Not relevant for floods Paris green Historical mosquito larvicide Less commonly used today Zinc phosphide (Option A) : It is a rodenticide , but it is not used in flood situations alongside doxycycline. Lindane (Option C) : This is a pesticide used for external treatment of lice and scabies, not typically used for flood-related control. Paris green (Option D) : This is a pesticide primarily used for insect control in agriculture, not in flood disaster management.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 338, 339, 910

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: What is the vector that causes the occurrence of buboes in the community? (Q856093)

A. Xenopsylla cheopis

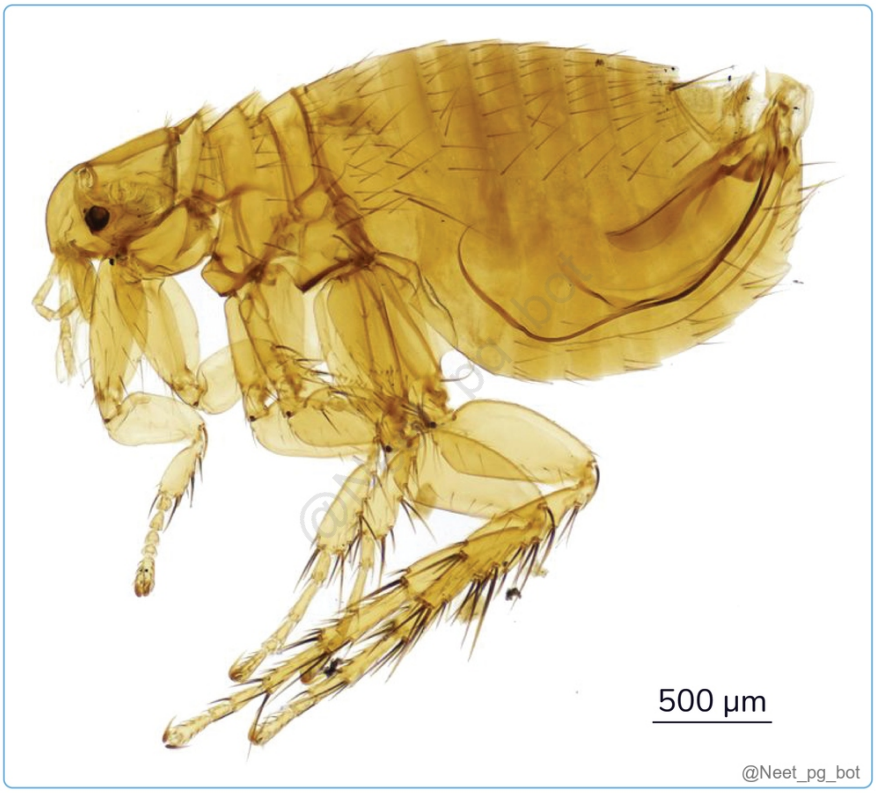
B. Phlebotomus argentipes

C. Ixodes tick

D. Female Anopheles mosquito

Correct Answer: A. Xenopsylla cheopis

Explanation: Buboes are swollen lymph nodes that are typically associated with bubonic plague , which is caused by the bacterium Yersinia pestis. The vector responsible for transmitting Y. pestis to humans is the rat flea Xenopsylla cheopis . The fleas bite infected rats, and when they bite humans, they transmit the bacterium, leading to the formation of buboes. {{caption_text}} Diseases and their vectors: Disease Vector Identification Habitat Details Malaria Female Anopheles mosquito (Option D ruled out) {{caption_text}} Slender body, long legs, and dark-colored spots on wings. Stagnant, clean water sources like ponds, lakes, and rice fields. Transmits Plasmodium species causing malaria. Dengue Aedes aegypti and Aedes albopictus {{caption_text}} Aedes aegypti White markings on legs, lyre-shaped pattern on the thorax. Urban areas, especially around human dwellings and discarded containers. Transmits Dengue virus causing dengue fever. Chikungunya Aedes aegypti and Aedes albopictus {{caption_text}} Aedes albopictus Similar to Aedes mosquitoes, with black and white banded legs. Urban and suburban areas, especially in domestic settings. Transmits Chikungunya virus, causing joint pain. Japanese Encephalitis Culex mosquito {{caption_text}} Smaller, brown or black, with a distinct scutellum (plate-like structure). Ponds, marshes, and areas with stagnant water. Transmits Japanese encephalitis virus, causing encephalitis. Leishmaniasis (Kala-azar) Phlebotomus argentipes (sandfly) (Option B ruled out) {{caption_text}} Small, yellowish-brown, with a hairy body and long legs. Sandy, dusty areas, often near human dwellings or animal shelters. Transmits Leishmania species causing visceral leishmaniasis. Bubonic Plague Xenopsylla cheopis (rat flea) {{caption_text}} Small, reddish-brown, flattened body. Found on rats, especially in urban areas and during rodent infestations. Transmits Yersinia pestis causing bubonic plague. Filariasis Female Culex mosquito {{caption_text}} Similar to Anopheles but with more rounded body and darker markings. Stagnant water, especially in urban and rural areas. Transmits Wuchereria bancrofti causing lymphatic filariasis. Zika Virus Aedes mosquitoes {{caption_text}} Aedes albopictus Similar to Aedes aegypti, black and white striped legs. Urban and suburban areas, particularly in places with standing water. Transmits Zika virus causing fever and birth defects. Tick-borne Encephalitis Ixodes tick (Option C ruled out) {{caption_text}} Small, oval-shaped, with a flattened body. Forested areas, grasslands, and areas with high animal populations. Transmits Tick-borne encephalitis virus causing encephalitis. Rickettsial Diseases Rhipicephalus (dog tick) and other ticks {{caption_text}} Oval, flat, with prominent mouthparts. Grasslands, forests, and around domesticated animals. Transmits Rickettsia bacteria causing typhus, scrub typhus, etc. Malaria (P. falciparum) Female Anopheles mosquito (Option D ruled out) {{caption_text}} Same as malaria vector. Found in areas with stagnant water and human proximity. Responsible for severe malaria (Plasmodium falciparum). Scrub Typhus Leptotrombidium mites (chiggers) {{caption_text}} Small, red, and often barely visible to the naked eye. Rural and semi-rural areas with dense vegetation. Transmits Orientia tsutsugamushi causing scrub typhus.


500 µm
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References:

Park's Textbook of Preventive and Social Medicine, Edition 25, Page 319- 322, 327, 831- 840.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: What are the most reliable indicators for regular monitoring of air pollution? (Q854854)

A. Sulfur dioxide, smoke, and suspended particles

B. Sulfur dioxide, lead, and particulate matter

C. Sulfur dioxide and carbon monoxide

D. Carbon monoxide and hydrogen sulfide

Correct Answer: B. Sulfur dioxide, lead, and particulate matter

Explanation: The most reliable indicators for routine air pollution monitoring are the criteria pollutants standardized by global agencies like EPA, WHO, and CPCB. Sulfur dioxide (SO■) is a key pollutant from industrial and fossil fuel combustion, serving as a sensitive indicator of air quality. Lead (Pb) is a classic criteria pollutant, historically from automobile emissions and now mainly from industries; it is routinely monitored. Particulate matter (PM2.5 & PM10) is the most important indicator for health-related air quality due to its deep lung penetration. These pollutants are part of the standard six criteria pollutants used for calculating Air Quality Index (AQI) worldwide. They reliably reflect both industrial and vehicular pollution trends. Their measurement is globally standardized, allowing consistent monitoring over time. Incorrect Options: Option A) Sulfur dioxide, smoke, and suspended particles : “Smoke” is not a standard criteria pollutant; it is simply a component of particulate matter. Not as comprehensive or standardized as the criteria pollutant set. Option C) Sulfur dioxide and carbon monoxide : Only two pollutants - missing particulate matter and lead, which are essential indicators. Not adequate for routine comprehensive monitoring. Option D) Carbon monoxide and hydrogen sulfide : H■S is not part of the standard criteria pollutants and is only monitored near specific industries. Does not reflect general ambient air quality.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 860

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A 45-year-old healthy man with a history of small streaks of blood in his stools is being sent for a colonoscopy to screen for colon cancer. This type of prevention is- (Q859432)

A. Primordial

B. Secondary

C. Primary

D. Tertiary

Correct Answer: B. Secondary

Explanation: Levels of prevention Definition Primordial (Option A ruled out) Prevention of establishment of risk factors. It aims to discourage people from adopting harmful habits. Primary (Option C ruled out) Prevention of onset of disease in a high-risk group/individual. It aims to protect the health of those who are at risk. Reduces the incidence of the disease. Secondary (Option B) Disease progression can be prevented at an early stage (Disease is reversible). It aims to reduce the prevalence of the disease by early identification and prompt treatment of diseases, and it also prevents complications. Tertiary (Option D ruled out) Prevention or limitation of impairment and disability in a diseased patient who has developed complications due to the disease and the disease has become irreversible. It aims to minimise a patient's suffering and maximise potential years of useful life.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 48, 49.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: What is the required thickness of a lead apron used for radiation protection? (Q859953)

A. 1mm

B. 2mm

C. 0.5mm

D. 1.5 mm

Correct Answer: C. 0.5mm

Explanation: The ideal thickness of lead aprons to prevent the technicians from radiation hazards is 0.5 mm. Radiation exposure is hazardous (dose-dependent), ranging from acute radiation sickness up to genetic mutations, fetal anomalies and carcinogenesis. RADIATION DOSE BIOLOGICAL EFFECTS <5 rad No adverse effects 5-150 rad Nausea, vomiting Mild haematological changes 150-1100 rad Bone marrow failure (anaemia, infections, bleeding tendency - might require bone marrow transplantation) 1100-2000 rad Gastrointestinal destruction in addition (death almost always occurs in a few weeks) >2000 rad Muscle and brain damage (death occurs in days) Employees who are exposed to radiation should Wear a lead apron 0.5 mm thick. (Option C) Wear a dosimeter to be checked from time to time. Radiation hygiene : Preventive measures, continued watchfulness and safe disposal

of radioactive waste materials. Creating awareness through seminars.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 871,872

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Mode of disposal of sewage ground water: (Q860030)

A. Activated sludge process

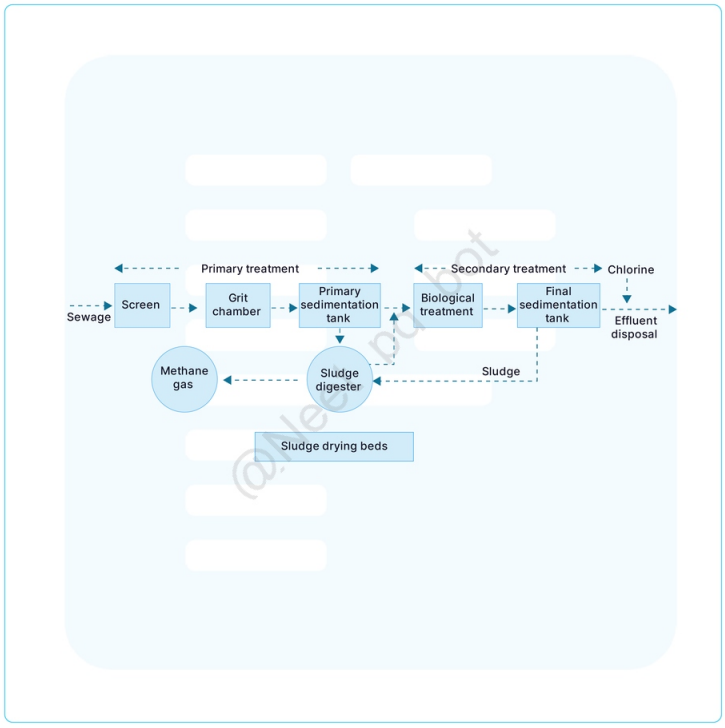
B. Grit chamber

C. Oxidation pond

D. All of the above

Correct Answer: D. All of the above

Explanation: Sewage treatment plant: Primary treatment involves screening, a grit chamber, and a plain sedimentation tank. The process is anaerobic digestion. Secondary treatment involves either the trickling filter or the activated sludge process. The process involves aerobic oxidation The activated sludge process is an easier method as it requires less process and involves an aeration tank. Trickling filter is a biological filter that uses microorganisms to remove organic matter and nitrogen from wastewater . Sedimentation tank is stage three of sewage treatment. Other methods: Sea outfall, river outfall, land treatment. sewage farming, oxidation ponds, oxidation ditches



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References:

Park’s textbook of preventive and social medicine 27th edition, page: 889

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: According to biomedical waste management protocols, what is the proper method of disposing of a broken vaccine vial? (Q855635)

A. Puncture proof blue bin

B. White container

C. Yellow container

D. Red Bag

Correct Answer: A. Puncture proof blue bin

Explanation: : White containers are used for waste sharps. This includes sharps that have been used, discarded, or contaminated. Yellow container (option C): The yellow container is generally used for infectious waste , such as

contaminated materials, human body fluids, or other biohazardous items. Red bag (option D): The red bag is used for non-infectious general waste. It contains solid/contaminated plastic /rubber, tubings, catheters, and cannulas.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 918 - 920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: PM 2.5 is considered particularly harmful to human health because it can enter which of the following? (Q879026)

A. Trachea

B. Alveoli

C. Bronchioles

D. Nose

Correct Answer: B. Alveoli

Explanation: PM2.5 (particles <2.5 µm) are small enough to bypass upper airway defenses and reach the alveoli , where gas exchange occurs. From there, they can enter the bloodstream and cause systemic effects. Major health effects include chronic bronchitis, reduced lung function, ischemic heart disease, and increased mortality risk. Incorrect Options: Trachea (Option A): Larger particles (>10 µm) are usually trapped here by mucociliary clearance. Bronchioles (Option C): PM 2.5 can pass through bronchioles and reach deeper into alveoli. Nose (Option D): Nasal hairs and mucus trap particles larger than 10 µm, not PM2.5.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 862

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: What type of sanitation facilities should be provided for the soldiers during war in military environments? (Q860583)

A. Pit method

B. Dumping method

C. Trench latrine

D. Acqua privy

Correct Answer: C. Trench latrine

Explanation: Trench latrine facilities serve as vital sanitation solutions, particularly in military environments. These setups involve excavating elongated trenches in the ground, fortified with materials to prevent cave-ins, and equipped with seating or similar structures for soldier utilization. They offer a straightforward and efficient means of waste disposal, particularly suited for temporary or field conditions. Key features of a basic trench latrine include: Trench dimensions typically measure 30 cm in width, with depths ranging from 90 to 150 cm, and lengths spanning 3 to 3.5 meters. Such specifications are designed to accommodate approximately 100 individuals efficiently. To uphold privacy and comfort, separate trench latrines are designated for male and female soldiers. Users are instructed to cover their waste with soil after each use, ensuring the maintenance of hygiene and sanitation standards within the facility. Incorrect Options: Pit method (Option A): The pit method involves digging a hole or pit in the ground for waste disposal. While similar to trench latrines, pit latrines typically have deeper holes and may not be as suitable for military settings due to the need for frequent relocation and potential health hazards. Dumping method (Option B): The dumping method typically refers to the disposal of waste in designated areas, such as waste disposal sites or landfills. This method may not be appropriate for soldiers returning from war, as it lacks privacy and sanitation measures. Acqua privy (Option D): An acqua privy is a type of water-based toilet system that uses water to flush waste away. While common in civilian settings, acqua privies may not be practical or feasible for military deployments, especially in remote or austere environments.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: What does the Langelier Saturation Index (LSI) primarily indicate in water quality management? (Q866779)

A. Water balance: scaling vs corrosion

B. Total dissolved solids in water

C. Hardness of water only

D. Presence of biological contaminants

Correct Answer: A. Water balance: scaling vs corrosion

Explanation: The Langelier Saturation Index (LSI) is used to determine whether water will deposit calcium carbonate (scaling) or dissolve it (corrosion). A positive LSI means the water tends to deposit scale, while a negative LSI means it is likely to be corrosive. LSI = (pH of water) – (pH at which water is saturated with calcium carbonate). Positive LSI → Scaling tendency (CaCO■ precipitation). Negative LSI → Corrosion tendency (CaCO■ dissolution). Zero LSI → Water is in equilibrium (balanced). Used in water treatment plants and industrial systems to maintain pipeline and equipment integrity. Total dissolved solids in water (Option B): Measured separately; not the purpose of LSI. Hardness of water only (Option C): LSI considers hardness along with pH, alkalinity, and temperature. Presence of biological contaminants (Option D): Biological quality is assessed by microbiological tests, not LSI.

↑ *Back to this question in Part A*

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Q21: During the assessment of drinking water from a village tank, which of the following parameters is not within the acceptable limits for safe drinking water? (Q866783)

A. Cadmium – 0.03 mg/L

B. Fluoride – 0.8 mg/L

C. Total Dissolved Solids (TDS) – 300 mg/L

D. Nitrate – 20 mg/L

Correct Answer: A. Cadmium – 0.03 mg/L

Explanation: The correct answer is Cadmium - 0.03 mg/L because the BIS (Bureau of Indian Standards) acceptable limit for cadmium in drinking water is 0.003 mg/L . A value of 0.03 mg/L is ten times higher and is therefore unsafe. Parameter Acceptable Limit (mg/L) Cadmium 0.003 Fluoride 1.0 Total Dissolved Solids (TDS) 500 Nitrate 45 Cadmium – Toxic heavy metal, harmful to kidneys and bones. Fluoride – 0.8 mg/L is safe and below the limit of 1.0 mg/L. TDS – 300 mg/L is within safe range (limit 500 mg/L). Nitrate – 20 mg/L is below limit of 45 mg/L. Fluoride – 0.8 mg/L (Option B): Safe; below permissible limit of 1.0 mg/L. TDS – 300 mg/L (Option C): Safe; below permissible limit of 500 mg/L. Nitrate – 20 mg/L (Option D): Safe; below permissible limit of 45 mg/L.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: During a Health Mela organized by a medical college, the Nalgonda technique for water purification was demonstrated. Which two chemicals are used in this

technique? (Q866430)

A. Alum and Gypsum

B. Alum and Charcoal

C. Alum and Lime

D. Charcoal and Lime

Correct Answer: C. Alum and Lime

Explanation: The Nalgonda technique is a simple, cost-effective, and scalable method for defluoridation of drinking water, developed by the National Environmental Engineering Research Institute (NEERI), Nagpur . It uses alum (aluminum sulfate) as a coagulant to flocculate and settle suspended impurities and lime to adjust the pH, enhance coagulation, and facilitate precipitation of fluorides. This method is widely used in rural and community settings due to its low cost and ease of implementation. In full-scale defluoridation, LAB (Lime, Alum, Bleaching powder) is added for combined purification and disinfection.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: A 20-year-old resident of Andhra Pradesh presents with outward bending of the lower limbs and signs of osteoporosis. His diet mainly consists of rice and jowar roti. What should not be done in the management of this patient? (Q866432)

A. Provision of running surface water for drinking

B. Change the water source

C. Fluoride supplementation

D. Add lime and alum to drinking water

Correct Answer: C. Fluoride supplementation

Explanation: The presentation — outward bending of limbs (genu valgum/varum) , osteoporosis, and location in a fluorosis-endemic region — is consistent with skeletal fluorosis caused by chronic ingestion of high-fluoride water. Fluoride supplementation in such cases is contraindicated because it would worsen bone and joint deformities by further increasing bone fluoride content. Management focuses on reducing fluoride exposure, improving nutrition (especially calcium and vitamin D), and providing safe water. Provision of running water (Option A), changing water source (Option B), and adding lime and alum (Option D) help reduce contaminants and improve water quality.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: A pus swab sample has been sent to the microbiology laboratory for examination. After testing is completed, how should the used swab and its container be safely discarded according to biomedical waste management guidelines? (Q852865)

A. Red

B. Yellow

C. Blue

D. Black

Correct Answer: B. Yellow

Explanation: Pus swabs are considered infectious waste and must be discarded in the appropriate biomedical waste bin. According to BMW (Biomedical Waste) guidelines, highly infectious waste, including cultures, swabs, and dressings, must be discarded in yellow bins. The yellow bin is meant for anatomical, pathological, and infectious waste that requires incineration or deep burial. Other color-coded bins are used for different types of waste (e.g., sharps in white, plastics in red, glass in blue, general waste in black). Biomedical Waste Disposal Proper segregation and disposal of biomedical waste are essential to prevent infections and environmental contamination. Biomedical Waste Color Coding & Disposal Methods Color Bin Waste Type Example Disposal Method Yellow Infectious waste, human anatomical waste, microbiological waste Pus swabs, cultures, dressings, placenta Incineration or deep burial Red Contaminated recyclable waste IV sets, gloves, syringes without needles Autoclaving/shredding Blue Glassware Broken vials, slides, ampoules Disinfection & recycling Black General non-infectious waste Office waste, packaging material Municipal disposal White (Puncture-proof) Sharps waste Needles, scalpels Autoclaving & shredding Red (Option A): Incorrect because it is for plastic biomedical waste like IV tubes, gloves, and catheters, not infectious swabs . Blue (Option C): Incorrect because it is used for glass waste like vials and slides, not pus swabs . Black (Option D): Incorrect because it is for general waste like office and household waste, not biohazardous materials .

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 918 - 920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: A student went on a trip to Jaisalmer, where the temp was 40 degrees, and relative humidity was 20%. What will the mechanism of heat loss be? (Q852869)

A. Evaporation

B. Radiation

C. Conduction with air

D. Conduction with objects

Correct Answer: A. Evaporation

Explanation: At high temperatures (40°C), radiation and conduction contribute less to heat loss since the surrounding environment is also hot. Relative humidity is low (20%), which allows for efficient evaporation of sweat from the skin. Evaporation is the most effective cooling mechanism in dry and hot climates, as sweat evaporates quickly, carrying away body heat. Radiation works best when the surrounding environment is cooler than the body, which is not the case here. Conduction requires direct contact with a cooler surface, which is not significant in this scenario. Mechanisms of Heat Loss in the Human Body The body regulates temperature through four primary heat loss mechanisms: Mechanism Description Effectiveness in a Hot, Dry Climate Evaporation Heat loss through sweat evaporation Most effective (low humidity allows efficient sweat evaporation) Radiation Emission of infrared heat waves to cooler surroundings Less effective (ambient temp is high, reducing heat gradient) Conduction Direct heat transfer through contact with a cooler object Minimal (air and objects in the desert are also hot) Convection Heat transfer via air movement Limited (unless there is strong wind aiding heat dissipation) In hot and dry environments like Jaisalmer, evaporation is the dominant mechanism for heat loss, as sweat evaporates efficiently due to low humidity. Radiation (Option B): Incorrect because radiative heat loss is minimal when ambient temperature is high (40°C). Conduction with air (Option C): Incorrect because air is a poor conductor of heat, and in desert conditions, it is already warm. Conduction with objects (Option D): Incorrect because objects like sand and rocks in Jaisalmer absorb heat and are usually hotter than the body.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC7662600/

https://www.ncbi.nlm.nih.gov/books/NBK499843/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: The following instrument is used for the measurement of? (Q844063)

A. Cooling power air

B. Radiant heat

C. Humidity

D. Temperature



Correct Answer: A. Cooling power air

Explanation: Correct Option A - Cooling power air: The above given image shows a KATA thermometer Incorrect Options: Option B and D: Globe thermometer measures radiant heat and effective temperature Option C - Humidity: The hygrometer measures air humidity.

Cooling Power of air	• Determines the capacity of the atmosphere to dissipate the metabolite heat generated by humans. • Includes 3 components: Air temperature, Air humidity and Air velocity. • Measured by a Kata thermometer.

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: Rukmini is attending the village health nutrition and sanitation program day. How frequently is this conducted? (Q860566)

A. Every month

B. Every week

C. Every 14 days

D. Every 3 months

Correct Answer: A. Every month

Explanation: The Village Health Nutrition and Sanitation Day (VHND) is scheduled to take place once every month , preferably on Wednesdays. In cases where certain villages have been missed, the VHND can be organized on any other day within the same month to ensure uniformity. The Anganwadi Center (AWC) is designated as the central location for hosting the VHND, serving as a hub for service provision under various health programs such as RCH-II and NHM. During the VHND, community health workers like ASHAs and AWWs mobilize villagers, with a particular focus on women and children, to gather at the nearest AWC. At the event, villagers have the opportunity to receive basic health services, and gain valuable information on preventive and promotive healthcare practices.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: An elderly man presents with leg deformities and skeletal abnormalities. On examination, he is using crutches and has visible bowing of the legs. It is also noted that several other villagers exhibit similar symptoms. Considering the cluster of cases in the same geographic area, which of the following is the most appropriate next step in the investigation? (Q866766)

A. Check serum vitamin D levels

B. Measure serum calcium levels

C. Perform parathyroid hormone (PTH) assay

D. Collect and analyze water samples for fluoride content

Correct Answer: D. Collect and analyze water samples for fluoride content

Explanation: A cluster of similar skeletal deformities in people from the same village suggests an environmental cause rather than an individual nutritional or endocrine disorder. Endemic skeletal fluorosis from high fluoride levels in drinking water causes bowing of legs, bone pain, and deformities. Therefore, the most logical next step is testing the local water supply for fluoride concentration. Endemic fluorosis: Caused by long-term ingestion of water with fluoride >1.5 mg/L . Early signs: joint stiffness, dental fluorosis. Late signs: bony overgrowths, deformities, restricted movements. Prevention: defluoridation of water, alternative safe water sources. Check serum vitamin D levels (Option A): Could detect rickets/osteomalacia, but wouldn’t explain a cluster in the same

area. Measure serum calcium levels (Option B): Useful for metabolic bone diseases, but not the primary step in an environmental cluster investigation. Perform parathyroid hormone (PTH) assay (Option C): For hyper/hypoparathyroidism; not first-line in a suspected environmental outbreak.



References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: What is the recommended free residual chlorine level after chlorination of a well to ensure adequate disinfection? (Q860601)

A. 0.5 ppm after 1 hour

B. 0.5 ppm after 2 hours

C. 0/8 ppm after 1 hour

D. 0.8 ppm after 2 hours

Correct Answer: A. 0.5 ppm after 1 hour

Explanation: According to standard guidelines for drinking water disinfection, a free residual chlorine level of greater than 0.5 mg/L (which is equivalent to 0.5 ppm) is required for effective disinfection. This level should be maintained for a contact period of at least 1 hour to ensure that the water is adequately disinfected and safe for consumption. Incorrect Options: Options B, C, and D depict inadequate levels of residual chlorine for adequate disinfection.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 470

↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: Which of the following is the vector responsible for transmitting Orientia tsutsugamushi? (Q859986)

A. Mite

B. Tick

C. Louse

D. Flea

Correct Answer: A. Mite

Explanation: Correct Option A- Mite The vector responsible for transmitting Orientia tsutsugamushi, the causative agent of scrub typhus, is the Trombiculid mite, specifically the larval stage. Incorrect Options: Options B, C, and D are not responsible for transmitting Orientia tsutsugamushi.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 832

↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: Air humidity and dew point temperature of the air is measured using which of the following instruments? (Q860045)

A. Sling psychrometer

B. Kata thermometer

C. Barometer

D. Dial thermometer

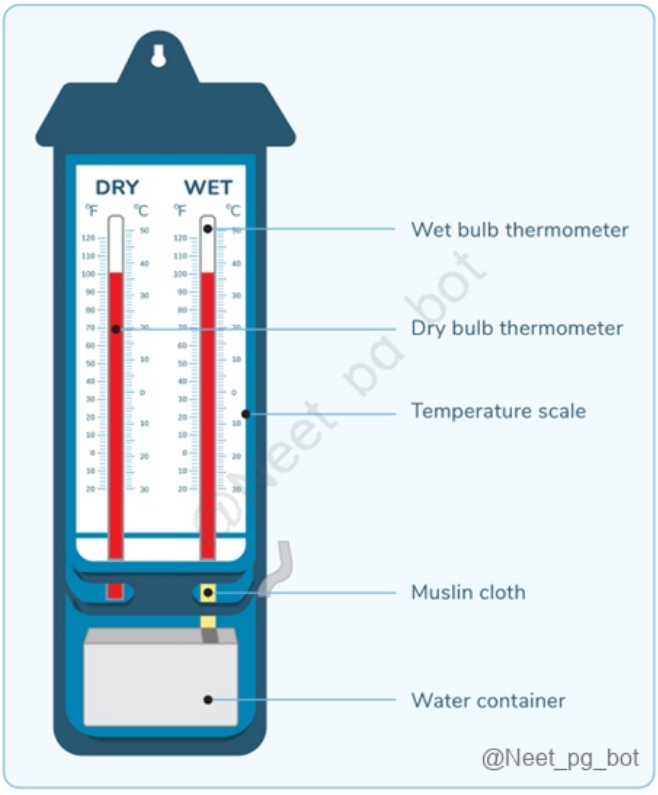
Correct Answer: A. Sling psychrometer

Explanation: Air humidity is the moisture content of air. It is measured using a sling psychrometer shown in the image below. Air humidity measuring instruments A. Hygrometer {{caption_text}} B. Sling psychrometer {{caption_text}} Wet and dry thermometers are mounted side by side C. Assman psychrometer {{caption_text}} Can be used even in strong sunshine D. Dry and wet bulb hygrometer Most widely used Same readings in both (dry and wet) bulbs indicate 100 per cent saturation with moisture Incorrect Options: Kata thermometer (Option B): Kata thermometer is used to measure low air velocity and cooling power of air. Barometer (Option C): A barometer is used to measure atmospheric pressure. Dial thermometer (Option D): Dial thermometer is used to monitor temperatures in solutions or samples.




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DRY
WET
°F
°C
Wet bulb thermometer
Dry bulb thermometer
Temperature scale
Muslin cloth
Water container
@Neet_pg_bot

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Pg: 875-876

↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: Match the following columns A. Byssinosis 1. Cane sugar factories B. Bagassosis 2. Sandstone industry C. Silicosis 3. Cement industry D. Asbestosis 4. Textile industry (Q857363)

A. A2-B4-C1-D3

B. A4-B1-C2-D3

C. A2-B1-C4-D3

D. A4-B1-C3-D2

Correct Answer: B. A4-B1-C2-D3

Explanation: Silicosis: Often occurs in workers exposed to silica dust in industries like mining and quarrying . Asbestosis: Typically found in workers who handle asbestos, prevalent in construction and shipbuilding industries . Byssinosis: Common among workers exposed to cotton, flax, or hemp dust, primarily in the textile manufacturing industry. Bagassosis: an occupational lung disease caused by inhaling bagasse (sugarcane dust) in workers at a sugarcane processing plant (Causative Agent: Thermoactinomyces sacchari)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 933, 934

↑ *Back to this question in Part A*

@Neet_pg_bot

Q33: Which international agency helps in construction of sanitary latrines(toilet building) in India? (Q820591)

A. USAID

B. CURE

C. Redcross

D. FORD

Correct Answer: D. FORD

Explanation: Correct Option D - FORD: The Ford Foundation has contributed significantly to various developmental projects in India, which includes the improvement of sanitation facilities. The foundation has been involved in initiatives aimed at improving living conditions, which includes the construction of sanitary latrines. Incorrect Options: Option A - USAID: While USAID does provide developmental assistance globally, including India, their focus does not primarily involve the construction of sanitary latrines. Option B - CURE: CURE International primarily focuses on providing medical care rather than working on sanitation projects. Option C - Redcross: The Red Cross largely deals with emergency assistance and disaster relief, and does not primarily focus on building sanitary latrines.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q34: All of the following about purification of water are true except? (Q855532)

A. Clostridium pores indicate remote contamination of water

B. Coliforms maybe detected by Multiple Tube Method and Indole production

C. Sodium thiosulphate is added to neutralize certain contaminants

D. Coliforms must not be detectable in any 1000 mL sample of drinking water

Correct Answer: D. Coliforms must not be detectable in any 1000 mL sample of drinking water

Explanation: a. True – Clostridium (especially Clostridium perfringens) spores indicate remote or past fecal contamination because they survive long in the environment. b. True – Detection of coliforms can be done by: Multiple Tube Fermentation Test (MTFT) Confirmed test using Indole production for E. coli c. True – Sodium thiosulfate is added to water samples during collection to neutralize residual chlorine so that chlorine does not kill bacteria before testing. d. False – Drinking water standards specify that coliforms must NOT be detectable in any 100 mL sample, not 1000 mL.

References:

Park textbook of preventive and social medicine, 25th edition

↑ *Back to this question in Part A*

@Neet_pg_bot

Q35: The ideal per capita space for students in a classroom should be (Q858027)

A. >5 sq. ft.

B. >10 sq. ft.

C. >15 sq. ft.

D. >20 sq. ft.

Correct Answer: B. >10 sq. ft.

Explanation: The ideal per capita space for students in a classroom is generally recommended to be greater than 10 square feet per student . This allows enough room for each student to sit comfortably and engage in classroom activities without feeling cramped. This standard ensures that classrooms are not overcrowded, promoting a better learning environment. >5 sq. ft. (Option A): is incorrect because this amount of space would be too small for students, making the classroom uncomfortable and impractical for learning. >15 sq. ft. (Option C): is incorrect because while this would be spacious, it is not always necessary for most classrooms. It could be suitable for larger or more specialized classrooms but is not typically required for all settings. >20 sq. ft. (Option D): is incorrect because this is even more space than needed for a regular classroom. Though spacious, it may lead to inefficient use of space and resources in most educational settings.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 664, 665

↑ *Back to this question in Part A*

@Neet_pg_bot

Q36: What is the term used to describe the process that occurs in an oxidation pond? (Q858122)

A. Always aerobic

B. Always anaerobic

C. Aerobic during day, anaerobic during night

D. Anaerobic during day, aerobic during night

Correct Answer: C. Aerobic during day, anaerobic during night

Explanation: In oxidation ponds, aerobic conditions prevail during the day due to oxygen production by algae, while anaerobic conditions may develop at night due to the cessation of photosynthesis and continued oxygen consumption by microorganisms. This dynamic balance aids in the effective breakdown of organic matter. Always

aerobic (Option A): is incorrect because oxygen levels in oxidation ponds fluctuate, and anaerobic conditions can develop at night due to reduced photosynthesis. Always anaerobic (Option B): is incorrect because during the day, algae in the pond produce oxygen through photosynthesis, creating aerobic conditions. Anaerobic during day, aerobic during night (Option D): is incorrect because photosynthesis occurs during the day, promoting aerobic conditions, while anaerobic conditions typically develop at night.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 859, 860.

↑ *Back to this question in Part A*

@Neet_pg_bot

• [13_Allied Health Disciplines] 049 Occupational Health

« Back to Folder Directory

[13_Allied Health Disciplines] 049 Occupational Health — Quick Jump

Q1 (p. 1634)	*Q2 (p. 1636)*	*Q3 (p. 1637)*	*Q4 (p. 1637)*	*Q5 (p. 1638)*	*Q6 (p. 1639)*
Q7 (p. 1640)	*Q8 (p. 1641)*	*Q9 (p. 1642)*	*Q10 (p. 1642)*	*Q11 (p. 1643)*	*Q12 (p. 1644)*
Q13 (p. 1645)	*Q14 (p. 1645)*	*Q15 (p. 1646)*	*Q16 (p. 1648)*	*Q17 (p. 1649)*	*Q18 (p. 1650)*
Q19 (p. 1650)	*Q20 (p. 1652)*				

Q1: A 50-year-old man presents with severe abdominal pain, confusion, and difficulty walking. Examination reveals moderate pallor, blue-black lines on his gums (shown in the image below), and bilateral foot drop. Which heavy metal poisoning is most likely responsible for his symptoms? (Q840949)

A. Arsenic

B. Mercury

C. Lead

D. Cadmium



Correct Answer: C. Lead

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The patient's clinical presentation, along with the image depicting Burtonian lines (blue-black lines on the gums), strongly suggests chronic lead poisoning. Heavy metal Clinical features Lead (Option C) Organic lead Wrist and/or foot drop. Insomnia. Headache. Mental confusion. Inorganic lead Anemia. Burton’s line - blue lines on gums. Colic, abdominal pain with diarrhea/constipation. Arsenic (Option A) Acute poisoning Gastroenteritis (Rice watery diarrhea) (differential diagnosis- cholera) Hypotension Non-cardiogenic pulmonary edema Proteinuria Seizures, delirium and encephalopathy Subacute poisoning (1-3 weeks) Glove stocking pattern polyneuropathy Absent deep tendon reflex Anemia, Leukopenia Chronic poisoning Raindrop pattern hyperpigmentation Palmar-plantar hyperkeratosis Alopecia Angiosarcoma Hepatomegaly Gangrene of extremities. Mercury (Option B) Greying of the oral mucosa Hemorrhagic gastroenteritis Acute tubular necrosis Shock Excessive irritability Acrodynia (painful extremities) Facial paresthesias Ataxia (loss of coordination), Dementia Blindness Cadmium (Option D) Acute poisoning Inhalation: Pneumonitis; ARDS Ingestion: GIT hemorrhagic necrosis Chronic poisoning Osteomalacia Parkinson like symptoms Proteinuria Raindrop pigmentation (Arsenic poisoning) Acrodynia (Mercury poisoning)





References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 934-935 Heavy Metals - StatPearls - NCBI Bookshelf Mercury Toxicity - StatPearls - NCBI Bookshelf Arsenic Toxicity - StatPearls - NCBI Bookshelf Cadmium Toxicity - StatPearls - NCBI Bookshelf Image: https://www.atsdr.cdc.gov/csem/leadtoxicity/signs_and_symptoms.html

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following best describes the objective of ergonomics? (Q841031)

A. Achieving optimal human performance and well-being through work adjustments.

B. Enhancing job satisfaction by adjusting tasks to fit human capabilities.

C. Ensuring workers perform efficiently without health risks.

D. Assessing job tasks to prevent health hazards.

Correct Answer: A. Achieving optimal human performance and well-being through work adjustments.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Ergonomics: Definition: The term "ergonomics" is derived from the Greek words ergon (meaning work) and nomos (meaning law), emphasizing the fitting of work to the worker. Scope of Training: Training in ergonomics includes designing machines, tools, equipment, manufacturing processes, workplace layout, work methods, and environments to enhance efficiency for workers and machines. Objective: The objective of ergonomics is to achieve the best mutual adjustment between humans and their work, improving human efficiency

and well-being. Contribution: The application of ergonomics has significantly reduced industrial accidents and improved workers' overall health and efficiency. Enhancing job satisfaction by adjusting tasks to fit human capabilities (Option B): Incorrect – While job satisfaction may improve, this is a secondary benefit, not the primary objective. Ensuring workers perform efficiently without health risks (Option C): Incorrect – This is part of the goal, but doesn't fully capture the broader aim of well-being and holistic performance. Assessing job tasks to prevent health hazards (Option D): Incorrect – This is a component of ergonomics (task assessment), not its main objective.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 930

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Where is the National Institute of Occupational Health(Apex) of India located? (Q841029)

A. New Delhi

B. Hyderabad

C. Pune

D. Ahmedabad

Correct Answer: D. Ahmedabad

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: List of research institutes and organisations active in the field of occupational health in India: Occupational Health Research Institute: Ahmedabad Central Mining and Research Station: Dhanbad Industrial Toxicology Research Centre: Lucknow National Environmental Engineering Research Institute: Nagpur All India Institute of Hygiene and Public Health: Kolkata Indian Institute of Technology: Kanpur

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 946

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: How frequently are periodic medical examinations typically conducted for employees in dichromate industries? (Q841027)

A. Once a year

B. Once a month

C. Once in six months

D. Daily

Correct Answer: D. Daily

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Periodic medical examinations for employees in dichromate industries are typically conducted daily. Periodical medical examinations: Periodicity Examples Annual (Once a year) General industries Office environments Biannual (Once in six months) Asbestos handling Pharmaceutical production Quarterly Construction Mining Monthly Chemical manufacturing Heavy metal industries(Lead) Radium and Ionsing radiation Dye industries Daily Dichromate

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 940

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following is a primary objective of a pre-placement medical examination? (Q841026)

A. To evaluate the effectiveness of the company's health and safety programs.

B. To ensure the employee's ongoing health and fitness after being hired.

C. To determine if the candidate is medically fit for the job they are being considered for.

D. To provide health benefits and insurance options to the new employee.

Correct Answer: C. To determine if the candidate is medically fit for the job they are being considered for.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The primary objective of a pre-placement medical examination is to assess whether a job candidate is physically and mentally capable of performing the specific duties of the job they are being considered for. Criteria Pre-Placement Examination Post-Placement Examination Timing Before hiring/starting the job. After the employee has started the job. Purpose To determine if the candidate is medically fit for the job. To monitor the ongoing health and safety of employees. Focus Assess fitness for specific job tasks. Detect work-related health issues and ensure continued fitness. Outcome Decision on hiring based on medical fitness Implement interventions if health issues are detected. Frequency Once, before the job offer. Periodically or as required during employment. Legal Requirement Often mandated by regulations for certain jobs It may be required by occupational health and safety regulations Examples of Usage High-risk jobs (e.g., heavy machinery operators, pilots) Jobs with ongoing exposure to hazards (e.g., chemical exposure)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 939

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: What does the sickness absenteeism rate measure? (Q841025)

A. The number of employees absent from work due to sickness.

B. The percentage of working hours lost due to employee absences caused by illness..

C. The average duration of sickness absences per employee per month.

D. The economic impact of sickness absences on the organisation

Correct Answer: B. The percentage of working hours lost due to employee absences caused by illness..

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Sickness Absenteeism refers to the situation where employees are absent from work due to illness or health-related issues. It's a key metric for assessing workforce health and productivity as it measures the frequency and duration of unplanned absences resulting from sickness within a workforce. Thus, it is a sensitive indicator of occupational health employees. Causes: Economic causes: Studies have shown that if an employee is entitled to sick leave with pay, he tends to avail of this privilege by reporting sick. Social causes: Family obligations like weddings, festivals, etc. Medical causes: About 10% of the days lost were found to be due to occupational accidents. Non-occupational disorders: Nutritional disorders, alcoholism and drug addiction. High sickness absenteeism rates indicate low occupational health and can significantly affect an organization's operations and costs.

$$\text{Sickness Absenteeism Rate (SAR)} = \frac{\text{Number of days lost due to sickness}}{\text{Total number of available workdays}} \times 100$$

@Neet_pg_bot

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 937

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A 32-year-old man presents with intermittent episodes of pale and white fingers followed by a dusky red colour, leading to a diagnosis of Raynaud's phenomenon. Considering his symptoms, what is his most likely occupation? (Q841023)

A. Farmers

B. Dentist

C. Construction workers

D. Office workers

Correct Answer: C. Construction workers

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: White finger syndrome/hand-arm vibration syndrome (HAVS) can be an occupational health problem in construction workers with heavy vibrating machinery. Secondary Raynaud's phenomenon presents with intermittent colour changes in the fingers or toes, accompanied by discomfort and tingling, often triggered by cold or stress. The typical sequence involves the affected area turning white (due to reduced blood flow), then blue (from lack of oxygen), and finally red (as circulation returns). It is associated with: Use of vibrating heavy machinery (in construction workers). Exposure to cold temperatures. Exposure to polyvinyl chloride (PVC). Work involving ammunition. Use of non-selective beta-blockers, cyclosporine, and interferon. Farmers(Option A) : Farmers often work in cold environments, which can trigger symptoms. But repeated cold exposure alone is not a primary cause. More associated with hypothermia , frostbite , or physical trauma — not strongly linked to Raynaud's phenomenon . Dentists (Option B): At risk, but less compared to construction workers. Use small, vibrating dental instruments like ultrasonic scalers and handpieces. Perform fine motor repetitive work . Typically work in climate-controlled indoor settings. Vibration exposure exists but is generally less intense and less prolonged compared to construction Office workers(Option D): Minimal hand trauma, vibration, or cold exposure. Least likely to develop Raynaud’s due to occupational factors..



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 931 Raynaud Disease - StatPearls - NCBI Bookshelf RAYNAUD'S PHENOMENON IN WORKERS WITH VIBRATORY TOOLS File:Raynaud phenomenon.jpg - Wikimedia Commons

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A 65-year-old male comes to the OPD due to hematuria. Cystoscopy reveals bladder cancer. Past occupational exposure to which of the following chemicals is associated with this condition? (Q840988)

A. Vinyl chloride

B. Benzidine

C. Benzene

D. Arsenic

Correct Answer: B. Benzidine

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Exposure to benzidine is associated with bladder cancer and is commonly seen in the dye, rubber, gas, and electric cable industries. Carcinoma Occupation exposure Lungs Arsenic (Option D) , beryllium, cadmium, Chromium, Asbestosis, Silica, radon, Nickel and aromatic hydrocarbon. Bladder Benzidine (Option B) , Auramine, Beta-naphthylamine, Para amino-diphenyl, Magenta. Liver Vinyl chloride (Option A) , Arsenic.

Leukaemia Benzene (Option C) , ethylene oxide. Skin Arsenic (Option D) , ionising radiation, Polycyclic aromatic hydrocarbons. Scrotum Polycyclic aromatic hydrocarbons.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 935-936

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which metal oxide fumes are most commonly implicated in causing metal fume fever? (Q840958)

A. Copper

B. Zinc

C. Lead

D. Mercury

Correct Answer: B. Zinc

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Inhalation of fresh metallic oxide fumes of zinc and magnesium can cause metal fume fever. It is often seen in people working in industries involving metal welding, galvanising steel, and Melting heavy metals. It presents with a flu-like syndrome, such as fever, sweating, chills, dry throat, cough, and breathlessness. Recovery occurs within 24 hours.

References:

www.ncbi.nlm.nih.gov/books/NBK583199/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following tests is the more sensitive and specific screening test for lead exposure? (Q840956)

A. Urine Coproporphyrin level

B. Urine aminolevulinate level

C. Blood lead level

D. Peripheral blood smear

Correct Answer: B. Urine aminolevulinate level

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Urine Aminolevulinate level estimation is the more sensitive and specific screening test for lead exposure Screening and diagnosis of lead poisoning Test Inference Urine coproporphyrin level (Option A) Used as a screening test (>150 mcg is indicative of lead exposure) Urine aminolevulinate (ALA) level (Option B) Most sensitive and specific for screening. Normal urine ALA: 1 to 6 mg/24 hours; in lead poisoning: >70 mg/24 hours. Urine lead level Quantitative indicator of lead exposure and absorption. (Normal: 0.2 to 0.8 mg/L) Blood lead level (Option C) Confirmatory test Normal: < 10 mcg/dl Occupational exposure: 40 mcg/dl Treatment should be started if levels >70 mcg/dl Peripheral blood smear (Option D) Examining basophilic stippling is a sensitive parameter for hematological response to lead levels and treatment of lead poisoning.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 935

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: A 45-year-old radiology technician consults his occupational health physician about his annual radiation exposure, concerned about potential health risks and whether his exposure is within safe limits. What is the maximum annual radiation exposure level a person can tolerate without significant health risks? (Q840731)

A. 1 rem

B. 5 rem

C. 15 rem

D. 10 rem

Correct Answer: B. 5 rem

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The International Commission of Radiological Protection (ICRP) has set the maximum permissible level of occupational exposure to ionising radiation at 5 rem per year for the whole body. This limit protects individuals from various health risks associated with ionising radiation exposure. Ionising radiation, such as X-rays and specific radioisotopes like cobalt-60 and phosphorus-32, plays a significant role in medical and industrial applications.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 931

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: A 4-year-old child presents with irritability, loss of appetite, and developmental delays. The parents mention living in an old house undergoing renovation, with peeling paint and dust. Blood tests confirm elevated lead levels. What is the most common route of lead poisoning in this child? (Q840945)

A. Inhalation

B. Absorption through the skin

C. Injection

D. Ingestion

Correct Answer: D. Ingestion

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Ingestion of lead paint is the most common route of lead poisoning in children, while in adults, it is the inhalation of fumes and dust in industrial settings. (Option A) Skin absorption occurs with organic lead compounds like tetraethyl lead, not with inorganic compounds. (Option B) Industrial Lead Exposure : Lead is the most common toxic metal exposure for industrial workers. Used in over 200 industries including: Storage battery manufacturing, Glass manufacturing, Shipbuilding, Printing and pottery, Rubber industry Non-Occupational Sources : Major environmental source: gasoline exhaust. Additional sources: Drinking water from lead pipes. Chewing lead paint on window sills or toys (especially in children).

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 934

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: A 38-year-old male factory worker at a sugarcane processing plant presents with a dry cough, shortness of breath, and fever. On examination, bilateral inspiratory crackles are noted. Chest X-ray shows diffuse infiltrates, and spirometry indicates a restrictive pattern. What respiratory condition is he likely suffering from? (Q840940)

A. Byssinosis

B. Farmer's lung

C. Bird fancier lung

D. Bagassosis

Correct Answer: D. Bagassosis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The patient's clinical presentation and history of working at a sugarcane processing plant suggest Bagassosis, an occupational lung disease caused by inhaling bagasse (sugarcane dust). Causative Agent: Thermoactinomyces sacchari. Clinical Presentation: Symptoms include breathlessness, cough, hemoptysis, slight fever, and acute diffuse bronchiolitis. A chest X-ray may show lung mottling or shadowing and impaired pulmonary function. Preventive Measures: To ensure safety for use, bagasse should maintain a moisture content above 20% and be treated with 2% propionic acid . Byssinosis (Option A): Source: Inhalation of cotton, flax, or hemp dust. Classic Sign: "Monday Fever." Workers feel chest tightness and shortness of breath on the first day back at work after a weekend. The symptoms often improve as the week progresses. Pathology: It is more of an airway (obstructive) disease initially, rather than a purely interstitial one. Farmer's Lung (Option B): Source: Inhalation of dust from moldy hay , straw, or grain. Causative Agent: Saccharopolyspora rectivirgula (formerly Micropolyspora faeni) that thrives in warm, damp stored hay. Presentation: Fever, cough, dyspnea, but specifically linked to agricultural work in silos or barns. Bird Fancier Lung (Option C): Source: Inhalation of proteins found in the droppings, feathers, or blood of birds (pigeons, parakeets, chickens). Causative Agent: Avian antigens. Seen in people who keep birds as a hobby (fanciers) or work in poultry processing. It presents as an acute or chronic interstitial lung disease.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 933

www.ncbi.nlm.nih.gov/pmc/articles/PMC7724370/#

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A 55-year-old male with over 30 years in the construction industry presents to the clinic with a chronic cough and shortness of breath. His history includes long-term asbestos exposure. Chest X-ray reveals interstitial fibrosis. The patient is concerned about complications from his occupational exposure. What is the most common manifestation in a patient with asbestosis? (Q840936)

A. Pleural plaques

B. Mesothelioma

C. Pleural effusion

D. Adenocarcinoma of the lungs

Correct Answer: A. Pleural plaques

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Asbestosis is characterised by diffuse interstitial fibrosis of the lungs due to prolonged exposure to asbestos fibres. The most common manifestation of asbestosis is the development of pleural plaques, which are discrete fibrous or calcified thickened areas on the parietal pleura. These plaques are typically asymptomatic but can be seen in imaging studies like chest X-rays or CT scans. The fibrosis in asbestosis is due to mechanical irritation, and is peri bronchial, diffuse in character and basal in location, (in contrast to silicosis in which the fibrosis is nodular in character and involves the upper part of the lungs). Although asbestosis increases the risk of developing other asbestos-related diseases, such as Mesothelioma (Option B) and lung cancer (Adenocarcinoma) (Option D) , pleural plaques are the most common initial finding. Types of Asbestos: Serpentine (chrysotile) : Composed of hydrated magnesium silicate, it constitutes 90% of global asbestos production. They are generally considered less hazardous than amphibole minerals. Amphibole : Contains minimal magnesium content; includes varieties such as Crocidolite (blue), Amosite (brown), and Anthophyllite (white). Symptoms include dyspnea, finger clubbing, cardiac distress, and cyanosis, with sputum showing "asbestos bodies" and X-rays revealing a ground-glass appearance in lower lung fields. Pleural effusion (Option C) can occur in patients with asbestosis when the adenocarcinoma spreads to the pleura, causing pleural effusion, but it is not the most common manifestation of asbestosis.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 934

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2840547/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A 60-year-old man presents with chronic cough, weight loss, and night sweats. He has worked in the mining industry for over 25 years. On examination, there are crackles in the upper lung fields, and a chest X-ray shows nodular opacities in the upper lobes. Which type of pneumoconiosis is most commonly associated with an increased risk of tuberculosis (TB)? (Q840933)

A. Asbestosis

B. Berylliosis

C. Coal worker's pneumoconiosis

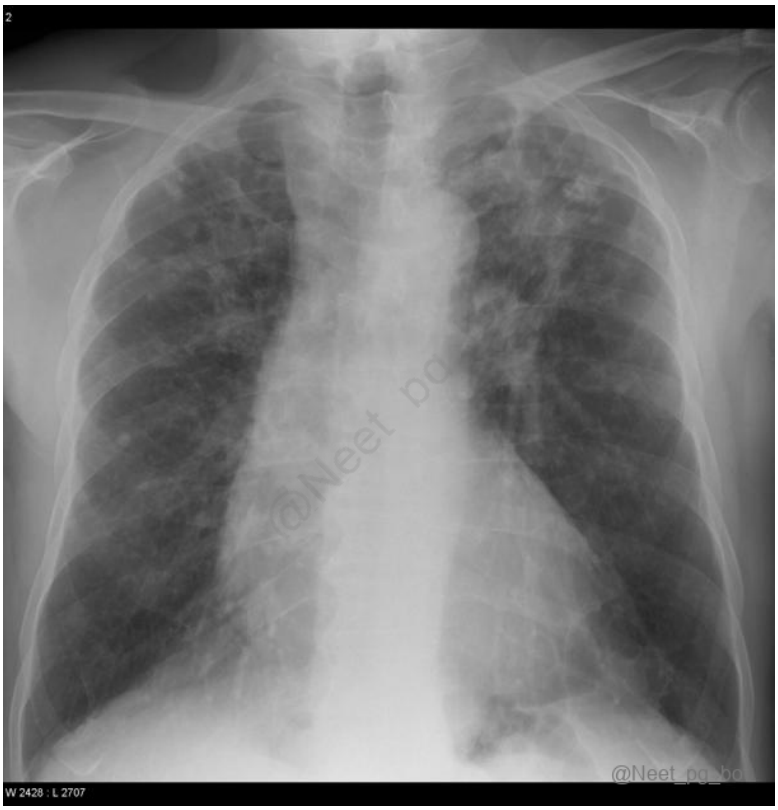
D. Silicosis

Correct Answer: D. Silicosis

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The clinical presentation, work history, and lung changes support a diagnosis of silicosis, which increases susceptibility to TB due to impaired lung macrophage function. Chest X-ray findings in silicosis show a snowstorm appearance predominantly in the upper lung fields. Affects: Alveoli → alveolitis → Dense nodular fibrosis Radiologically, silicosis and tuberculosis can present similarly, potentially causing diagnostic challenges. Silicotics (people with silicosis) are prone to pulmonary tuberculosis (TB), leading to a condition known as "silicotuberculosis." Silicotuberculosis: Sputum: Rarely show tubercle bacilli Children, women don't develop tuberculosis Postmortem failed to prove existence of tuberculosis disease Clinical symptoms: 1 st stage: Mild dyspnea on exertion, unproductive cough 2 nd stage: Marked dyspnea impairing patient's ability to work 3 rd stage: Patient incapacitated with signs of right heart failure No treatment, Occupational exposure changes are irreversible and persist post-exposure Asbestosis (Option A): Source: Inhalation of asbestos fibers (used in insulation, roofing, and shipbuilding). Key Feature: Unlike Silicosis, it primarily affects the lower lobes of the lungs. Complications: It is more strongly associated with Mesothelioma (cancer of the lung lining) and bronchogenic carcinoma rather than TB. Berylliosis (Option B): Source: Exposure to Beryllium metal (used in aerospace, electronics, and nuclear industries). Key Feature: It causes non-caseating granulomas , making it look very similar to Sarcoidosis on a biopsy. It is an immune-mediated response rather than a direct toxic effect on macrophages. Coal Worker's Pneumoconiosis (Option C): Source: Inhalation of coal mine dust. Key Feature: Also known as "Black Lung Disease." While it involves mining, the risk of TB is much lower than in Silicosis. Caplan Syndrome: A specific condition where coal workers with Rheumatoid Arthritis develop large nodules in the lungs.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 933

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A 55-year-old male presents to the outpatient clinic with progressive shortness of breath and a chronic dry cough. He mentions working in shipbuilding for over 30 years. On examination, his lungs have a dull percussion note and fine crackles at the bases. A chest X-ray is performed. Which of the following is the characteristic radiologic change seen in this patient? (Q840929)

A. Mottling of lung

B. Snowstorm appearance

C. Fine nodular opacity

D. Ground glass opacity

Correct Answer: D. Ground glass opacity

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The clinical presentation and a history of working in shipbuilding suggest that the patient likely has Asbestosis. The characteristic radiologic change seen in this patient is a ground glass opacity on the chest X-ray. Asbestosis is a chronic lung disease caused by inhaling asbestos fibres. It is often seen in individuals with prolonged occupational exposure, such as those working in shipbuilding, construction, or manufacturing(cement, roof tiling, brake lining, etc.). Asbestos enters the body by inhalation, and fine dust may be deposited in the alveoli. This can lead to pulmonary fibrosis, carcinoma of the bronchus, mesothelioma of the pleura or peritoneum, and cancer of gastrointestinal tract. Chest X-ray findings in different types of pneumoconiosis: X-Ray Changes Types of pneumoconiosis Ground glass opacity Asbestosis Black lung Anthracosis Mottling of lung Bagassosis (Option A) Fine nodular opacity Farmer's lung (Option C) Snowstorm Silicosis (Option B)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 934

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Which of the following factors plays a crucial role in determining the severity of pneumoconiosis in individuals exposed to mineral dust? 1) Fineness of particles 2) Chemical composition 3) Concentration of dust in the air 4) Period of exposure (Q840926)

A. 1,2,3

B. 1,2,3,4

C. 2,3

D. 2,3,4

Correct Answer: B. 1,2,3,4

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Factors influencing pneumoconiosis : Factor Description Chemical Composition Different dust types have varying toxicity levels; silica and asbestos are particularly harmful. Fineness of Particles Finer particles can penetrate deeper into the lungs, causing more severe damage over time. Concentration of Dust in the Air Higher concentrations increase the likelihood and severity of respiratory issues upon inhalation. Period of Exposure Longer exposure durations, especially at high concentrations, increase cumulative lung damage. Health Status of the Person Exposed Pre-existing lung diseases like Asthma, COPD, smokers and immune status affect

susceptibility.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 933

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Match the following pneumoconiosis conditions with their related industries: Pneumoconiosis Exposure Industry 1. Silicosis a. Textile Manufacturing 2. Asbestosis b. Mining and Quarrying 3. Byssinosis c. Construction and Shipbuilding 4. Anthracosis d. Coal Mining (Q840924)

A. 1-a, 2-b, 3-c, 4-d

B. 1-b, 2-c, 3-a, 4-d

C. 1-d, 2-c, 3-a, 4-b

D. 1-b, 2-d, 3-c, 4-a

Correct Answer: B. 1-b, 2-c, 3-a, 4-d

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Silicosis: Often occurs in workers exposed to silica dust in industries like mining and quarrying. Asbestosis: Typically found in workers who handle asbestos, prevalent in construction and shipbuilding industries. Byssinosis: Common among workers exposed to cotton, flax, or hemp dust, primarily in the textile manufacturing industry. Anthracosis or Coal Workers' Pneumoconiosis (aka "black lung disease"): This condition affects workers in coal mining due to inhalation of coal dust.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 933, 934

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: A 55-year-old coal miner with a history of fine dust exposure presents with chronic cough and shortness of breath. A chest X-ray shows extensive lung fibrosis,

and he is diagnosed with pneumoconiosis. Which particle size is most dangerous for causing pneumoconiosis by reaching the lower respiratory tract? (Q840733)

A. 5 - 10 µm

B. 3 - 5 µm

C. 0.5 - 3 µm

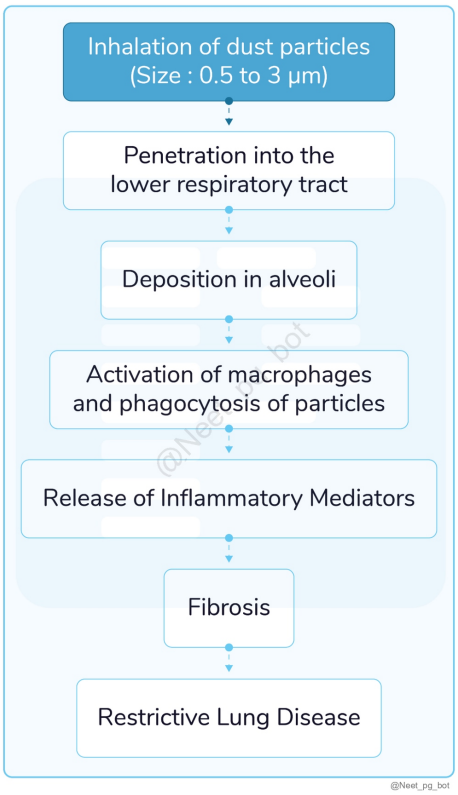
D. >10 µm

Correct Answer: C. 0.5 - 3 µm

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Particles ranging from 0.5 to 3 µm are considered the most dangerous in pneumoconiosis because they can penetrate deeply into the lower respiratory tract , reaching the alveoli where they cause significant damage. Pathogenesis: Particle Size Effects on Respiratory Tract 5-10 µm It gets trapped in the upper respiratory tract. 3-5 µm Deposits in the mid-respiratory tract. 0.5-3 µm It enters the alveoli and causes damage. Less than 0.5 µm Moves deeper due to Brownian motion into smaller airways.



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 933

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: A 30-year-old construction worker presents with painful muscle spasms after several hours of heavy sweating in the hot sun. He reports extreme thirst and muscle tightness, but his vital signs are normal. Which heat-related illness is primarily caused by loss of sodium and chloride during heavy physical work in high temperatures? (Q840732)

A. Heat stroke

B. Heat exhaustion

C. Heat cramps

D. Heat syncope

Correct Answer: C. Heat cramps

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Heat cramps occur when sodium and chloride are lost from the blood during heavy muscular work in high temperatures and humidity. Heat-related illness: Heat Disorder Mechanism Features Treatment Heat Cramps (Option C) Loss of sodium and chlorides due to heavy muscular work. Painful, spasmodic contractions of skeletal muscles. Rehydration and electrolyte replacement; rest and stretching of affected muscles. Heat Stroke (Option A) Failure of heat-regulating mechanism. Very high body temperature (> 110°F or 43.3°C), delirium, convulsions, partial or complete loss of consciousness, dry and hot skin Classical heat stroke occurs in vulnerable populations during heatwaves, while E xertional heat stroke occurs in healthy individuals during intense physical activity in hot conditions. Rapid cooling in an ice water bath until rectal temperature falls below 102°F (38.9°C). Continuous monitoring of rectal temperature. Supportive care for complications. Heat Exhaustion (Option B) Imbalance or inadequate replacement of water and salts lost through perspiration. Normal or moderately elevated body temperature (< 102°F or 38.9°C) Dizziness, weakness, fatigue, circulatory distress, Normalise fluid and electrolyte balance; may require hospitalization in severe cases. Heat Syncope (Option C) Blood pooling in lower limbs due to dilated blood vessels. Pale skin, sudden collapse, no significant rise in body temperature Lay down in the shade with your head slightly down; recovery typically takes 5-10 minutes.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 875

↑ *Back to this question in Part A*

@Neet_pg_bot

• [13_Allied Health Disciplines] 050 Esi Act Factory Act Nrega Act And Disaster Management

« Back to Folder Directory

[13_Allied Health Disciplines] 050 Esi Act Factory Act Nrega Act And Disaster Management — Quick Jump

Q1 (p. 1653) *Q2 (p. 1654)* *Q3 (p. 1655)* *Q4 (p. 1656)* *Q5 (p. 1657)* *Q6 (p. 1658)*
Q7 (p. 1658) *Q8 (p. 1659)* *Q9 (p. 1660)* *Q10 (p. 1661)* *Q11 (p. 1662)* *Q12 (p. 1663)*
Q13 (p. 1663)

Q1: Which of the following chemicals was released during the Bhopal gas tragedy? (Q840855)

A. Strontium

B. Sarin

C. Methyl isocyanate

D. Cesium

Correct Answer: C. Methyl isocyanate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Bhopal gas tragedy is one of the worst man-made disasters involved in the accidental leak of Methyl isocyanate (MIC) (Option C) in the Union Carbide Pesticide plant in 1984. It is a point source single exposure epidemic. Clinical features of MIC poisoning: Toxicity develops within 1-4 hours of exposure. Symptoms: Cough, dyspnea, chest pain, lacrimation, eyelid swelling and unconsciousness. These symptoms progress over next 24-72 hours and may lead to acute lung injury, cardiac arrest and death

References:

Park's Textbook of Preventive and Social Medicine 27th edition, page 928

https://emergency.cdc.gov/agent/methylisocyanate/casedef.asp#:~:text=Toxicity%20might%20develop%20over%201,death%20(1%2D4).

https://www.uab.cat/web/newsroom/news-detail/continuous-leaking-of-radioactive-strontium-and-caesium-from-fukushima-1345830290613.html?detid=1345699485440

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5764759/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following is the correct sequence in a disaster management cycle? (Q840858)

A. Disaster impact → Response → Rehabilitation → Reconstruction → Mitigation → Preparedness

B. Disaster impact → Mitigation → Preparedness → Response → Rehabilitation → Reconstruction

C. Disaster impact → Response → Rehabilitation → Reconstruction → Preparedness → Mitigation

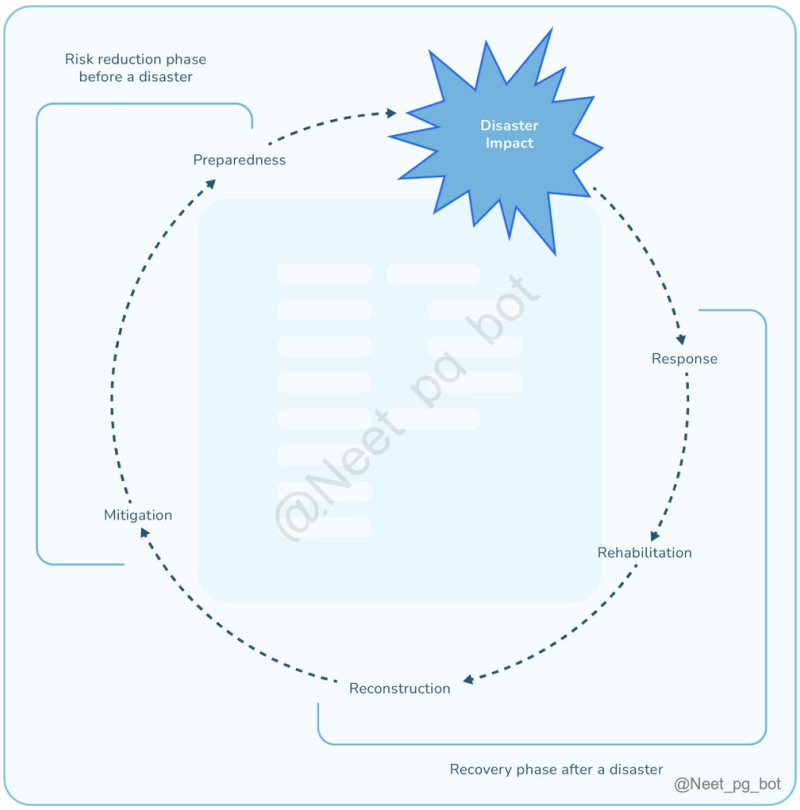
D. Disaster impact → Rehabilitation → Reconstruction → Response → Mitigation → Preparedness

Correct Answer: A. Disaster impact → Response → Rehabilitation → Reconstruction → Mitigation → Preparedness

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Disaster management is a systematic approach using decisions, organizations to implement policies, strategies to lessen the impact of natural or man-made hazards. Disaster management cycle: The three fundamental aspects of disaster management: Disaster impact: Involves disaster response and relief. Disaster preparedness: It is the proper equipment of the country to manage disasters. Disaster mitigation: Preventing the hazard from becoming a disaster.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 923

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: During a disaster, a patient is suffering from a closed femur fracture with stable vital signs and another patient with a penetrating chest wound with respiratory distress. Which of the following are the colour coding given to the patients respectively based on triage principle? (Q840862)

A. Red and Yellow

B. Yellow and green

C. Yellow and Red

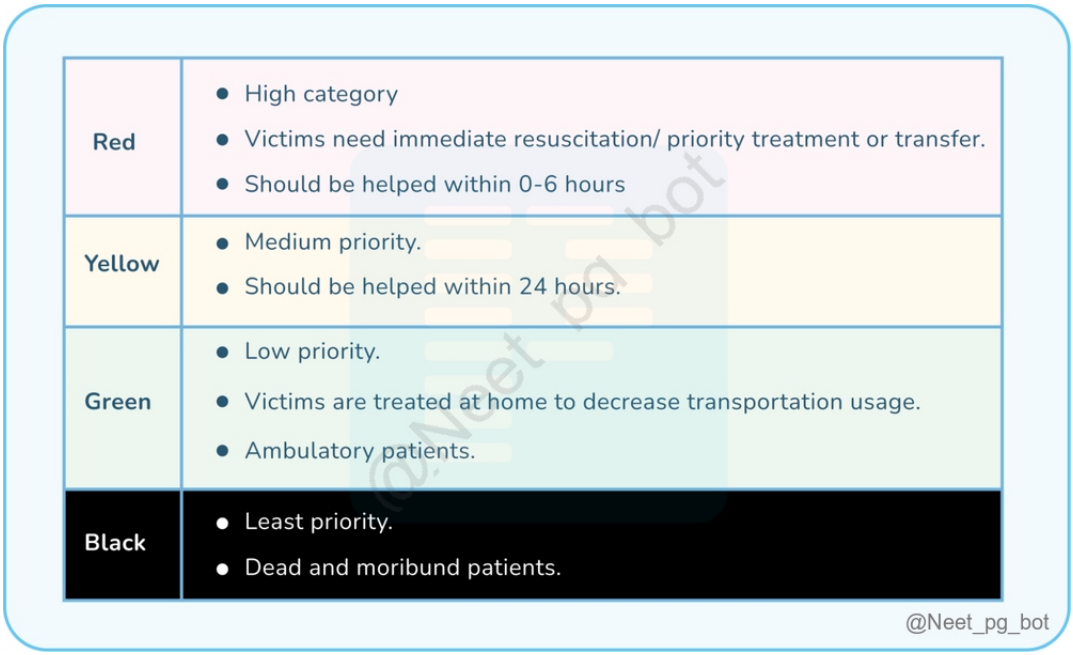
D. Green and Yellow

Correct Answer: C. Yellow and Red

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The first patient, with a closed femur fracture and stable vitals, is triaged as YELLOW, requiring assistance within 24 hours. The second patient, in respiratory distress, necessitates immediate resuscitation and is triaged as RED. Color coding in triage:



References:

Park's Textbook of Preventive and Social Medicine 27th edition, page 923

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7472824/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Following an earthquake, which of the following is the most effective step to manage infectious diseases? (Q840866)

A. Mass vaccination against all infectious agents

B. Meticulous antibiotic supply

C. Ensure thorough water chlorination and adequate sanitation

D. Isolating infected people

Correct Answer: C. Ensure thorough water chlorination and adequate sanitation

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Epidemiological Survey and Disease Control: Post-disaster: Contamination of the water supply and displacement of the population are the most common causes of communicable diseases. Therefore, ensuring a safe water supply with chlorination and proper sanitation is the most effective step to decrease the risk of infectious diseases (option C). Due to Disease Poor sanitation and overcrowding Acute respiratory diseases Gastrointestinal diseases (most common) Displacement of animals Zoonotic diseases Floods Leptospirosis and rickettsia The most common vitamin deficiency post-disaster is Vitamin A deficiency.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 924

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following is not true regarding post-disaster rehabilitation and accommodation? (Q840868)

A. Residual chlorine level >0.7 mg/L for 1 hour contact

B. 0.5 gm chlorine tablet is sufficient for 20 liters of water

C. Distance between water point and latrine should be 100 mts

D. Number of people per latrine: 50

Correct Answer: D. Number of people per latrine: 50

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Post-disaster rehabilitation: Returning to pre-disaster conditions. Water supply Safe water supply with chlorination. Residual chlorine levels should be >0.7 mg/L for 1 hour contact period (Option A). 0.5 mg chlorine tablets sufficient for 20 L water (Option B). Food and Vector control Safe food should be ensured To protect from vector-borne diseases, rodenticides like zinc phosphide must be sprayed. Indoor residual sprays must be used for mosquitoes and sandflies. Accommodation guidelines Per person shelter space: 3.4 square meters Number of people per water point: 250 (option D) Distance to water point: 150 meters Number of people per latrine: 20 Distance to latrine: 30 meters Distance between water point and latrine: 100 mts (Option C)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 925

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following is not a component of disaster mitigation according to the provided information? (Q840874)

A. Implementing optimal land-use plans

B. Improved building codes for earthquake-resistant structures

C. Developing communication and warning systems

D. Flood mitigation codes for dam resistance

Correct Answer: C. Developing communication and warning systems

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Developing communication and warning systems because this component is part of disaster preparedness, not disaster mitigation. This is a part of disaster preparedness activities, which aim to manage and respond to emergencies effectively. Disaster Mitigation: Prevents hazards from becoming disasters. Mitigation is a crucial component of disaster preparedness. It aims to lessen the potential impact of hazards through long-term development activities. Disaster Mitigation in Health Sector : Focuses on safeguarding health facilities and public services like water and sanitation to prevent economic strain during post-disaster rehabilitation. Importance of Safe Water and Sanitation : Vital for disaster mitigation in health, as contamination or disruption of water supplies can lead to social upheaval and costly rehabilitation efforts. Structural Mitigation Measures : For example, Utilizing engineering modalities to prevent hazards, Proper land use (option A) Improved building codes for earthquake-resistant structures (option B) Flood mitigation codes for dam resistance (option D) Relationship to Disaster Management Cycle : Represents a proactive approach within disaster management, complementing preparedness and response activities to minimize disaster impacts. Reduces vulnerability to disasters and strengthens the capacity to manage emergencies effectively.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 925

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following is not a key activity of disaster preparedness? (Q840877)

A. Risk assessment to identify specific hazards

B. Securing financial and logistical resources for preparedness and response

C. Public education programs to raise awareness about disaster risks and responses

D. Enforcing disaster-resistant building codes

Correct Answer: D. Enforcing disaster-resistant building codes

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Enforcing disaster-resistant building codes is a mitigation measure because it involves implementing measures that prevent hazards from turning into disasters. Disaster Preparedness Aims to reduce the impact of hazards through long-term development. Key Activities: Risk assessment to identify specific hazards (Option A) Set construction and land-use regulations Develop alert and communication systems Organize response: train personnel, plan evacuation, stockpile supplies Securing financial and logistical resources for preparedness and response (Option B) Public education programs to raise awareness about disaster risks and responses (Option C) Collaboration with news media for effective information dissemination during emergencies Conducting disaster simulation exercises to test and improve response mechanisms Integration of Mitigation Measures Disaster mitigation in disaster preparedness aims to minimize hazard impacts through proactive development efforts, enhancing resilience and emergency management capabilities. Empowers local individuals as first responders. Effective when communities manage internal and external assistance programs. Multi-Sectoral Approach Involves collaboration among government agencies, NGOs, communities, and individuals. Ensures a comprehensive and coordinated response to mitigate disaster risks and enhance resilience.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pages 925-927

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which agency was established by the Disaster Management Act (2005) to oversee disaster management at the national level in India? (Q840879)

A. Ministry of Home Affairs (MHA)

B. National Institute of Disaster Management

C. National Disaster Management Authority (NDMA)

D. Emergency Medical Relief Wing

Correct Answer: C. National Disaster Management Authority (NDMA)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The NDMA, established by the Disaster Management Act (2005), prepares national-level disaster management plans and coordinates disaster management efforts across India. It plays a key role in disaster response and mitigation at the national level. Disaster Management Act (2005): Established the National Disaster Management Authority (NDMA) and State Disaster Management Authorities (SDMAs). Provides a legal framework for disaster management in India. National Disaster Management Authority (NDMA): Prepares national-level disaster management plans and oversees their execution. Key agency for disaster management coordination in India. National Institute of Disaster Management: (Option B) Located in New Delhi, focuses on capacity building, training, and research. Aims to strengthen national disaster response capabilities. Role of State Governments: Direct responsibility for executing relief efforts post-disaster. Supported by the Union government through the Calamity Relief Fund (3:1 contribution ratio). Ministry of Home Affairs (MHA): (Option A) Nodal ministry for overall coordination of disaster management. Chaired by the Prime Minister, oversees disaster response at the national level. Emergency Medical Relief Wing: (Option D) Operates under the Ministry of Health and Family Welfare, coordinates health-related activities during disasters.

References:

Park's Textbook of Preventive and Social Medicine 27th edition, pages 928-929

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following statements is true regarding the minimum age requirements for employing children in factories as per the Factories Act? (Q841323)

A. Guaranteed employment for under 14-year-olds from below-poverty-line families in factories.

B. No employment for under 18-year-olds in factories.

C. Under 14-year-olds can be employed only in non-hazardous factory roles.

D. 15-18 year olds need a fitness certificate for factory work from a certified surgeon

Correct Answer: D. 15-18 year olds need a fitness certificate for factory work from a certified surgeon

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Children between 15-18 years of age require a certificate of fitness from a certified surgeon to be employed in factories as per the Factory Act. Factory Act Definition An establishment employing 10 or more workers where power is used or 20 or more workers where power is not used. Applicability Applies to all of India and covers all factories, including perennial and seasonal factories. Age Restrictions (Option A, B and D) Prohibits employment of children below 14 years of age . 15-18 year olds need fitness certificate for factory work from a

certified surgeon Hours of Work Work limited to 48 hours/week or 9 hours/day; max 60 hours/week with overtime . Adolescents: max 4.5 hours/day. Women and adolescents: work hours 6 am to 7 pm. Leave Grants 1 day of leave per 15 days of work for adolescents 1 day per 30 days of work for adults. Permits accumulation of leaves up to 40 days for adolescents and 30 days for adults. Health & Safety Mandates a minimum of 500 cubic feet of space per worker. Requires 1 safety officer per 1000 workers. Welfare Stipulates 1 welfare officer per 500 workers, 1 canteen per 250 workers, and 1 crèche per 30 women workers.

References:

labour.gov.in/sites/default/files/factories_act_1948.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which statement regarding the administration of the Employees' State Insurance (ESI) Act is incorrect? (Q841324)

A. ESI Corporation administers the ESI Scheme

B. Union Minister for Labour is Chairman of the ESI Corporation.

C. The Director General of Health Services heads the Medical Benefit Council.

D. ESI Corporation functions under the Ministry of Health and Family Welfare.

Correct Answer: D. ESI Corporation functions under the Ministry of Health and Family Welfare.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Employees' State Insurance Corporation (ESIC) functions autonomously under the Ministry of Labour and Employment. ESI (Employees State Insurance) Act Year 1948 Applicability Factories Applies to all non-seasonal factories employing 10 or more persons in implemented areas, regardless of power usage. Excludes railways, defense, and mines. Other Establishments Covers shops, hotels and restaurants, cinemas and theaters, road-motor transport establishments, and newspaper establishments. Employee Eligibility Employees earning up to Rs. 21,000 per month are eligible for benefits. This includes manual, clerical, supervisory, and technical employees. Administration (Option D) Managed by the autonomous Employees' State Insurance Corporation (ESIC). ESIC chairman: The Union Minister for Labour The Secretary to the Government of India, Ministry of Labour, is the Vice-Chairman.

References:

Park's Textbook of Preventive and Social Medicine 27th edition, pages 943-944

https://www.esic.gov.in/coverage

https://www.esic.gov.in/attachments/publicationfile/9decf733b65a587e3e6201914e54dbaa.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following benefits is not offered under the ESI Act? (Q841325)

A. Unemployment Allowance

B. Paid Vacation Time

C. Funeral Expenses

D. Rehabilitation Allowance

Correct Answer: B. Paid Vacation Time

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Paid vacation time is not a benefit under the ESI Act. Benefits of ESI(Employees State Insurance) Act. Medical Benefit Provides "full medical care," including hospitalization at no cost to insured individuals & families in cases of sickness, employment injury, and maternity. Sickness Benefit Provides 70% of average daily wages in cash during medical leave for a maximum of 91 days within 365 days, as certified by the Insurance Medical Officer/Practitioner. Extended Sickness Benefit Extended coverage for long-term diseases beyond 91 days; 34 diseases covered if employed for two years. Extended sickness benefit is paid at 80% of the insured person's wages. Enhanced Sickness Benefit Cash benefits (100% wages) for sterilisation procedures: 14 days for tubectomy (women), 7 days for vasectomy (men). Maternity Benefit Cash payments for childbirth, miscarriage, or pregnancy-related sickness: 26 weeks for childbirth, 6 weeks for miscarriage, and 40 days for pregnancy-related sickness. Paid at 100% of the insured woman's average daily wages. Disablement Benefit Temporary Disablement Benefit (TDB): 90% of wages paid from day one for temporary employment injury, until recovery. Permanent Disablement Benefit (PDB): 90% of wages paid monthly for life, based on certified loss of earning capacity. Dependent's Benefit Dependents receive 90% of the deceased's (due to employment injuries) wages as a shared pension, eligible until age 18 or earlier for married daughters. If daughter marries before 18 the benefit is withdrawn Funeral Expenses (Option C) Offers a cash payment up to Rs. 15,000 to cover funeral expenses upon the death of an insured individual. Rehabilitation (Option D) Insured individuals and their families are entitled to continued medical treatment even after permanent disablement or retirement. They have to pay a nominal fee of Rs.10 per month to avail this benefit. Rehabilitation allowance of Rs.15,000 granted. Unemployment allowance (Option A) For eligible employees due to factory closure or retrenchment: 50% of wage for up to two years.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pages 943-944

https://www.esic.gov.in/benefits

https://www.esic.gov.in/information-benefits

https://www.indiacode.nic.in/handle/123456789/1441?view_type=browse&sam_handle=123456789/1362

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following benefits offered under the ESI Act provides coverage for 26 weeks? (Q841326)

A. Sickness benefit

B. Maternity benefit for confinement

C. Temporary disablement benefit

D. Extended sickness benefit

Correct Answer: B. Maternity benefit for confinement

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Maternity Benefit under ESI Act Payable for up to 26 weeks (6 months) for 2 surviving children Paid at 100% of insured woman's average daily wages Max 8 weeks can be availed before expected date of confinement Miscarriage or MTP 6 weeks (42 days) of maternity benefit from date after miscarriage/MTP Paid at 100% of insured woman's average daily wages Sickness from Pregnancy, Confinement, Premature Birth Up to 4 weeks of maternity benefit Paid at 100% of insured woman's average daily wages The ESI Act provides sickness benefits for a maximum period of 91 days in any continuous period of 365 days. (Option A) Temporary disablement benefit is paid for the duration the temporary disability lasts. (Option C) Extended sickness benefit is payable for a maximum period of two years. (Option D)

References:

Park's Textbook of Preventive and Social Medicine 27th edition, pages 943-944.

https://www.esic.gov.in/maternity-benefits

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following schemes is most closely related to providing unemployment relief to eligible individuals who have lost their jobs in specific circumstances? (Q841327)

A. Atal Beemit Vyakti Kalyan Yojana

B. Abhiyan Indra Dhanush

C. MGNREGA

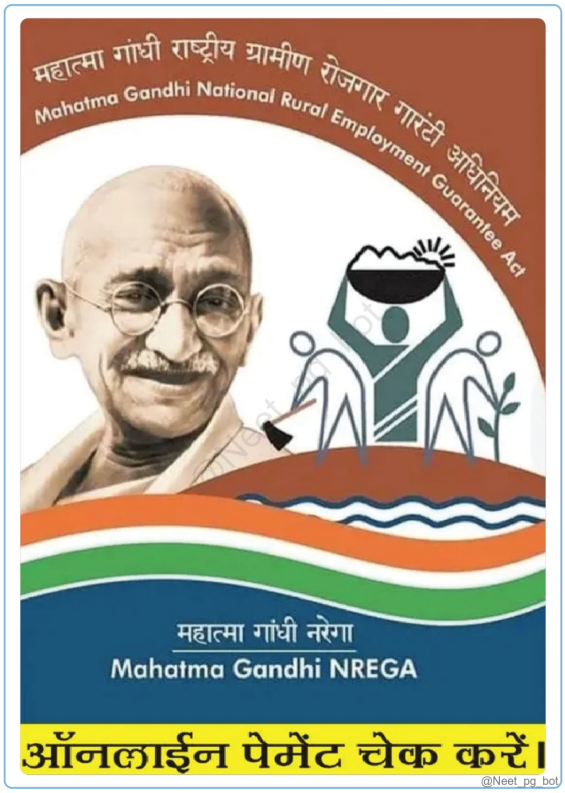
D. None of the above

Correct Answer: A. Atal Beemit Vyakti Kalyan Yojana

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Scheme Description Key Features Atal Beemit Vyakti Kalyan Yojana Provides financial assistance to employees covered under the ESI Act, 1948, who become unemployed. Offers relief payment for up to 90 days, once in a lifetime. The relief payment is 50% of the employee's wages. To be eligible, the insured person must have been employed for at least two years and contributed for at least 78 days. Abhiyan Indra Dhanush (Option C) Aims to enhance hygiene and cleanliness in ESIC hospitals. Implements a VIBGYOR colour-coded pattern for changing bed sheets. MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) (Option D) Guarantees 100 days of paid work to rural households. Provides wage jobs to BPL households for unskilled work Must offer work within 15 days or pay unemployment allowance



References:

www.esic.gov.in/abvky

www.esic.gov.in/Publications/Note_on_Launch.pdf

www.esic.gov.in/attachments/circularfile/8efb10af81a1ff52c64b69601d78625d.pdf

https://rural.gov.in/sites/default/files/nrega/Library/Books/1_MGNREGA_Act.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

• [13_Allied Health Disciplines] 051 Previous Year Questions

« Back to Folder Directory

[13_Allied Health Disciplines] 051 Previous Year Questions — Quick Jump

Q1 (p. 1666)	*Q2 (p. 1666)*	*Q3 (p. 1667)*	*Q4 (p. 1668)*	*Q5 (p. 1669)*	*Q6 (p. 1670)*
Q7 (p. 1671)	*Q8 (p. 1672)*	*Q9 (p. 1673)*	*Q10 (p. 1673)*	*Q11 (p. 1674)*	*Q12 (p. 1675)*
Q13 (p. 1676)	*Q14 (p. 1677)*	*Q15 (p. 1678)*	*Q16 (p. 1679)*	*Q17 (p. 1680)*	*Q18 (p. 1681)*
Q19 (p. 1682)	*Q20 (p. 1683)*	*Q21 (p. 1683)*	*Q22 (p. 1684)*	*Q23 (p. 1685)*	*Q24 (p. 1686)*
Q25 (p. 1687)	*Q26 (p. 1687)*	*Q27 (p. 1688)*	*Q28 (p. 1689)*	*Q29 (p. 1690)*	*Q30 (p. 1691)*
Q31 (p. 1691)	*Q32 (p. 1692)*	*Q33 (p. 1693)*			

Q1: As per the Factories Act 1948, what is the maximum number of work hours allowed per week, including any hours worked as overtime? (Q854816)

A. 48 hours

B. 72 hours

C. 60 hours

D. 66 hours

Correct Answer: C. 60 hours

Explanation: Correct option: C) 60 hours Maximum work hours per week including overtime work hours is 60 hours. Hours of work: 48 hours per week or 9 hours per day. 60 hours per week including overtime. 4 and ½ hours per day for adolescents. Women and adolescents can only be employed between 6 am and 7 pm.

References:

https://labour.gov.in/sites/default/files/factories_act_1948.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: What is the most frequent association of lung malignancy? (Q857751)

A. Asbestosis

B. Silicosis

C. Bagassosis

D. Byssinosis

Correct Answer: A. Asbestosis

Explanation: sbestosis is a diffuse interstitial fibrosing disease of the lung . Past exposure to asbestos is specifically indicated by pleural plaques on chest radiographs, which are characterized by either thickening or calcification along the parietal pleura, particularly along the lower lung fields. Pulmonary function testing in asbestosis reveals a restrictive pattern with a decrease in both lung volumes and diffusing capacity. Complications include carcinoma of lung and mesothelioma . Silicosis (Option B): Silicosis is a lung disease caused by inhaling silica dust, which increases the risk of tuberculosis and may slightly elevate the risk of lung cancer. However, the association with lung malignancy is much weaker compared to asbestosis. Bagassosis (Option C): Bagassosis is a hypersensitivity pneumonitis caused by exposure to sugarcane bagasse dust. It does not have a known association with lung malignancy. Byssinosis (Option D): Byssinosis is an occupational lung disease caused by inhaling cotton, flax, or hemp dust. It primarily leads to chronic obstructive airway disease and is not associated with lung cancer.

References:

Harrison’s Principles of Internal Medicine, 21st Edition, Page 2168

Davidson’s Principles and Practice of Medicine, 24th Edition, Page 615

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which benefit does a patient receive when seeking treatment at an ESI hospital under the ESI Act? (Q857756)

A. Sickness benefit

B. Medical benefit

C. Maternity benefit

D. Dependent's benefit

Correct Answer: B. Medical benefit

Explanation: ash benefits (100% wages) for sterilization procedures: 14 days for tubectomy (women), 7 days for vasectomy (men). Maternity Benefit (Option C) Cash payments for childbirth, miscarriage, or pregnancy-related sickness: 26 weeks for childbirth, 6 weeks for miscarriage, and 40 days for pregnancy-related sickness. Paid at 100% of the insured woman's average daily wages. Disablement Benefit Temporary Disablement Benefit (TDB): 90% of wages paid from day one for temporary employment injury, until recovery. Permanent Disablement

Benefit (PDB): 90% of wages paid monthly for life, based on certified loss of earning capacity. Dependent's Benefit (Option D) Dependents receive 90% of the deceased's (due to employment injuries) wages as a shared pension, and they are eligible until age 18. If the daughter marries before 18, the benefit is withdrawn. Funeral Expenses It offers a cash payment of up to Rs. 15,000 to cover funeral expenses upon the death of an insured individual. Rehabilitation Insured individuals and their families are entitled to continued medical treatment after permanent disablement or retirement. They have to pay a nominal fee of Rs.10 per month for this benefit. A rehabilitation allowance of Rs.15,000 granted. Unemployment allowance For eligible employees due to factory closure or retrenchment: 50% of wage for up to two years.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 943, 944

https://www.esic.gov.in/benefits

https://www.esic.gov.in/information-benefits

https://www.indiacode.nic.in/handle/123456789/1441?view_type=browse&sam_handle=123456789/1362

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: What is the primary method of absorption of inorganic lead in industrial settings that can result in lead poisoning? (Q855297)

A. Absorption through skin

B. Inhaled lead dust

C. Ingestion of contaminated food and water

D. Contaminated hands

Correct Answer: B. Inhaled lead dust

Explanation: In industrial settings, the inhalation of lead dust is the primary route of exposure and absorption of inorganic lead. This occurs when lead-containing particles become airborne, usually as a result of industrial processes such as smelting, welding, or battery manufacturing. Workers who breathe in the contaminated air can inhale these lead particles, which can then be absorbed into the bloodstream through the respiratory system. Incorrect Options: Absorption through skin (Option A): While it is true that lead can be absorbed through the skin, it is not the most common mode of absorption in industrial settings. Ingestion of contaminated food and water (Option C): Contaminated food and water can cause lead exposure and poisoning, notably in residential or environmental contexts, but it's not the primary route of absorption in industrial settings. Contaminated hands (Option D): While contact with contaminated hands can contribute to lead exposure, it is not the most common mode of absorption in industrial settings.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 996

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: In the hospital ward, the nurse arranges the bins as depicted in the image. Which of the subsequent items should be disposed of in the black bin? (Q855302)

A. Soiled linen bedsheet

B. Glove paper cover

C. Gloves

D. Contaminated gloves



Correct Answer: B. Glove paper cover

Explanation: B) Glove paper cover The item that would go into the black bin is a glove paper cover The black bin is typically used for the disposal of general non-recyclable waste. In this case, the glove paper cover is a single-use item that is used to cover and protect gloves before use. Once the gloves are taken out and used, the paper cover becomes non-recyclable waste and should be disposed of in the black bin. Colour Type of waste Example of waste Treatment and disposal Yellow Human anatomical waste. Animal anatomical waste. Soiled waste. Discarded or

expired medicine. Microbiology, biotechnology and other clinical laboratory waste. Chemical waste. Chemical liquid waste. Placenta. Post-operative body parts. Plaster of Paris (POP). Pathological waste. Cotton waste. Dressing materials. Beddings. Body fluid contaminated paper and cloth. Face mask, cap, shoe cover and head cover. Cytotoxic, expired and discarded medicines. Microbiology and biotechnology lab waste. Blood bag Vacutainers with blood Incineration. Plasma pyrolysis. Deep burial. Red Contaminated waste that is recyclable. Syringe without needles. Fixed needle syringes with their needle cut. IVset. Catheters. Gloves (soiled or unsoiled). Urine bag. Dialysis kit. IVbottles. Tubing's. Bottles. Vacutainers with needle cut. Vacutainers without blood. ELISA plate and vials not containing blood samples. Autoclaving or microwaving/ hydroclaving followed by shredding or mutilation and waste set to registered recyclers or for energy recovery/road making. Plastic waste should not be sent to landfill sites. White Waste Sharps Needles Syringes with fixed needles Blades Scalpers Trocar cannula Insulin pen needle Puncture proof , Leak proof, Tamper proof containers Autoclaving or dry heat sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete Or sent for final disposal to iron foundries or sanitary landfill or designated concrete waste sharp pit Blue Glassware or metallic body implants. Includes broken or discarded glass and metallic objects that are contaminated. Glass: Broken glass. Ampoules. Lab slide Metals: Nails. Metallic body implants. Scissors. Artificial pacemakers. Cardboard boxes with blue coloured marking or blue coloured puncture- proof and tamper-proof containers. Disinfection (cleaning with detergent and soaking in sodium hypochlorite) or autoclaving or microwaving or hydroclaving and then sent for recycling. Incorrect Options: Soiled linen bedsheet (Option A): The color of the bin for contaminated linen is yellow. Gloves (Option C): Gloves used in a hospital setting, even if they are used and no longer sterile, should be disposed of in red bins Contaminated gloves (Option D): Similarly, contaminated gloves should be disposed of in red bins.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 915

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A patient admitted following a road traffic accident has left a blood spill on the hospital floor. Which disinfectant is most appropriate for effectively decontaminating the area? (Q856045)

A. Ethyl alcohol

B. Chlorhexidine

C. Sodium hypochlorite

D. Formaldehyde

Correct Answer: C. Sodium hypochlorite

Explanation: Sodium hypochlorite is the disinfectant of choice for cleaning blood spills on hospital floors due to its potent virucidal, bactericidal, and sporicidal properties. It effectively destroys blood-borne pathogens, including

hepatitis B and C viruses and HIV, which might be present in the spilled blood. The recommended concentration for disinfecting blood spills is 1% sodium hypochlorite (10,000 ppm). Blood Spill Cleaning Protocol Step Action Details 1. PPE Wear Personal Protective Equipment (PPE) Gloves, goggles/face shield, gown/apron, mask (if necessary) to protect from exposure. 2. Control the Spill Area Secure and contain the spill Alert others, prevent access, and use absorbent materials (e.g., paper towels) to contain the spill. 3. Select and Apply Disinfectant Use appropriate disinfectant Sodium hypochlorite (1%) is preferred. Apply disinfectant to the spill and allow it to sit for 10 minutes. 4. Clean the Spill Wipe the area with absorbent materials Use disposable towels or wipes to clean up the blood and dispose of them in biohazard waste. 5. Disinfect Surrounding Area Clean the surrounding floor or surfaces Mop or wipe down the surrounding area with disinfectant to ensure thorough decontamination. 6. Dispose of Contaminated Items Safely dispose of contaminated materials Place used gloves, mop heads, towels, and any contaminated materials in a biohazard waste container. 7. Remove and Dispose of PPE Safely remove PPE and dispose of it Remove gloves last, ensuring that they are turned inside out. Dispose of PPE in biohazard waste containers. 8. Wash Hands Clean hands thoroughly after cleaning Wash hands with soap and water, or use alcohol-based hand sanitizer if soap is unavailable. 9. Documentation and Reporting Record the incident and inform relevant departments Document the blood spill and cleaning procedure, and report any potential exposures to infection control. Ethyl alcohol (Option A): Alcohol is effective as a disinfectant for skin or small equipment but is not suitable for blood spills as it gets inactivated by organic matter like blood. It does not have sporicidal properties. Chlorhexidine (Option B): Chlorhexidine is primarily used for antisepsis (skin preparation before surgery or wound cleaning). It lacks activity against all viruses and is ineffective against bacterial spores. Formaldehyde (Option D): While formaldehyde is a powerful disinfectant and sterilant, it is a gas at room temperature and not practical for cleaning floors. Its application involves complex procedures and can be hazardous to humans due to its toxic and irritant nature.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC11368531/

https://pmc.ncbi.nlm.nih.gov/articles/PMC7158362/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: In the case of a child presenting with pharyngitis, when a throat swab is collected and sent for culture, in which colored bin should the used swab be disposed of? (Q856069)

A. Red

B. Yellow

C. White

D. Blue

Correct Answer: B. Yellow

Explanation: In healthcare settings, waste disposal is categorized by color-coded bins to ensure safe and proper handling of different types of waste. Yellow bins are typically used for disposing of clinical waste that is contaminated or potentially infectious, such as used swabs, tissues, or any material that has come into contact with body fluids. In the case of a throat swab collected for culture, it would be considered infectious waste until proven otherwise, so it should be disposed of in a yellow bin . Biomedical Waste Disposal: Color Category of Waste Description Examples Yellow Infectious waste Waste that may contain pathogens and poses a risk of infection. Contaminated dressings, swabs, body fluids, soiled surgical items Red (Option A ruled out) Contaminated waste (non-infectious) Waste that has been contaminated with bodily fluids but is not infectious. Non-sharp waste like plastic, tubing, syringes (without needles), and items used in medical treatments Blue (Option D ruled out) Glass waste Waste consisting of broken glassware or other glass items. Glass vials, ampoules, broken glass containers White (Translucent) (Option C ruled out) Sharp waste Waste items that can cut or puncture, requiring careful handling. Needles, syringes with needles, scalpels, razors, and broken glass Black General or non-biomedical waste Non-hazardous waste that is not contaminated by biological or medical waste. Paper, packaging, non-infectious non-medical waste

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 852- 854

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following bags are used for disposing of latex gloves after they have been used? (Q856878)

A. Yellow

B. Red

C. Blue

D. Transparent

Correct Answer: B. Red

Explanation: isposal System: Red Bag : Used for contaminated items like: Latex gloves IV tubes, catheters, syringes (without needles) Disposable PPE These items are sent for autoclaving or shredding followed by recycling. Yellow Bag : (Option A ruled out) Used for waste requiring incineration , such as: Anatomical waste Soiled dressings, bandages Pathological waste (e.g., human tissues) Blue Bag : (Option C ruled out) Used for glassware and sharp metal objects , such as: Broken ampoules Vials Metallic implants Transparent Bag : (Option D ruled out) Typically used for general waste like paper, food, or non-infectious material.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 853

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Sharp waste is disposed of in? (Q854807)

A. Yellow bag

B. Red bag

C. Blue bag

D. White bag

Correct Answer: D. White bag

Explanation: Correct Option: D) White bag Colour Type of waste Example of waste Treatment and disposal Yellow (Option A ruled out) Human anatomical waste. Animal anatomical waste. Soiled waste. Discarded or expired medicine. Microbiology, biotechnology and other clinical laboratory waste. Chemical waste. Chemical liquid waste. Placenta. Post-operative body parts. Plaster of Paris (POP). Pathological waste. Cotton waste. Dressing materials. Beddings. Body fluid contaminated paper and cloth. Face mask, cap, shoe cover and head cover. Cytotoxic, expired and discarded medicines. Microbiology and biotechnology lab waste. Blood bag Vacutainers with blood Incineration. Plasma pyrolysis. Deep burial. Red (Option B ruled out) Contaminated waste that is recyclable. Syringe without needles. Fixed needle syringes with their needle cut. IVset. Catheters. Gloves (soiled or unsoiled). Urine bag. Dialysis kit. IVbottles. Tubing's. Bottles. Vacutainers with needle cut. Vacutainers without blood. ELISA plate and vials not containing blood samples. Autoclaving or microwaving/ hydroclaving followed by shredding or mutilation and waste set to registered recyclers or for energy recovery/road making. Plastic waste should not be sent to landfill sites. White (Option D) Waste Sharps Needles Syringes with fixed needles Blades Scalpers Trocar cannula Insulin pen needle Puncture proof , Leak proof, Tamper proof containers Autoclaving or dry heat sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete Or sent for final disposal to iron foundries or sanitary landfill or designated concrete waste sharp pit Blue (Option C ruled out) Glassware or metallic body implants. Includes broken or discarded glass and metallic objects that are contaminated. Glass: Broken glass. Ampoules. Lab slide Metals: Nails. Metallic body implants. Scissors. Artificial pacemakers. Cardboard boxes with blue coloured marking or blue coloured puncture- proof and tamper-proof containers. Disinfection (cleaning with detergent and soaking in sodium hypochlorite) or autoclaving or microwaving or hydroclaving and then sent for recycling.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: In controlled tipping, the amount of land required for the trench method to be practiced for a population of 10,000 is: (Q857701)

A. 4 acres

B. 5 acres

C. 2 acres

D. 1 acre

Correct Answer: D. 1 acre

Explanation: umping: Unsatisfactory; becomes a nuisance. 2. Controlled Tipping (Sanitary Landfill): Most satisfactory; achieved via trench, ramp, and area methods. Modified Sanitary Landfill: Compacting and covering are done once or twice a week Methods of controlled tipping a. Trench Method: Used on level ground. Most important method Dug on level ground, 2-3 meters deep and 4-12 meters wide. For a population of 10,000, a 2-meter-deep trench requires 1 acre of land. b. Ramp Method: For moderately sloping terrain c. Area Method: Requires supplemental earth, used in depressions or quarries. Technique in controlled tipping Physical, chemical, and bacteriological changes occur in buried refuse. Temperature rises to 60°C after 7 days, killing pathogens, followed by decomposition. Organic matter decomposes into innocuous soil in 4-6 months, used as manure Cooling occurs within 2-3 weeks. Final product: Manure used in farming.

References:

https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=3292&context=roadschool#:~:text=Sanitary%20landfill%20is%20the%20most,have%20an%20air%20pollution%20problem.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: What is the duration of the extended sickness benefit provided to an employee who has been diagnosed with TB? (Q854834)

A. 1 year

B. 2 years

C. 3 years

D. 4 years

Correct Answer: B. 2 years

Explanation: Correct option: B) 2 years The extended sickness benefit according to the ESI act of 1948 is for a period of 2 years at 80 % of daily wages. It is provided for 34 Diseases including TB, leprosy, HIV and mental illness etc. Benefits of ESI(Employees State Insurance) Act. Medical Benefit Provides "full medical care," including hospitalization at no cost to insured individuals & families in cases of sickness, employment injury, and maternity. Sickness Benefit Provides 70% of average daily wages in cash during medical leave for a maximum of 91 days within 365 days, as certified by the Insurance Medical Officer/Practitioner. Extended Sickness Benefit Extended coverage for long-term diseases beyond 91 days; 34 diseases covered if employed for two years. Extended sickness benefit is paid at 80% of the insured person's wages. Enhanced Sickness Benefit Cash benefits (100% wages) for sterilisation procedures: 14 days for tubectomy (women), 7 days for vasectomy (men). Maternity Benefit Cash payments for childbirth, miscarriage, or pregnancy-related sickness: 26 weeks for childbirth, 6 weeks for miscarriage, and 40 days for pregnancy-related sickness. Paid at 100% of the insured woman's average daily wages. Disablement Benefit Temporary Disablement Benefit (TDB): 90% of wages paid from day one for temporary employment injury, until recovery. Permanent Disablement Benefit (PDB): 90% of wages paid monthly for life, based on certified loss of earning capacity. Dependent's Benefit Dependents receive 90% of the deceased's (due to employment injuries) wages as a shared pension, eligible until age 18 or earlier for married daughters. Funeral Expenses Offers a cash payment up to Rs. 15,000 to cover funeral expenses upon the death of an insured individual. Rehabilitation Insured individuals and their families are entitled to continued medical treatment even after permanent disablement or retirement. They have to pay a nominal fee of Rs.10 per month to avail this benefit. Rehabilitation allowance of Rs.15,000 granted. Unemployment allowance For eligible employees due to factory closure or retrenchment: 50% of wage for up to two years.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 900

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which compound is primarily responsible for the disinfectant properties of bleaching powder among the following options? (Q854864)

A. Hypochlorite ion

B. Hydrochloric acid

C. Hypochlorous acid

D. Chloride ion

Correct Answer: C. Hypochlorous acid

Explanation: Correct Option: C) Hypochlorous acid Bleaching powder, or calcium hypochlorite (Ca(ClO)2), serves as both a disinfectant and bleaching agent. When dissolved in water, it releases hypochlorous acid (HOCl) and hypochlorite ion (ClO-) as active disinfectants. Hypochlorous acid, primarily responsible for disinfection, acts as a potent oxidizing agent, effectively killing bacteria, viruses, and fungi. Incorrect Option: Hypochlorite ion

(Option A): Bleaching powder releases hypochlorite ion (ClO-) when dissolved, but its disinfecting power mainly comes from HOCl, more effective due to superior antimicrobial activity than ClO-. Hydrochloric acid (Option B): Bleaching powder doesn't contain hydrochloric acid (HCl). Its disinfecting property stems from chlorine compounds, primarily hypochlorous acid (HOCl), not HCl. Chloride ion (Option D): Bleaching powder releases chloride ions (Cl-) when dissolved but disinfection is primarily from HOCl formed by hypochlorite ions reacting with water. Cl- lacks significant disinfecting properties

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 67

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following items is placed in the yellow bag for disposal? (Q858449)

A. Blood bag

B. IV set

C. Sharps

D. Needle

Correct Answer: A. Blood bag

Explanation: Correction Option A - Blood bag Blood bag is disposed of in yellow bag Colour Type of waste Example of waste Treatment and disposal Yellow Human anatomical waste. Animal anatomical waste. Soiled waste. Discarded or expired medicine. Microbiology, biotechnology and other clinical laboratory waste. Chemical waste. Chemical liquid waste. Placenta. Post-operative body parts. Plaster of Paris (POP). Pathological waste. Cotton waste. Dressing materials. Beddings. Body fluid contaminated paper and cloth. Face mask, cap, shoe cover and head cover. Cytotoxic, expired and discarded medicines. Microbiology and biotechnology lab waste. Blood bag (Option A) Vacutainers with blood Incineration. Plasma pyrolysis. Deep burial. Red Contaminated waste that is recyclable. Syringe without needles. Fixed needle syringes with their needle cut. IVset. Catheters. Gloves (soiled or unsoiled). Urine bag. Dialysis kit. IVbottles. Tubing's. Bottles. Vacutainers with needle cut. Vacutainers without blood. ELISA plate and vials not containing blood samples. Autoclaving or microwaving/ hydroclaving followed by shredding or mutilation and waste set to registered recyclers or for energy recovery/road making. Plastic waste should not be sent to landfill sites. White Waste Sharps (Option C) Needles Syringes with fixed needles Blades Scalpers Trocar cannula Insulin pen needle Puncture proof , Leak proof, Tamper proof containers Autoclaving or dry heat sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete Or sent for final disposal to iron foundries or sanitary landfill or designated concrete waste sharp pit Blue Glassware or metallic body implants. Includes broken or discarded glass and metallic objects that are contaminated. Glass: Broken glass. Ampoules. Lab slide Metals: Nails. Metallic body implants. Scissors. Artificial pacemakers. Cardboard boxes with blue coloured marking or blue coloured puncture- proof and tamper-proof containers. Disinfection (cleaning with detergent and soaking in sodium hypochlorite) or autoclaving or

microwaving or hydroclaving and then sent for recycling.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 40

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: What type of bags are used for the disposal of chemical waste? (Q858456)

A. Yellow

B. White

C. Red

D. Green

Correct Answer: A. Yellow

Explanation: Correct Option A - Yellow Colour Type of waste Example of waste Treatment and disposal Yellow (Option A) Human anatomical waste. Animal anatomical waste. Soiled waste. Discarded or expired medicine. Microbiology, biotechnology and other clinical laboratory waste. Chemical waste. Chemical liquid waste. Placenta. Post-operative body parts. Plaster of Paris (POP). Pathological waste. Cotton waste. Dressing materials. Beddings. Body fluid contaminated paper and cloth. Face mask, cap, shoe cover and head cover. Cytotoxic, expired and discarded medicines. Microbiology and biotechnology lab waste. Blood bag Vacutainers with blood Incineration. Plasma pyrolysis. Deep burial. Red (Option C) Contaminated waste that is recyclable. Syringe without needles. Fixed needle syringes with their needle cut. IVset. Catheters. Gloves (soiled or unsoiled). Urine bag. Dialysis kit. IVbottles. Tubing's. Bottles. Vacutainers with needle cut. Vacutainers without blood. ELISA plate and vials not containing blood samples. Autoclaving or microwaving/ hydroclaving followed by shredding or mutilation and waste set to registered recyclers or for energy recovery/road making. Plastic waste should not be sent to landfill sites. White (Option B) Waste Sharps Needles Syringes with fixed needles Blades Scalpers Trocar cannula Insulin pen needle Puncture proof , Leak proof, Tamper proof containers Autoclaving or dry heat sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete Or sent for final disposal to iron foundries or sanitary landfill or designated concrete waste sharp pit Blue Glassware or metallic body implants. Includes broken or discarded glass and metallic objects that are contaminated. Glass: Broken glass. Ampoules. Lab slide Metals: Nails. Metallic body implants. Scissors. Artificial pacemakers. Cardboard boxes with blue coloured marking or blue coloured puncture- proof and tamper-proof containers. Disinfection (cleaning with detergent and soaking in sodium hypochlorite) or autoclaving or microwaving or hydroclaving and then sent for recycling. Incorrect Options: Green (Option D) is used for general waste and not biomedical waste.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 900

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A 38-year-old man visits a Suraksha Clinic with complaints of anorectal discharge. According to the National AIDS Control Organisation (NACO) guidelines for syndromic management of sexually transmitted infections (STIs), which color-coded kit should be used for treatment? (Q859930)

A. Brown

B. Green

C. White

D. Blue

Correct Answer: A. Brown

Explanation: Suraksha Clinics: Integrating STI/RTI Treatment and HIV/AIDS Control Government STI/RTI clinics, branded as "Suraksha Clinics," offer free standardized integrated STD and RTI treatment services at district-level and above healthcare facilities. Under National AIDS Control Program (NACP) Referral Centers STD Clinics at district, block, and First Referral Unit (FRU) levels act as referral centers for specialized treatment. Counselling and Condom Distribution Counselling services and high-quality condoms are provided to promote safer sexual practices. Utilizes the expertise of NGOs in providing counselling services at STD clinics. Training and strengthening existing centers Existing STD clinics in hospitals and medical colleges are strengthened with technical support, equipment, Training for medical staff to manage STDs/RTIs using a syndromic approach. Pre-packed STI/RTI Color-Coded Kits Free pre-packed kits provided to clinics, centrally procured and distributed through State AIDS Control Societies. Kit No. Color Syndrome treated 1 Grey Urethral discharge (male) 2 Green Vaginal discharge (female) 3 White Cervical discharge (female) 4 Blue Lower abdominal pain (female) 5 Red Genital ulcer – non-herpetic 6 Yellow Genital ulcer – herpetic 7 Black Inguinal bubo 8 Brown Anorectal discharge



References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg 501

https://naco.gov.in/sti-rti-services

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A nurse got an accidental prick from a needle used for an HIV+ patient. Which single test would lead to a confirmatory diagnosis in her? (Q859958)

A. p24 antigen

B. PCR

C. HIV ELISA

D. Western blot assay

Correct Answer: D. Western blot assay

Explanation: LABORATORY DIAGNOSIS OF HIV INFECTION Screening tests ELISA screens for HIV antibodies (most sensitive) (Option C ruled out) Confirmatory tests Western blot - A confirmatory test confirms specific antibodies against p24 and gp41 proteins. (highly specific) (Option D) Confirmatory test for adults - qPCR for HIV1 (Option B ruled out) Confirmatory tests of infants < 1 year - HIV DNA RT-PCR Virus Isolation Direct virus testing is not standard; HIV isolation from cultured lymphocytes is costly and resource-intensive. CD4

Lymphocyte Count Most reliable predictor of HIV progression; absolute count indicates immune system health, with <200 cells/µL signalling a high risk of AIDS-related infections. CD4 Lymphocyte Percentage Independent indicator of disease progression; <14% suggests a heightened risk of AIDS-related complications. HIV Viral Load Tests Measure actively replicating HIV in blood; correlate with disease progression and assess antiretroviral therapy effectiveness. Other Markers Beta-2 microglobulin (B2M) levels and p24 antigen presence indicate immune activation and viral replication, aiding disease assessment. P24 antigen tests positive in the window period (Option A ruled out)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg 400 - 401

https://www.ncbi.nlm.nih.gov/books/NBK482145/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Which organization is responsible for gathering and regularly publishing extensive surveys on morbidity, family planning, and vital events? (Q859974)

A. AIIMS

B. National sample survey

C. Sample registration system

D. Central Bureau of Health

Correct Answer: B. National sample survey

Explanation: The National Sample Survey Office(NSSO) headed by a Director General conducts large scale sample surveys in diverse fields throughout India. National Sample Survey Office(NSSO): Primarily data are collected through nation-wide household surveys. NSSO also collects data on rural and urban prices and plays a significant role in the improvement of crop statistics. It also maintains a frame of urban area units for use in sample surveys in urban areas. Four divisions of NSSO: Survey Design and Research Division (SDRD) Field Operations Division (FOD) Data Processing Division (DPD) Survey Coordination Division (SCD)



References:

https://www.mospi.gov.in/national-sample-survey-officensso

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: A factory worker sustained burns covering 25% of his body while on duty. He later developed infections and complications related to the injury. Under the ESI Act, which of the following benefits is he eligible for? (Q866780)

A. Dependants' Benefit

B. Sickness Benefit

C. Extended Sickness Benefit

D. Enhanced Sickness Benefit

Correct Answer: C. Extended Sickness Benefit

Explanation: Under the Employees' State Insurance (ESI) Act, Extended Sickness Benefit is provided to insured workers suffering from long-term illnesses that require prolonged treatment, including conditions that may develop as complications from injuries sustained at work. Since the factory worker's burns led to infections and complications, he qualifies for extended sickness benefit, which is available for up to 2 years for specified diseases. Extended Sickness Benefit: Definition: Paid benefit under the ESI Act for insured persons suffering from certain long-term diseases requiring extended treatment. Eligibility: Must be an ESI-insured employee. Must suffer from a disease on the prescribed list of 34 long-term diseases (including certain complications from burns and injuries). Medical certification required. Duration & Rate: Up to 2 years at a higher daily rate than the standard sickness benefit (usually 140% of standard rate). Purpose: To ensure continued income for workers during prolonged illness. Dependants' Benefit (Option A): For dependants of an insured person who dies due to employment injury or occupational disease; not applicable here. Sickness Benefit (Option B): Regular sickness benefit for up to 91 days in two benefit periods; not applicable for prolonged illness. Enhanced Sickness Benefit (Option D): For sterilization procedures with higher compensation for a short duration; not applicable in this case.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: According to the Biomedical Waste Management Rules, in which color-coded bag should used cotton swabs contaminated with blood or body fluids be disposed of? (Q857699)

A. Yellow

B. Red

C. Blue

D. Transparent

Correct Answer: A. Yellow

Explanation: ontaminated waste (recyclable) : Tubing, bottles, intravenous tubes and sets, catheters, urine bags , syringes (without needles), vacutainers and gloves. Red coloured non chlorinated plastic bags. Autoclaving or microwaving/hydroclaving, and then sent for recycling (not to landfill). Blue Glassware: Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic waste. Metallic body implants . Cardboard boxes with blue coloured markings. Disinfection or autoclaving/microwaving, hydroclaving and then sent to recycling. White Waste sharps including metals: Needles, syringes with fixed needles, scalpels or any other sharp object that may cause puncture and cuts. Puncture proof and leak proof containers. Auto or dry heat sterilization followed by shredding and mutilation or encapsulation.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 918 - 920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: What are the potential health risks faced by workers in a sugarcane factory? (Q857148)

A. Anthracosis

B. Siderosis

C. Bagassosis

D. Byssinosis

Correct Answer: C. Bagassosis

Explanation: aused by - Inhalation of sugar cane fibers, cardboard industry and paper industry. Infested by a fungus known Thermoactinomyces sacchari. Reported in India by two people- Ganguly and Pal. X-ray findings: Mottling of lung fields. Bagasse control: Keep the moisture content more than 20% and also spray the bagasse with 2% propionic acid. Anthracosis (Option A): is a lung disease caused by the inhalation of coal dust. Siderosis (Option B): is a lung disease caused by the inhalation of iron dust or particles. Byssinosis (Option D): also known as "brown lung disease," is primarily associated with exposure to dust from textile materials such as cotton, flax, or hemp.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 933

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7724370/#:~:text=Bird%20Fancier's%20Lung%20is%20a,common%20causes%20of%20hypersensitivity%20pneumonitis.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: In biomedical waste management, waste placed in which color-coded bag is typically disposed of by incineration? (Q857083)

A. Yellow

B. Red

C. Blue

D. Black

Correct Answer: A. Yellow

Explanation: ontaminated waste (recyclable) : Tubing, bottles, intravenous tubes and sets, catheters, urine bags , syringes (without needles), vacutainers and gloves. Red coloured non chlorinated plastic bags. Autoclaving or microwaving/hydroclaving, and then sent for recycling (not to landfill). Blue (Option C) Glassware: Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic waste. Metallic body implants . Cardboard boxes with blue coloured markings. Disinfection or autoclaving/microwaving, hydroclaving and then sent to recycling. White Waste sharps including metals: Needles, syringes with fixed needles, scalpels or any other sharp object that may cause puncture and cuts. Puncture proof and leak proof containers. Auto or dry heat sterilization followed by shredding and mutilation or encapsulation. Black bags (Option D): are typically managed through landfill or other standard waste management methods.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 918 - 920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: Heart of sewage disposal plant: (Q860028)

A. Primary sedimentation tank

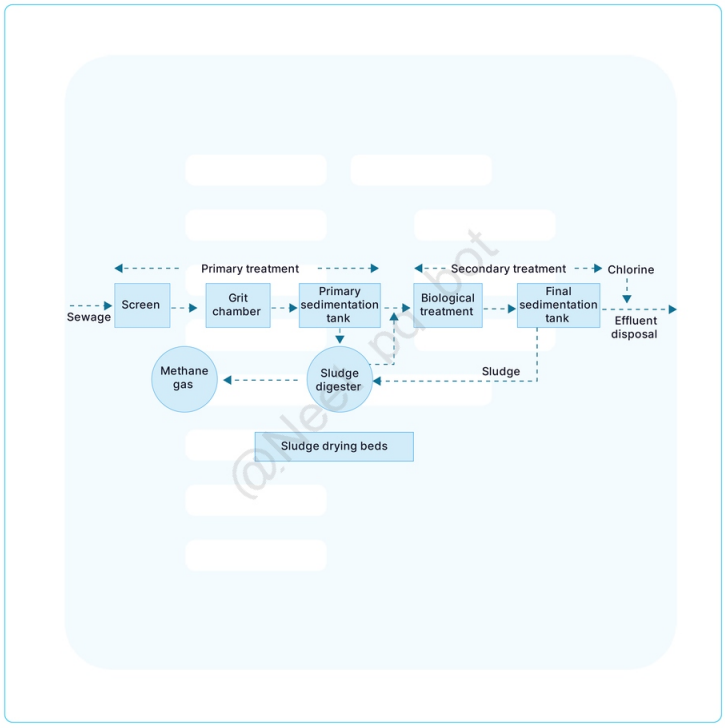
B. Aeration tank

C. Secondary sedimentation tank

D. Sludge digestion tank

Correct Answer: B. Aeration tank

Explanation: The aeration tank is the heart of sewage treatment. In this stage, the effluent from the primary sedimentation tank is subjected to aerobic oxidation, promoting the growth of microorganisms that break down organic pollutants in the sewage. Sewage treatment plant: Primary treatment involves screening, a grit chamber, and a plain sedimentation tank. The process is anaerobic digestion. Secondary treatment involves either the trickling filter or the activated sludge process. The process involves aerobic oxidation The activated sludge process is an easier method as it requires less process and involves an aeration tank. This process is essential for effectively reducing biochemical oxygen demand (BOD) and improving the quality of the treated effluent. Trickling filter is a biological filter that uses microorganisms to remove organic matter and nitrogen from wastewater . Sedimentation tank is stage three of sewage treatment. Incorrect Options: Options A, C, and D are components of the sewage treatment plant, but they are less essential as compared to the aeration tank.



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References:

Park’s textbook of preventive and social medicine 27th edition, page: 889

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: What is the recommended area per worker in a factory, considering that any height above a specified limit is not taken into account? (Q860024)

A. 100 cubic feet

B. 500 cubic feet

C. 300 cubic feet

D. 400 cubic feet

Correct Answer: B. 500 cubic feet

Explanation: According to the Factory Act of 1948, the recommended minimum space per worker is 500 cubic feet. This regulation is in place to ensure that workers have enough space to work comfortably and safely, reducing

the risk of accidents and health issues that can arise from overcrowding. Factory Act Definition An establishment employing 10 or more workers where power is used or 20 or more workers where power is not used. Applicability Applies to all of India and covers all factories, including perennial and seasonal factories. Age Restrictions Prohibits employment of children below 14 years of age. 15-18 year olds need fitness certificate for factory work from a certified surgeon Hours of Work Work limited to 48 hours/week or 9 hours/day; max 60 hours/week with overtime. Adolescents: max 4.5 hours/day. Women and adolescents: work hours 6 am to 7 pm. Leave Grants 1 day of leave per 15 days of work for adolescents 1 day per 30 days of work for adults. Permits accumulation of leaves up to 40 days for adolescents and 30 days for adults. Health & Safety Mandates a minimum of 500 cubic feet of space per worker. Requires 1 safety officer per 1000 workers. Welfare Stipulates 1 welfare officer per 500 workers, 1 canteen per 250 workers, and 1 crèche per 30 women workers.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

labour.gov.in/sites/default/files/factories_act_1948.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: Which pneumoconiosis is caused by exposure to cotton dust? (Q860006)

A. Byssinosis

B. Bagassosis

C. Anthracosis

D. Silicosis

Correct Answer: A. Byssinosis

Explanation: Byssinosis: Common among workers exposed to cotton, flax, or hemp dust, primarily in the textile manufacturing industry. Bagassosis (Option B): an occupational lung disease caused by inhaling bagasse (sugarcane dust). Caused by Thermoactinomyces sacchari with ymptoms include breathlessness, cough, hemoptysis, slight fever, and acute diffuse bronchiolitis. Chest X-ray may show lung mottling or shadowing and impaired pulmonary function. Anthracosis or Coal Workers' Pneumoconiosis (aka "black lung disease") (Option C) : This condition affects workers in coal mining due to inhalation of coal dust. Silicosis (Option D): Often occurs in workers exposed to silica dust in industries like mining and quarrying.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: Patients requiring immediate life-threatening care are categorized under which of the following triages? (Q839887)

A. Red

B. Yellow

C. Green

D. Black

Correct Answer: A. Red

Explanation: Correct Option A – Red: The red category in triage is for patients who need immediate medical attention to save their lives. This includes conditions such as severe bleeding, major trauma, or cardiac arrest. Incorrect Options: Option B – Yellow: The yellow category in triage is for patients who need urgent care but are not immediately life-threatening. Option C - Green: The green category in triage is for patients with minor injuries who can wait for treatment. Option D – Black: The black category in triage is for patients who are deceased or whose injuries are so severe that survival is unlikely.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: The needle with the syringe is disposed of in which container? (Q860558)

A. Yellow

B. Red

C. Blue

D. White

Correct Answer: D. White

Explanation: Needle with a syringe/syringes with fixed needles should be disposed of in a white puncture proof, tamper-proof bag/container. Colour Type of waste Example of waste Treatment and disposal Yellow (Option A) Human anatomical waste. Animal anatomical waste. Soiled waste. Discarded or expired medicine. Microbiology,

biotechnology and other clinical laboratory waste. Chemical waste. Chemical liquid waste. Placenta. Post-operative body parts. Plaster of Paris (POP). Pathological waste. Cotton waste. Dressing materials. Beddings. Body fluid contaminated paper and cloth. Face mask, cap, shoe cover and head cover. Cytotoxic, expired and discarded medicines. Microbiology and biotechnology lab waste. Blood bag Vacutainers with blood Incineration. Plasma pyrolysis. Deep burial. Red (Option B) Contaminated waste that is recyclable. Syringe without needles. Fixed needle syringes with their needle cut. IVset. Catheters. Gloves (soiled or unsoiled). Urine bag. Dialysis kit. IVbottles. Tubing's. Bottles. Vacutainers with needle cut. Vacutainers without blood. ELISA plate and vials not containing blood samples. Autoclaving or microwaving/ hydroclaving followed by shredding or mutilation and waste set to registered recyclers or for energy recovery/road making. Plastic waste should not be sent to landfill sites. White (Option D) Waste Sharps Needles Syringes with fixed needles Blades Scalpers Trocar cannula Insulin pen needle Puncture proof , Leak proof, Tamper proof containers Autoclaving or dry heat sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete Or sent for final disposal to iron foundries or sanitary landfill or designated concrete waste sharp pit Blue (Option C) Glassware or metallic body implants. Includes broken or discarded glass and metallic objects that are contaminated. Glass: Broken glass. Ampoules. Lab slide Metals: Nails. Metallic body implants. Scissors. Artificial pacemakers. Cardboard boxes with blue coloured marking or blue coloured puncture- proof and tamper-proof containers. Disinfection (cleaning with detergent and soaking in sodium hypochlorite) or autoclaving or microwaving or hydroclaving and then sent for recycling.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 918-920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: Arrange the order of the Disaster management cycle (Q860548)

A. Impact-response-rehabilitation-mitigation

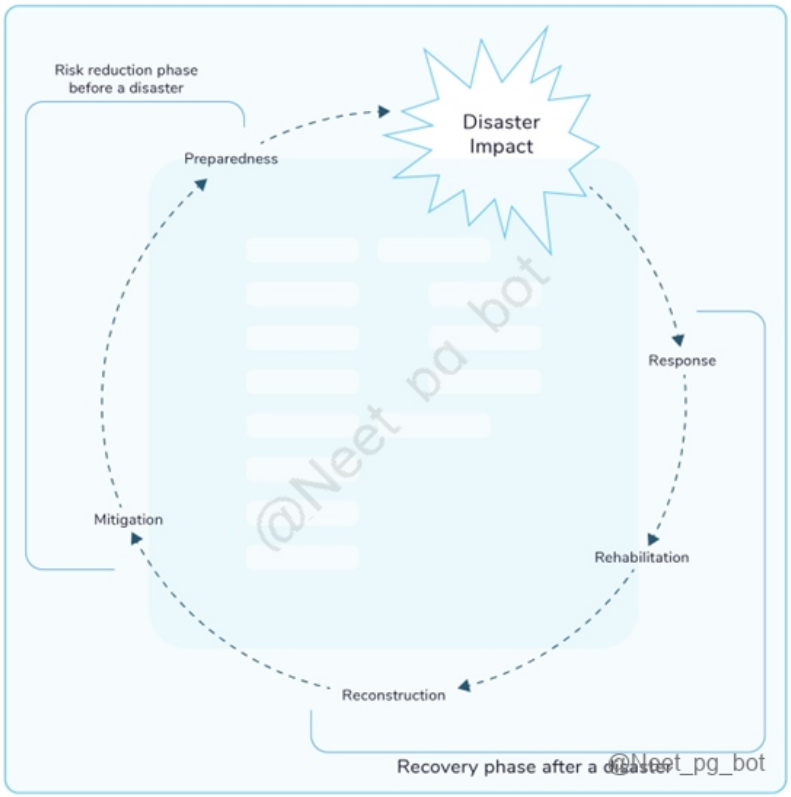
B. Rehabilitation-response-impact-mitigation

C. Response-disaster-rehabilitation-mitigation

D. Impact-mitigation-response-rehabilitation

Correct Answer: A. Impact-response-rehabilitation-mitigation

Explanation: Correct Option: A) Impact-response-rehabilitation-mitigation Disaster management cycle: The three fundamental aspects of disaster management: Disaster impact: Involves disaster response and relief. Disaster preparedness: It is the proper equipment of the country to manage disasters. Disaster mitigation: Preventing the hazard from becoming a disaster.



References:

Park 27e, pg no:923 (including image)

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: What is the correct order of disaster management steps? (Q844104)

A. Impact-Response- Rehab-Mitigation

B. Response- Rehab- Mitigation- Impact

C. Rehab- mItigation-Response-Impact

D. Mitigation-Response-Impact-Rehab

Correct Answer: A. Impact-Response- Rehab-Mitigation

Explanation: Correct Option A: Impact - Response - Rehab - Mitigation Impact : Refers to the immediate consequences of the disaster. Response : Actions taken to address the immediate needs and mitigate further damage. Rehab : Short for rehabilitation, involving recovery efforts and rebuilding. Mitigation : Long-term strategies to reduce the risk of future disasters. Incorrect Options: Option B, C and D are incorrect as given above.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: Which of the following phases of the disaster management cycle occur before disaster strike? Response Rehabilitation Mitigation Preparedness (Q844070)

A. 1 and 2

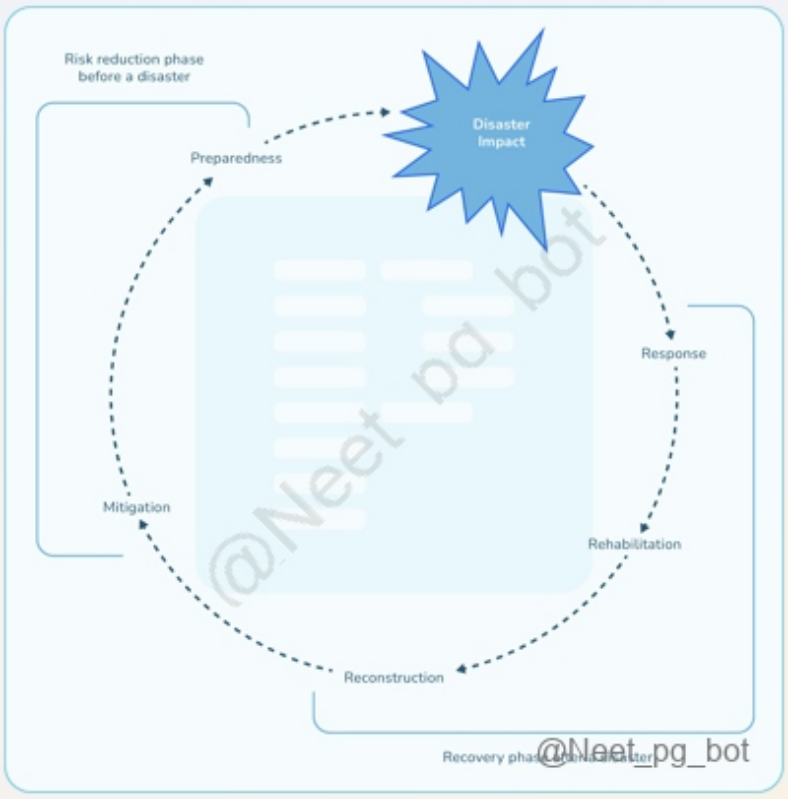
B. 1 and 3

C. 3 and 4

D. 2 and 4

Correct Answer: C. 3 and 4

Explanation: Before disaster strike: Mitigation and preparedness After disaster strike: Response and rehabilitation phase Disaster management cycle



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 923

↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: Which of the following occupational exposures is most strongly associated with the development of mesothelioma? (Q866885)

A. Asbestos exposure

B. Silica dust

C. Cotton dust

D. Coal dust

Correct Answer: A. Asbestos exposure

Explanation: Mesothelioma, particularly malignant pleural mesothelioma , is strongly linked to occupational exposure to asbestos fibers. Asbestos can be inhaled during mining, manufacturing, or use in construction materials, and the fibers lodge in the pleura, causing chronic inflammation and carcinogenesis. The latency period is typically very long (20–40 years). Asbestos: Group of naturally occurring silicate minerals with heat resistance and insulating properties. Types: Chrysotile (serpentine), amosite, crocidolite (amphiboles — more carcinogenic). Health effects: Asbestosis (interstitial lung fibrosis). Lung carcinoma (Most common) Malignant mesothelioma (pleura, peritoneum, pericardium): Most specific. Benign pleural plaques and effusions. Pathogenesis: Inhaled fibers → persistent pleural irritation → chronic inflammation & DNA damage → malignant transformation. Silicosis Sandstone industry, granite industry. Pottery industry, ceramic industry, gold, mica and steel industry, glass factory, building and construction work, rock mining Asbestosis Cement factory, fireproof industry, construction, airplanes Anthracosis Coalmines Baritosis Photography, printing, barium diagnostic works Byssinosis Textile industry Bagassosis Cane sugar factories, paper and cardboard factories-Fibrous residue from bagasse used in paper factories Farmer's lung Agricultural industry Siderosis Iron mines, Iron, and steel industry Occupations at risk: Shipyard workers, construction, insulation manufacturing, asbestos mining. Silica dust (Option B): Causes silicosis and increases risk of TB and lung cancer, but not strongly linked to mesothelioma. Cotton dust (Option C): Associated with byssinosis (“Monday fever”); no direct link to mesothelioma. Coal dust (Option D): Causes coal workers’ pneumoconiosis (“black lung disease”); no direct link to mesothelioma.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: A study was conducted among nursing staff to analyze the time spent on different aspects of patient care, such as bed preparation, monitoring vital signs, attending the doctor’s rounds, blood sampling, and drug administration. Which of the following management techniques is most appropriate for this type of analysis?

(Q866786)

A. Critical Path Method

B. System Analysis

C. Work Sampling

D. Time and Motion Study

Correct Answer: C. Work Sampling

Explanation: The study in the question focuses on estimating how much time nursing staff spend on various activities across the day, but not by continuously timing each task from start to finish. Work Sampling is the appropriate method here because it involves taking observations at random intervals to determine the proportion of time spent on different activities. Work Sampling: Definition: A statistical technique for determining the proportion of time spent on various activities by making observations at random intervals. Purpose: Assess workload distribution. Identify major time-consuming activities. Provide data for staffing and scheduling decisions. Applications in Healthcare: Studying nurse-patient interaction time. Determining how much time doctors spend in direct patient care vs. paperwork. Evaluating efficiency in diagnostic labs. Critical Path Method (Option A) : Project management technique for scheduling dependent tasks; not for estimating activity time proportions. System Analysis (Option B): Studies entire systems and processes; too broad for specific activity-time proportion studies. Time and Motion Study (Option D): Continuous observation of each step of a task; gives detailed task timings but is more intrusive and detailed than required for this study.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: What is used to clean up blood spills in the operation theater? (Q793778)

A. Chlorine compound

B. Phenolic compound

C. Quaternary ammonium compounds

D. Alcoholic compounds

Correct Answer: A. Chlorine compound

Explanation: Correct Options A : Chlorine compound An effective disinfectant against a variety of pathogens, including viruses, bacteria, and fungi, chlorine compounds, such as sodium hypochlorite (bleach), are typically used to clean up blood spills in operating rooms. Strong oxidizing properties of chlorine compounds aid in the destruction of microorganisms and the breakdown of organic matter, including blood. Incorrect Options : Option b: Phenolic compounds are not effective as chlorine compounds as disinfectants. Option c : QAC (Quaternary

ammonium compounds) are also used as a disinfectant for cleaning blood spills in operation theaters but are not as effective as chlorine compounds. Option d: Alcoholic compounds can be used for cleaning blood spills, but they are not effective as chlorine compounds for disinfection.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q33: In the context of biomedical waste disposal, which type of waste is discarded in a yellow bag? (Q793538)

A. Blood bag

B. Gloves

C. Sharps

D. Urine bag

Correct Answer: A. Blood bag

Explanation: Correct Option A: Blood bag The yellow bag is used to dispose of infectious or pathological waste, including blood-soaked items such as blood bags, blood-stained bandages, and cotton swabs. Blood bags contain blood and blood components, which may pose a significant risk of infection if not disposed of correctly. Incorrect Options: Option b : Gloves - Gloves are non-infectious waste and are disposed of in a Red bag. Solid contaminated recyclable waste. Option c: Sharps - Disposed in White box. Sharps are disposed of in a puncture-resistant container labeled with the biohazard symbol. Option d: Urine bag - Urine bags contain human waste, and is disposed of in a red bag.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

• [14_Health Education and Communication] 052 Health Education And Communication

« Back to Folder Directory

[14_Health Education and Communication] 052 Health Education And Communication — Quick Jump

Q1 (p. 1694) *Q2 (p. 1695)* *Q3 (p. 1695)* *Q4 (p. 1696)* *Q5 (p. 1697)* *Q6 (p. 1698)*
Q7 (p. 1699) *Q8 (p. 1699)*

Q1: The Community medicine department set out to an urban community to raise awareness about the importance of hand hygiene in preventing infectious diseases. As part of the campaign, health educators plan to conduct workshops to educate community members about proper handwashing techniques and their benefits. Which of the following is not a principle of health education? (Q840578)

A. Interest

B. Credibility

C. Authoritativeness

D. Feedback

Correct Answer: C. Authoritativeness

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Authoritativeness is not a principle of health education Authoritative teaching often involves one-way communication. This may make the audience feel passive and less engaged. People are more likely to absorb and act on information when they actively participate in the learning process. An authoritarian manner can create a power imbalance and make the audience feel disrespected or mistrusted. Building trust is crucial for effective health education. Principles of health education include: 1. Credibility (Option B) 2. Interest (Option A) 3. Participation 4. Motivation 5. Comprehension 6. Reinforcement 7. Learning by doing 8. Known to unknown 9. Setting an example 10. Good Human Relations 11. Feedback (Option D) 12. Leaders

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 990

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A 35 y/o woman comes to the clinic concerned about vaccinating her child due to information she encountered online suggesting that vaccines cause severe side effects and are part of a government conspiracy. She mentions feeling very emotional and scared after reading several personal stories about vaccine injuries on social media. Which of the following is a feature of the propaganda she has encountered? (Q840581)

A. It is behavior-centered.

B. Promotes reflective behavior in people

C. Develops individuality and personality

D. Appeals to emotion

Correct Answer: D. Appeals to emotion

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The scenario described indicates that the woman has been influenced by propaganda , which is characterized by its use of emotional appeals to persuade individuals. This includes using personal stories, fear, and conspiracy theories to evoke strong emotional responses, leading to fear and mistrust of vaccines. Health education is contrastingly different from propaganda in the following ways: Health Education Propaganda Mode of acquisition Actively acquired knowledge and skills (active thinking). Knowledge (may be false or exaggerated) is instilled in people's minds (facts). Develops Reflective behaviour (Option B) Trains people to use judgment before acting. Individuality, Personality. (Option C) Self-expression. Reflexive behaviour. Aims at impulsive action. A standard pattern of attitudes and behaviours according to what would be used- a set pattern of behaviour. Appeals to Reason Emotion Knowledge acquisition By self-reliant activity Spoon-fed and received Process centered on Behaviour(Option A) : Aims at developing favourable attitudes, habits, and skills. Information: no changes of attitude- behaviour designed.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 987

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A public health campaign aims to reduce smoking rates in a community. The campaign involves spreading awareness about the dangers of smoking, encouraging people to try quitting through support programs, and promoting the success stories of

those who have quit. Which model of health education does this campaign best represent? (Q840586)

A. Medical model

B. Motivation or adoption model

C. Social interventional model

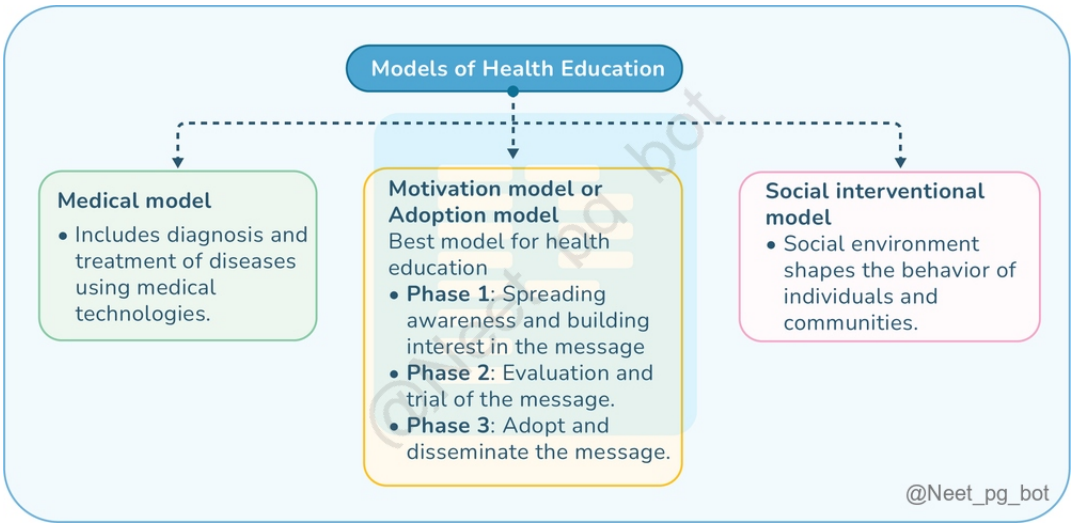
D. Behavioral modification model

Correct Answer: B. Motivation or adoption model

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This campaign follows the phases of the motivation or adoption model of health education: D) Behaviour modification is not a model of health education.



References:

Park Textbook of Preventive and Social Medicine, 27th edition, Pg 988

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A healthcare provider is conducting a patient interview and encounters several barriers to effective communication. Which of the following is not one of them? (Q840589)

A. The patient is geriatric and belongs to a low socio-economic status.

B. The clinic is located in a busy area with constant traffic noise, making it hard to communicate.

C. The patient speaks a different language and has difficulty understanding the provider's instructions.

D. The patient appears distressed and anxious, making it difficult for them to concentrate on the conversation.

Correct Answer: A. The patient is geriatric and belongs to a low socio-economic status.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: While age can sometimes affect communication due to sensory impairments or cognitive decline, it is not inherently considered a barrier unless it leads to specific impairments like hearing loss or dementia. While socioeconomic factors can influence access to healthcare and health education materials, they are not typically classified as direct barriers to communication in the context of conveying health information. Noise pollution is an example of Physical Barrier of communication(Option B) Language barrier is an example of a Cultural Barrier of communication (Option C) Emotional or psychological barriers such as distress and anxiety are examples of Psychological barriers. (Option D)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 984

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: The most effective method of educating the general public about how to perform CPR (Cardiopulmonary resuscitation) is: (Q840591)

A. Flashcards

B. Demonstration

C. Lecture

D. Group discussion

Correct Answer: B. Demonstration

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A demonstration is a carefully prepared presentation to show how to perform a skill or procedure. Here CPR is carried out step by step before the general public and the demonstrator ascertains that the audience

understands how to perform it. Flashcards: This mode of communication primarily relies on visual information and may not provide the hands-on demonstration required for learning the technique of CPR. (Option A) Lecture: While lectures may be effective for sharing knowledge, they might not be as suitable for demonstrating CPR in a patient with cardiac arrest as lectures will not provide the hands-on experience necessary for understanding the CPR Technique. (Option C) Group Discussion: They are more focused on dialogue and may not provide the practical demonstration needed for performing CPR. (Option D)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 992

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A group of 4 experts on cardiac health were invited to interact with an audience of about 100 members. However, they were not given any set agenda to speak upon nor did they have any set speeches. They are allowed to discuss among themselves during the event as well and there is no set order of speaking. What kind of event were they invited to? (Q840593)

A. Panel discussion

B. Symposium

C. Workshop

D. Seminar

Correct Answer: A. Panel discussion

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In a panel discussion, 4 to 8 persons who are qualified to talk/ discuss the topic sit and discuss a given problem or topic in front of a large group or audience, without a set agenda or order of speaking and with audience interaction at the end of the discussion. Symposium: In contrast to a panel discussion, a symposium involves 4-8 experts talking on a given topic with set agendas, speeches, and an order of speaking. . (Option B) Panel discussion Symposium 4-8 experts 4-8 experts Two-way or Socratic Two-way or Socratic No set agenda Set agenda Not set speeches Set speeches No set order of speaking Set order of speaking Audience is present Audience is present Experts can discuss among themselves (they can intervene in between) Experts cannot intervene in between (they cannot discuss among themselves) Feedback can be taken Feedback can be taken Workshop (Option C): A workshop is a practical educational experience in which participants learn new skills or techniques over a series of four or more meetings. Seminar (Option D): A seminar is a lecture-style presentation where a speaker provides information on a particular subject and the audience is allowed to ask questions and participate in a discussion. It has a set agenda and speech.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 993

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following statements best describes the Delphi technique? (Q840596)

A. A method of data collection where participants discuss and agree on a topic in person.

B. A qualitative research method that involves direct observation of participants in their natural environment.

C. A structured communication technique used in health research that relies on a panel of experts answering questionnaires in multiple rounds to achieve consensus.

D. A statistical analysis method used to interpret large datasets through the use of complex algorithms.

Correct Answer: C. A structured communication technique used in health research that relies on a panel of experts answering questionnaires in multiple rounds to achieve consensus.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Delphi method is a structured communication method that depends on a panel of experts. It involves gathering opinions from the panel of experts on a specific issue, summarizing their collective feedback, and repeating this process for several rounds. After each round, the experts share their feedback and the reasoning behind their judgements anonymously. This feedback encourages experts to reconsider and potentially revise their earlier opinions based on the responses of other panel members. Through this process, the range of responses tends to narrow, and the group will reach a consensus. The Delphi method does not involve participants discussing the issues (Option A) or natural observation (Option B) or statistical analysis (Option D).

References:

Use of Delphi in health sciences research: A narrative review - PMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which counseling approach is used in family planning to provide structured and supportive communication to clients? (Q840601)

A. SPIKES approach

B. Flannel graph

C. Flipcharts

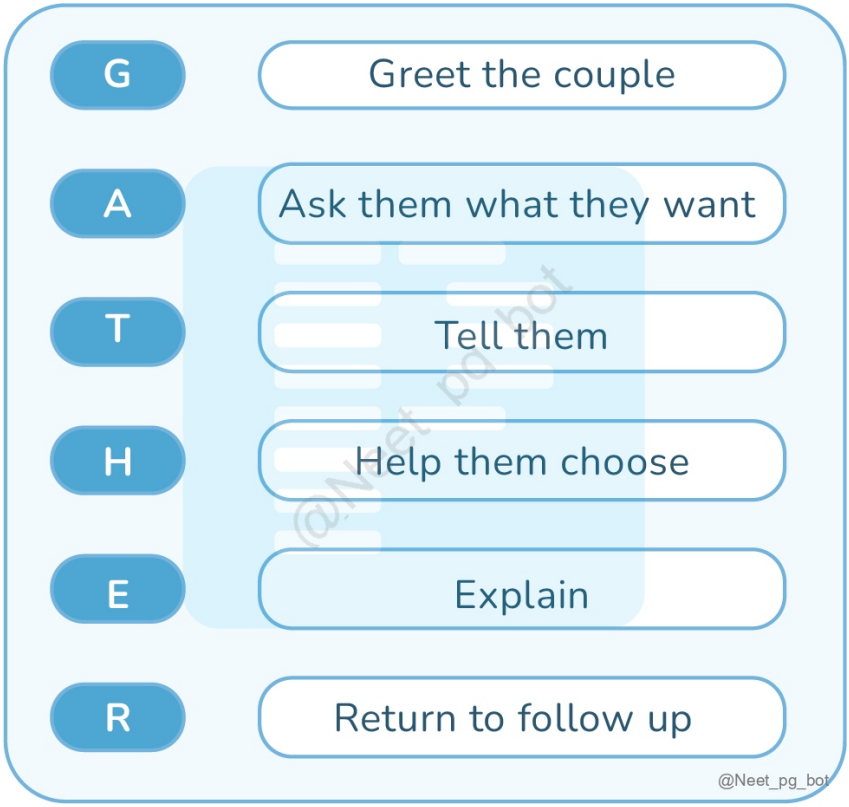
D. GATHER approach

Correct Answer: D. GATHER approach

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The GATHER approach is employed in family planning counseling to offer supportive communication to clients when choosing contraceptive methods. Previously, the cafeteria method involved offering a basket full of contraceptives. The SPIKES approach is utilized when delivering bad news to patients or their families .(Option A) Flannel graph is a piece of flannel fabric with a series of pictures to help narrate stories and is used in health education . (Option B) Flipcharts consist of sequentially organized sheets, similar to a small calendar, presenting key health information through illustrations, diagrams, and text, making it easier to engage audiences during presentations and discussions . (Option C)





References:

https://www.aiims.edu/aiims/events/Gynaewebsite/ec_site/manual/1_3_1.htm

www.ncbi.nlm.nih.gov/pmc/articles/PMC5578619/

↑ *Back to this question in Part A*

@Neet_pg_bot

• [14_Health Education and Communication] 053 Previous Year Questions

« Back to Folder Directory

[14_Health Education and Communication] 053 Previous Year Questions — Quick Jump

Q1 (p. 1702)	*Q2 (p. 1702)*	*Q3 (p. 1703)*	*Q4 (p. 1704)*	*Q5 (p. 1705)*	*Q6 (p. 1706)*
Q7 (p. 1707)	*Q8 (p. 1708)*	*Q9 (p. 1709)*	*Q10 (p. 1709)*	*Q11 (p. 1710)*	*Q12 (p. 1711)*
Q13 (p. 1711)	*Q14 (p. 1712)*	*Q15 (p. 1713)*	*Q16 (p. 1713)*	*Q17 (p. 1714)*	*Q18 (p. 1715)*

Q1: Which of the following statements accurately reflects the truth about health propaganda? (Q858075)

A. It is actively acquired

B. It appeals to emotions

C. It is behaviour centred

D. It aids in developing a reflective behaviour

Correct Answer: B. It appeals to emotions

Explanation: Health propaganda is designed to influence or persuade people's attitudes, beliefs, and behaviors regarding health-related issues. It typically appeals to emotions rather than logic, aiming to evoke strong feelings to drive action, such as fear, empathy, or excitement. It is actively acquired (Option A): is incorrect because health propaganda is often passively received through media, advertisements, and campaigns, rather than being actively sought out by the audience. It is behavior centered (Option C): is incorrect because health propaganda doesn't primarily focus on modifying behavior directly but rather on altering perceptions or attitudes through emotional appeal. It aids in developing a reflective behavior (Option D): is incorrect because health propaganda tends to focus on immediate emotional responses rather than encouraging reflective, thoughtful behavior change that requires deeper cognitive engagement.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 955

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: What is the method employed to gather agreement on predictions among a substantial group of individuals? (Q859203)

A. Television

B. GATHER approach

C. Conferences

D. Delphi method

Correct Answer: D. Delphi method

Explanation: Delphi method is a structured communication method that depends on a panel of experts. It involves gathering opinions from the panel of experts on a specific issue, summarizing their collective feedback, and repeating this process for several rounds. After each round, the experts share their feedback and the reasoning behind their judgements anonymously. This feedback encourages experts to reconsider and potentially revise their earlier opinions based on the responses of other panel members. Through this process, the range of responses tends to narrow, and the group will reach a consensus. The Delphi method does not involve participants discussing the issues or natural observation or statistical analysis. Incorrect Options Television (Option A): It is a medium for broadcasting information and entertainment to a wide audience (mass communication). It is not a structured method for gathering agreement or predictions from a group. Instead, it is typically one-way communication with no direct feedback mechanism to facilitate consensus. GATHER approach (Option B): It is employed in family planning counseling to offer supportive communication to clients when choosing contraceptive methods. Conferences (Option C): They are gatherings where individuals present ideas, research, and discussions. While they allow for the exchange of information and networking, they are not specifically designed to achieve structured consensus or gather collective predictions systematically.

References:

Use of Delphi in health sciences research: A narrative review - PMC

https://www.aiims.edu/aiims/events/Gynaewebsite/ec_site/manual/1_3_1.htm

Park’s Textbook of Preventive and Social Medicine, 26th edition, Pg 983, 984, 993

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: As a Medical Officer in charge of a Primary Health Center, you intend to engage in a conversation and address health concerns specifically with Antenatal mothers. What would be the ideal number of participants you would include in the focus group discussion? (Q857760)

A. 4-6

B. 3-5

C. 6-12

D. 12-15

Correct Answer: C. 6-12

Explanation: - 6-12 This range is generally considered ideal for a focal group discussion. It allows for a sufficient number of participants to provide diverse viewpoints and experiences, while still keeping the group manageable for effective facilitation and participation. Focus group discussion: Key Points Description Data Collection Technique Focus Group Discussion (FGD) is a qualitative method, in the form of two-way communication Participants 6-12 people seated in a circle, guided by a Moderator. Role of Moderator The active role of Leading the FGD by asking 10-12 open-ended, guiding questions. Sociogram Purpose Reflects the quality and interactiveness of the FGD. Sociogram Definition A diagram or chart created by an observer to represent the interaction dynamics during the FGD. Role of Recorder A separate individual is responsible for recording the discussion, with participants' prior permission. Data Analysis Focuses on identifying common themes emerging from the discussion. Communication Style The FGD is interactive and two-way (Socratic), encouraging dialogue among participants and between participants and the Moderator.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition Pg 960, 961

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: What is the term used to describe the act of disseminating a specific organized belief system or political perspective through the use of information with the intention of implanting it in people's minds? (Q857708)

A. Health doctrine

B. Health propaganda

C. Health education

D. Health information

Correct Answer: B. Health propaganda

Explanation: ehaviour: aims at developing favourable attitudes, habits, and skills. Information: no changes of attitude- behaviour designed. Doctrine(Option A): simply means group or set of beliefs held or taught by a group. So, it is not something which can be used to spread a particular systemised doctrine itself. Health information

(Option D): is any data related to a person’s health or disability including previous medical histories, injuries, signs and symptoms, etc.

References:

Park Textbook of Preventive Medicine 27th ed. Pg 987

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: In India, which organization is responsible for promoting health awareness? (Q857143)

A. Central Bureau of health intelligence

B. Indian council of medical research

C. Central health education bureau

D. National health library

Correct Answer: C. Central health education bureau

Explanation: : Has 5 divisions which are as follows: Media and editorial division Health promotion and education School health education division Training division Administrative division Central Bureau of Health Intelligence (CBHI) (Option A): is the health intelligence wing of the Directorate General of Health Services in the Ministry of Health & FW, Government of India. The Indian Council of Medical Research (Option B): (ICMR), New Delhi, the apex body in India for the formulation, coordination and promotion of biomedical research, is one of the oldest medical research bodies in the world. National Health Library (Option D): is not responsible for promotion of health awareness in India.



References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC4776916/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: The most effective approach to educating an urban slum community about oral rehydration solution (ORS) is - (Q857110)

A. Lecture

B. Roleplay

C. Flashcards

D. Demonstration

Correct Answer: D. Demonstration

Explanation: emonstration: is the best method for teaching practical skills, especially in low-literacy or semi-literate communities. It allows individuals to see how ORS is prepared and used, making it easy to

understand and replicate. Visual and hands-on learning are highly effective for retention, especially when dealing with health practices like mixing the correct proportions of water, salt, and sugar for ORS. Reasons why the Demonstration method is highly effective in health education: (a) dramatizes by arousing interest (b) persuades the onlookers to adopt recommended practices (c) upholds the principles of "seeing is believing" and "learning by doing", and (d) can bring desirable changes m the behavior about the use of the new practice. Lecture (Option A): Less engaging, especially in communities with lower literacy or interest in theoretical teaching. Roleplay (Option B): Useful for Life saving skills, but less practical for teaching step-by-step processes like preparing ORS. Flashcards (Option C): Limited effectiveness in communities with low literacy and may not adequately convey the exact preparation technique.

References:

Park Textbook of Preventive Medicine 27th ed. Pg 992

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: In a country like India, which is characterized by its varied cultures and languages, what measures should a physician adopt to effectively communicate with patients and ensure improved treatment results? 1. Insist on good communication 2. Insist on communication only via an interpreter 3. Treat them regardless of their cultural perceptions 4. The physician should consider the patient’s religion and cultural perception (Q855126)

A. 1, 2

B. 2, 3

C. 3, 4

D. 1, 4

Correct Answer: D. 1, 4

Explanation: Insist on good communication : Effective communication is vital for ensuring proper diagnosis, treatment, and patient satisfaction. A physician should prioritize clear, open, and empathetic communication, which is especially important in a diverse cultural and linguistic setting like India. The physician should consider the patient’s religion and cultural perception : Understanding and respecting a patient’s cultural and religious background is essential in providing holistic care. This consideration helps in building trust and in making informed decisions that align with the patient's values and beliefs, which can lead to better treatment outcomes. Incorrect Options: 1, 2 (Option A) : While insisting on good communication is essential, insisting on communication only via an interpreter may not always be the most effective approach, especially when interpreters are not available or when direct communication is possible in a shared language. It is better to attempt direct communication or use an interpreter when necessary rather than relying exclusively on one method. 2, 3

(Option B) : Insisting on communication via an interpreter and treating patients regardless of their cultural perceptions may not be ideal. Ignoring cultural perceptions can lead to misunderstandings and hinder the development of a good patient-physician relationship, which can negatively impact treatment outcomes. 3, 4 (Option C) : Treating patients regardless of cultural perceptions contradicts the idea of respecting the patient's religion and cultural perceptions , which are crucial for effective care. Ignoring cultural perceptions can lead to suboptimal treatment and may even harm the patient's trust in the healthcare system.

References:

Park's Textbook of Preventive and Social Medicine, 25th Edition, Page 918

Hutchison's Clinical Methods, 24th Edition, Page 5, 6, 12

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following Acts is primarily concerned with the protection of personal medical data and privacy in India? (Q865317)

A. PNDT Act

B. DPDP Act

C. HIPAA

D. MTP Act

Correct Answer: B. DPDP Act

Explanation: The Digital Personal Data Protection Act (DPDP), 2023, is concerned with the protection of personal medical data and privacy in India. An Act to provide for the processing of digital personal data in a manner that recognises both the right of individuals to protect their personal data and the need to process such personal data for lawful purposes and for matters connected therewith or incidental thereto. Incorrect Options: PNDT Act (Pre-Conception and Pre-Natal Diagnostic Techniques Act) (Option A) : This Act is designed to prevent female foeticide by regulating the use of prenatal diagnostic techniques. It aims to prohibit sex selection before or after conception but does not deal with the protection of personal medical data or privacy. HIPAA (Health Insurance Portability and Accountability Act) (Option C) : HIPAA is a United States federal law that protects the privacy and security of individuals' medical information. Although it is widely recognized for safeguarding health data, it is not applicable in India. MTP Act (Medical Termination of Pregnancy Act) (Option D) : This Act governs the legal termination of pregnancies in India, setting conditions under which abortion is permitted. It does not address data privacy or the protection of personal medical information.

References:

THE DIGITAL PERSONAL DATA PROTECTION ACT, 2023 (NO. 22 OF 2023) An Act to provide for the processing of digital personal data in

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Giving class in a village for wound care after a dog bite by enacting it is which mode of health communication? (Q858073)

A. Lecture

B. Group discussion

C. Flashcards

D. Demonstration

Correct Answer: D. Demonstration

Explanation: Demonstration involves showing or enacting a process, technique, or skill in a visual and practical manner to the audience. In this case, by enacting wound care for a dog bite, the instructor is visually demonstrating the proper technique to the participants, making it an effective mode of communication. Lecture (Option A): is incorrect because a lecture involves verbally delivering information to an audience, typically in a one-way communication format, without the hands-on, visual demonstration of the technique. Group discussion (Option B): is incorrect because group discussion involves interactive exchange of ideas among participants, rather than a direct demonstration of a technique. Flash cards (Option C): is incorrect because flashcards are visual aids that are typically used to present information in a simplified manner, but they don't involve enacting or demonstrating a process like wound care.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 959- 961

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: The socially acquired learned behaviour is known as? (Q857371)

A. Custom

B. Culture

C. Socialization

D. Mores

Correct Answer: B. Culture

Explanation: Learned behaviour which has been socially acquired. Culture is passed on from one generation to another by learning process (bith formal and informal). Custom (Option A): Established pattern of human behavior. Customs are considered to be a part of culture as a whole. Socialization (Option C): It is the process by which individuals adopt the cultures, customs, traditions, beliefs, and habits of a society and become a part of the society. Mores (Option D): It is social norms that are widely observed within a particular society or culture. Mores determine what is considered morally acceptable or unacceptable within any given culture.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 785, 786, 787

https://en.wikipedia.org/wiki/Mores

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which term refers to the practice of instilling a particular point of view in people's minds and inhibiting their independent thought? (Q860002)

A. Health Propaganda

B. Health Promotion

C. Health Awareness

D. Health Education

Correct Answer: A. Health Propaganda

Explanation: Health Propaganda refers to the practice of instilling a particular point of view in people's minds and inhibiting their independent thought. It involves disseminating information (may be false or exaggerated) that is designed to influence people's opinions and behaviors, often appealing to emotions rather than reason. Incorrect Options: Health Promotion (Option B): Health promotion involves activities aimed at improving overall health and well-being. Health Awareness (Option C): Health awareness is about raising knowledge and understanding of health issues among individuals and communities. Health Education (Option D): Health education involves providing people with accurate information and skills to make informed health decisions. It encourages active thinking and reasoning, aiming to develop reflective behavior and individual judgment.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 967

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: What is the ANMOL program for auxiliary nurse midwives? (Q860550)

A. Tablet-based software

B. TV based

C. Newspaper

D. Telephone-based

Correct Answer: A. Tablet-based software

Explanation: ANMOL (Auxiliary Nurse Midwife Online) is a digital application for tablets designed for Auxiliary Nurse Midwives (ANMs) in India to improve healthcare service delivery. It is a mobile/tablet-based application developed under the National Health Mission (NHM). Features of ANMOL: Digital Data Entry – Helps ANMs record and update data of beneficiaries online. Real-time Tracking – Monitors maternal and child health, immunisation, and nutrition status. Paperless Work – Reduces the burden of maintaining physical registers. Decision Support – Provides alerts and reminders for due services. Integration with RCH Portal – Syncs data with the Reproductive and Child Health (RCH) portal for centralised monitoring. Benefits for ANMs: Increases efficiency in service delivery. Helps track pregnant women and newborns for timely interventions. Ensures accurate and up-to-date health records. ANMOL enhances maternal and child healthcare services by making data accessible, reliable, and easy to use for frontline health workers. Incorrect Options: Option B, C, and D are incorrect

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 281

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: What significant error did the intern make while creating a banner on measures to prevent the spread of non-communicable diseases, as assigned by a group of doctors? (Q860549)

A. Ban smoking in public areas

B. Restrictions on alcohol selling/consumption

C. Shift from PUFA to transfat

D. Decrease additive salts

Correct Answer: C. Shift from PUFA to transfat

Explanation: PUFA are part of dietary recommendations and trans fats are not recommended in a healthy diet. Hence, this is the mistake made by the intern. Incorrect Options: Ban smoking in public areas (Option A): This is correct as smoking has health hazards for both active and passive smokers. Restrictions on alcohol selling/consumption (Option B): This is correct as consumption of alcohol can lead to liver disease. Decrease additive salts (Option D): This correct as additive salts could increase blood pressure.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 472

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: In the health education model, the first step is awareness; the second step is motivation. What is the third step? (Q844117)

A. Reflection

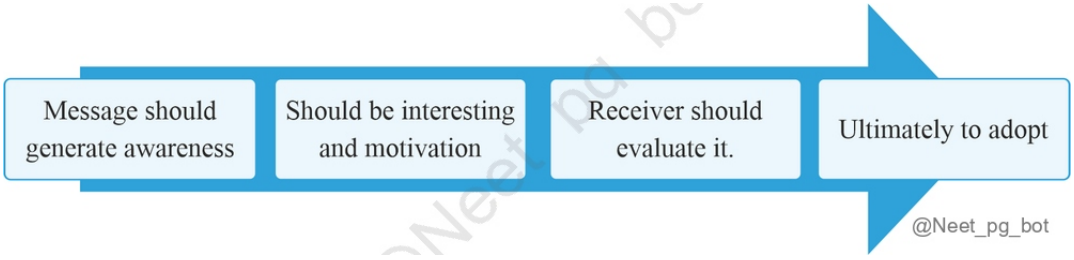
B. Dedication

C. Contemplation

D. Action

Correct Answer: D. Action

Explanation: Correct Option D - Action: In the health education model , the typical sequence of steps is: Awareness → Making the person aware of the health issue. Motivation → Encouraging the person to take action. Action → The person adopts the recommended behavior or practice. Incorrect Options: Options A, B, and C are incorrect, as given above.



References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: A patient does not understand the meaning of the doctor's words. Which type of barrier is this? (Q844033)

A. Cultural

B. Linguistic

C. Psychological

D. Environmental

Correct Answer: B. Linguistic

Explanation: Linguistic When a patient does not understand the meaning of the doctor’s words , the barrier is due to language or communication issues , which is classified as a linguistic barrier . This may be due to use of complex medical terms, different languages, accents, or poor language comprehension. It impairs effective doctor–patient communication. Classification of Communication Barriers: Type Description Example Cultural Differences in beliefs, values, or customs A patient rejecting treatment due to cultural beliefs Linguistic Barriers related to language or word usage A patient not understanding medical terminology Psychological Related to emotions, stress, anxiety, or mental health A patient too anxious to listen or comprehend Environmental Due to external distractions like noise, poor lighting, or space A consultation held in a noisy hospital corridor Cultural (Option A): Incorrect – This would involve a conflict in beliefs or practices, not merely misunderstanding words. Psychological (Option C): Incorrect – This applies when emotional or mental states interfere with understanding, not language itself. Environmental (Option D): Incorrect – Environmental barriers refer to physical surroundings, not comprehension of spoken words.

References:

Park Textbook of Preventive Medicine 27th ed. Pg 984

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: ICER is a unit for which of the following economical analysis? (Q852867)

A. Cost effectiveness

B. Cost benefit

C. Cost utility

D. Cost margin

Correct Answer: A. Cost effectiveness

Explanation: ICER (Incremental Cost-Effectiveness Ratio) is a key metric used in cost-effectiveness analysis (CEA). ICER is calculated as: ICER= Change in Effectiveness/ Change in Cost■ Cost is measured in monetary units (e.g., dollars). Effectiveness is measured in health outcomes (e.g., life-years gained, reduction in disease incidence). CEA helps policymakers compare healthcare interventions based on cost per unit of health benefit. ICER is commonly used in health economics to decide whether a new treatment is worth its cost. Economic Analysis in Healthcare Health economic evaluations help determine the best use of resources by comparing costs and benefits of different interventions. Type of Analysis Measure Used Unit of Benefit Example Cost-Effectiveness Analysis (CEA) ICER Natural health units (e.g., life-years gained, infections prevented) Comparing two drugs for hypertension based on BP reduction Cost-Benefit Analysis (CBA) Net Monetary Benefit (NMB) Money Assessing whether a vaccination program saves more money than it costs Cost-Utility Analysis (CUA) Cost per QALY (Quality-Adjusted Life Year) QALY (Quality-Adjusted Life Year) Comparing cancer treatments based on survival & quality of life Cost-Minimization Analysis (CMA) Lowest Cost Option No effectiveness measure (assumes equal outcomes) Choosing between two equivalent generic drugs based on price Cost-benefit (Option B): Incorrect because CBA measures outcomes in monetary terms, not effectiveness per cost unit (ICER). Cost-utility (Option C): Incorrect because CUA uses QALY, not ICER, to compare interventions. Cost margin (Option D): Incorrect because "cost margin" is not a standard term in health economic analysis.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC9561137/

https://pmc.ncbi.nlm.nih.gov/articles/PMC8424074/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: What is the term commonly used to describe a mode of communication wherein 4-8 speakers engage in a discussion on a specific topic in front of a large audience, without following a specific agenda, predetermined speeches, or a set order of speaking, and eventually interact with the audience? (Q793631)

A. Panel discussion

B. Symposium

C. Workshop

D. Seminar

Correct Answer: A. Panel discussion

Explanation: A panel discussion is a type of communication where a group of experts or professionals share their views on a given topic or problem in front of a sizable audience, without a set agenda, speech, or order of speaking, and with audience interaction at the conclusion. Incorrect choices Option b : Symposium - A symposium is an expert-led series of presentations on a particular subject or theme, usually more formal and structured than a panel discussion. Option c: Workshop - A workshop is a practical educational experience where participants learn new skills or techniques. series of more than 4 meetings. Option d: Seminar - A seminar is a lecture-style presentation where a speaker provides information on a particular subject, and the audience is then given the opportunity to ask questions or participate in a discussion. It may have a set agenda or speech.



↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: In a community, an awareness session on handwashing was organized. The appropriate order of events in this session is: (Q793708)

A. Awareness > interest > adoption > evaluation

B. Awareness > interest > evaluation > adoption

C. Evaluation > adoption > awareness > interest

D. Adoption > awareness > interest > evaluation

Correct Answer: B. Awareness > interest > evaluation > adoption

Explanation: Correct option B The proper procedure for a community handwashing awareness program is:Awareness > Interest > Evaluation >Adoption Incorrect choices Options A, C & D are incorrect

↑ *Back to this question in Part A*

@Neet_pg_bot

• [15_Health Planning and Management] 054 Health Planning And Management

« Back to Folder Directory

[15_Health Planning and Management] 054 Health Planning And Management — Quick Jump

Q1 (p. 1717) *Q2 (p. 1718)* *Q3 (p. 1719)* *Q4 (p. 1719)* *Q5 (p. 1721)* *Q6 (p. 1722)*
Q7 (p. 1723) *Q8 (p. 1724)* *Q9 (p. 1725)*

Q1: In a rural community, there is a sudden outbreak of a waterborne disease, necessitating immediate intervention. The local health authorities have identified that additional trained medical personnel are required to effectively manage the situation. In the context of health planning, what do manpower and money represent? (Q840618)

A. Objectives

B. Evaluation

C. Resources

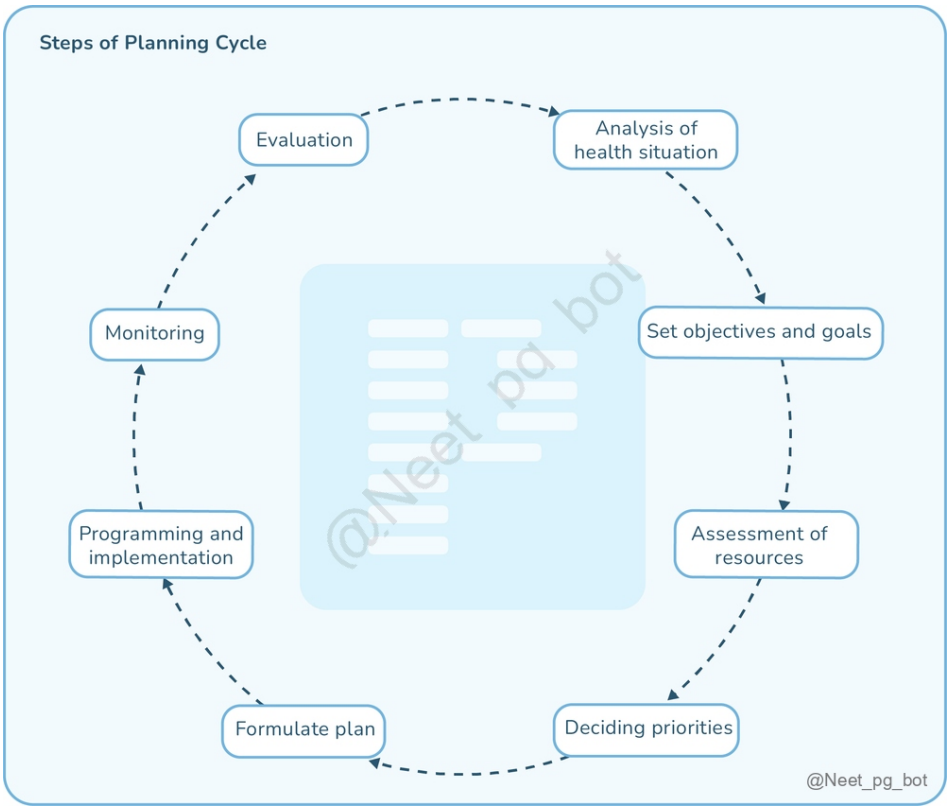
D. Monitoring

Correct Answer: C. Resources

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Resources in a planning cycle refer to manpower, money, materials, skills, and knowledge needed to implement the health programme. Steps of the Health planning cycle include: Analysis of health situation - Socio-demographic profiling of the community to understand the health situation. Set objectives and goals - specific and detailed, which may be short or long-term. Resources Deciding priorities Formulating a plan - Listing down the necessary acts to be done. Programming and Implementation: Define roles and tasks, train and supervise manpower, and organise effectively to achieve predetermined objectives. Monitoring - Day-to-day activities are monitored to ensure proper implementation of the plan Evaluation - measuring the final outcome and associated factors of the plan.



References:

Park's Textbook of Preventive and Social Medicine, 27th Ed, Pg.no. 997-998

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: In health planning, which term refers to a broad aim or purpose distinct from specific measurable outcomes? (Q840622)

A. Target

B. Goal

C. Objective

D. Strategy

Correct Answer: B. Goal

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The goal in health planning represents the ultimate desired state towards which all objectives and resources are directed. Not constrained by time and resources Timeframe guidelines should not extend beyond a five-year period. Objective (Option C) represents the planned endpoint of all activities. Objectives should be SMART, which stands for: S: Specific M: Measurable A: Achievable R: Realistic T: Time-bound Target (Option A) measures the degree of achievement of objectives with time. Targets are short-term. A strategy (Option D) is a comprehensive plan or approach designed to achieve specific goals or objectives.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg.no. 996

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: According to the recommendations of the Chadha Committee, what was the proposed ratio of basic health workers to the population ? (Q840629)

A. 1 worker for every 1000 population

B. 1 worker for every 5000 population

C. 1 worker for every 10000 population

D. 1 worker for every 20000 population

Correct Answer: C. 1 worker for every 10000 population

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Chadha Committee (1963) suggested deploying one basic health worker for every 10000 population to improve healthcare accessibility and coverage. Target - Malaria vigilance and family planning activities. Focussed on National Malaria Eradication Programme / Malaria control activities. Other recommendations of the Chadha Committee: Strengthening Primary Health Care Improving Malaria Vigilance Family planning health assistance

References:

nhsrcindia.org/sites/default/files/2021-04/Chada%20Committe%20Report.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which organization is primarily responsible for developing the Health Index in India? (Q840632)

A. Ministry of Health and Family Welfare

B. NITI Aayog

C. Indian Council of Medical Research (ICMR)

D. World Health Organization (WHO)

Correct Answer: B. NITI Aayog

- *Listen (English)*
- *Listen (Hindi)*

Explanation: NITI (National Institution for Transforming India) Aayog is the organisation responsible for developing the Health Index in India. The Health Index is a composite measure that tracks the performance of Indian states and Union Territories on various health indicators, such as the Neonatal Mortality Rate and the Under-5 Mortality Rate. NITI Aayog replaced the Planning Commission of India in 2015 , and acts as a think tank to the central and state governments on policy matters, including health. The Ministry of Health and Family Welfare collaborates with NITI Aayog and provides data but is not the primary organization for evaluating and releasing the Health Index. (Option A) The Indian Council of Medical Research (ICMR) focuses on biomedical research and is not involved in creating the Health Index. (Option C) The World Health Organization (WHO) is an international body providing health-related guidelines and support but not developing the Health Index for India. (Option D).



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 32 & Pg 1002

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which health management technique is used for creating a graphical representation of all events and activities required to complete a project enabling timely project completion? (Q840636)

A. Systems Analysis

B. Programme Evaluation and Review Technique (PERT)

C. Cost-Effectiveness Analysis

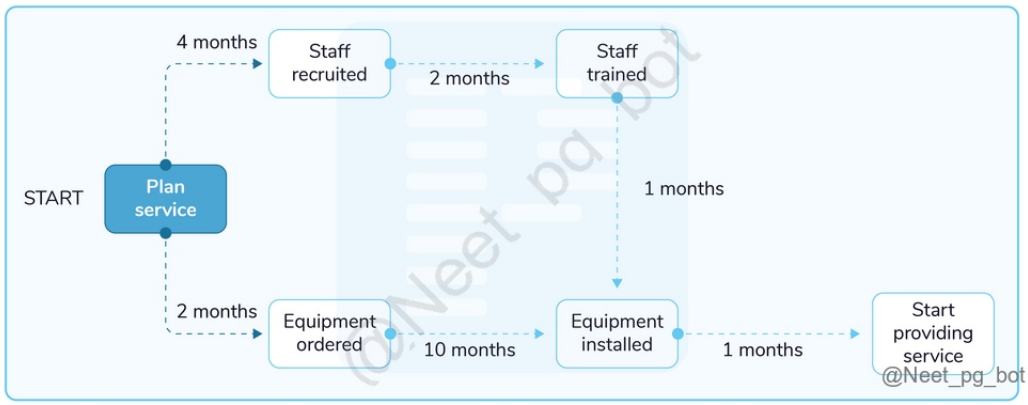
D. Planning–Programming–Budgeting System (PPBS)

Correct Answer: B. Programme Evaluation and Review Technique (PERT)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Programme Evaluation and Review Technique (PERT) is a type of quantitative health management method that involves creating a graphical representation (often an Arrow Diagram) of all events and activities required to complete a project. It identifies the sequence of activities, calculates the time needed for each, and highlights critical activities that must be completed on time to ensure the overall project is finished as scheduled. Systems Analysis Systems Analysis is a quantitative health management method focused on problem investigation, objective setting, and cost-effective evaluation of alternatives, without involving graphical or time-oriented project planning. (Option A) Cost-effectiveness analysis is a type of quantitative health management method that evaluates the outcomes of different options in terms of costs and benefits to ensure (Option C) Planning–Programming–Budgeting System (PPBS) is a type of quantitative health management method for allocating resources efficiently within an organisation. Still, it does not focus on graphical project management or critical path identification. (Option D)



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 999-1000

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following statements correctly describes the difference between Cost-Benefit Analysis and Cost-Effective Analysis in health management? (Q840639)

A. Cost-Benefit Analysis focuses on the qualitative aspects of health services, while Cost-Effective Analysis focuses on quantitative aspects.

B. Cost-benefit analysis compares monetary costs and benefits, whereas Cost-Effectiveness Analysis compares the costs to achieve a specific non-monetary outcome.

C. Cost-Benefit Analysis is used for planning and budgeting, while Cost-Effective Analysis is used for project scheduling.

D. Cost-Benefit Analysis evaluates staff performance, whereas Cost-Effective Analysis evaluates patient outcomes.

Correct Answer: B. Cost-benefit analysis compares monetary costs and benefits, whereas Cost-Effectiveness Analysis compares the costs to achieve a specific non-monetary outcome.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Cost-Benefit Analysis It is a management technique that compares a program's monetary costs with its monetary benefits , expressed in terms of economic gain. It helps determine whether the benefits outweigh the costs in monetary terms. The main drawback with this technique is that the benefits in the health field cannot always be expressed in monetary terms . Cost-Effective Analysis Compares the costs of different interventions to achieve a specific health outcome that is not expressed in monetary terms. It is used to determine the most efficient way to achieve a particular health goal, such as lives saved or cases treated , without converting the outcomes into monetary values.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 999

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following is an incorrect statement regarding Work Sampling as a health management technique? (Q840647)

A. Work Sampling involves systematic observation and recording of activities at random intervals to estimate the proportion of time spent on different tasks.

B. Work Sampling is used for the evaluation of Doctors, Nurses, and Pharmacists.

C. Work Sampling helps to calculate the total project cost by evaluating the monetary benefits of health interventions.

D. Work Sampling is a quantitative type of health management technique.

Correct Answer: C. Work Sampling helps to calculate the total project cost by evaluating the monetary benefits of health interventions.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Work sampling is a health management technique used to measure how health workers spend their time during working hours. It is commonly used in hospitals, PHCs, CHCs, and other health facilities. It helps determine: How much time doctors spend on OPD consultations, documentation, breaks, administrative work, etc. How much time nurses spend on patient care, ward rounds, drug administration, and non-clinical duties. How

much time pharmacists spend dispensing drugs, inventory management, or idle time. Work Sampling does not involve calculating project costs or evaluating monetary benefits. It is primarily used to systematically observe and record the activities of individuals at random intervals to estimate how time is allocated among various tasks, aiding in workforce management and efficiency improvement. (Option A) It is used to evaluate how time is spent by healthcare providers like doctors, nurses, and pharmacists on different activities. (Option B) It is a type of quantitative health management technique. (Option D)

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 1000

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Match the following Class Names with their % of total items and % of Total Cost according to ABC Classification of Inventory Management- Class Name % of Total Items % of Total Cost A. Class-A 1. 20-40% i. 05-20% B. Class-B 2. 40-75% ii.15-40% C. Class-C 3. 05-25% iii. 40-80% (Q840654)

A. Class A-3-ii, Class B-1-iii, Class C-2-i

B. Class A-3-i, Class B-2-ii, Class C-1-iii

C. Class A-3-iii, ClassB-1-ii, Class C-2-i

D. D) Class A-2-i, Class B-1-ii, Class C-3-iii

Correct Answer: C. Class A-3-iii, ClassB-1-ii, Class C-2-i

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: ABC classification in stock management used for Health Planning and Management: Class-A items represent 05-25% of the total items and 40-80% of the total cost , making them highly valuable despite being fewer in number. Class-B items account for 20-40% of the total items and 15-40% of the total cost , representing a moderate level of importance. Class-C items make up 40-75% of the total items but only 05-20% of the total cost , meaning they are less valuable but more numerous.

References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC3021698/

www.ncbi.nlm.nih.gov/pmc/articles/PMC4922040/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Arrange the following steps of the planning cycle in the correct chronological sequence: Establishment of goals and objectives Evaluation Programming and implementation Analysis of the health situation Assessment of resources (Q845075)

A. 4-1-5-3-2

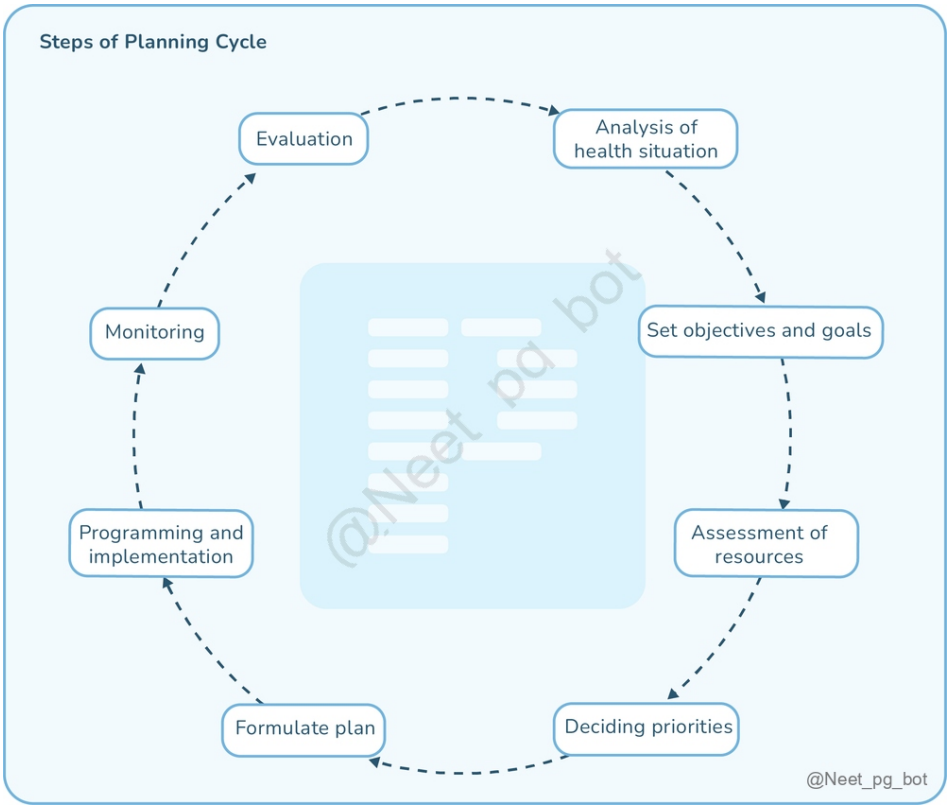
B. 2-3-5-4-1

C. 4-5-1-3-2

D. 1-4-5-3-2

Correct Answer: A. 4-1-5-3-2

Explanation: Steps of planning cycle:



References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pg.no. 997-998

↑ *Back to this question in Part A*

• [15_Health Planning and Management] 055 Previous Year Questions

« Back to Folder Directory

[15_Health Planning and Management] 055 Previous Year Questions — Quick Jump

Q1 (p. 1727) *Q2 (p. 1727)* *Q3 (p. 1728)* *Q4 (p. 1729)* *Q5 (p. 1731)* *Q6 (p. 1732)*
Q7 (p. 1733) *Q8 (p. 1733)* *Q9 (p. 1734)* *Q10 (p. 1735)* *Q11 (p. 1735)* *Q12 (p. 1736)*
Q13 (p. 1737) *Q14 (p. 1738)* *Q15 (p. 1739)*

Q1: A group of experts delivered individual speeches on a common topic. There was no discussion allowed between them, and at the end, one person summarized the key points. What is this type of academic session called? (Q866782)

A. Panel discussion

B. Symposium

C. Seminar

D. Workshop

Correct Answer: B. Symposium

Explanation: The type of academic session where a group of experts delivers individual speeches on a common topic without discussion, concluding with a summary by one person, is called a Symposium. It involves multiple speakers presenting on different aspects of a topic, with a designated person providing a summary or conclusion at the end. It is a scholarly gathering focused on sharing knowledge through individual presentations. Panel discussion (Option A): Experts discuss a topic among themselves and respond to audience questions. Seminar (Option C): In-depth study session, often interactive, on a specific topic for a small audience. Workshop (Option D): Hands-on, practical training session with active participation.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: An urban city has a population of 70,00,000, with 30% residing in slum areas. According to NUHM (National Urban Health Mission) norms, how many Urban Primary Health Centres (UPHCs) are required for the slum population? (Q866433)

A. 22

B. 32

C. 42

D. 52

Correct Answer: C. 42

Explanation: Under NUHM guidelines , one Urban Primary Health Centre (UPHC) is established for every 50,000 people living in slums . Total population = 7,000,000 Slum population = 30% of 7,000,000 = 2,100,000 Required UPHCs = 2,100,000 ÷ 50,000 = 42 This ensures equitable access to primary healthcare services for underserved urban slum populations.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is related to Navjaat Shishu Suraksha Karyakram? (Q860051)

A. Mother

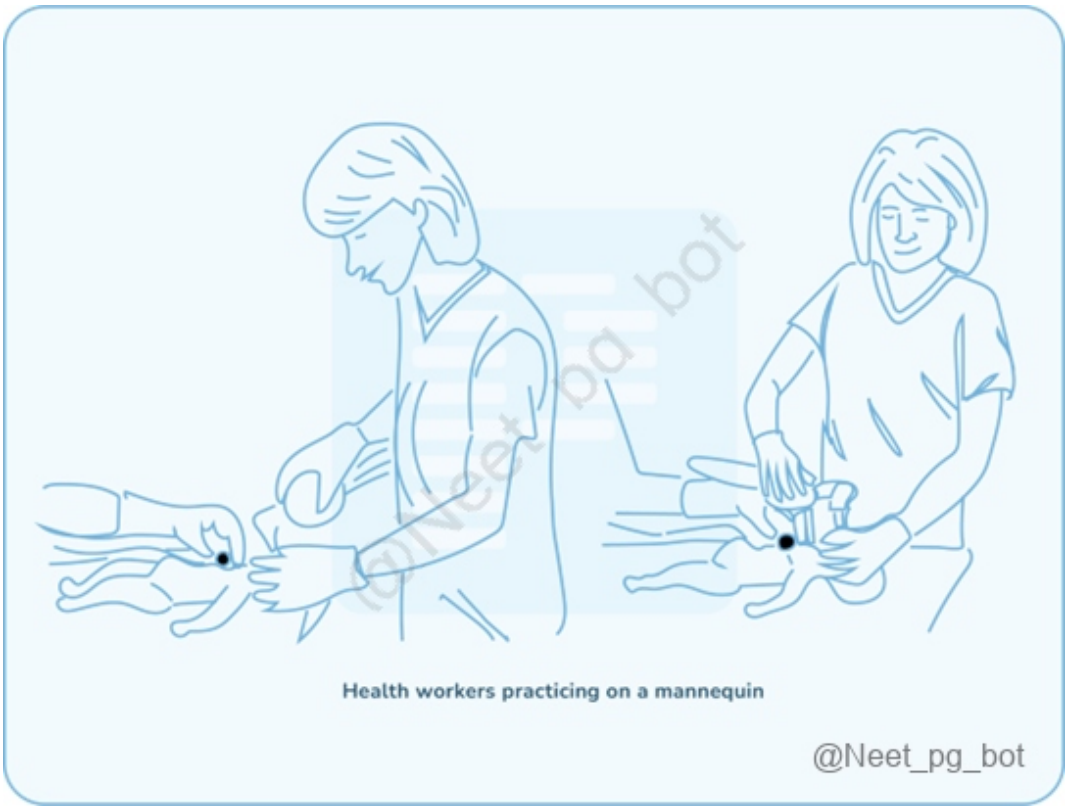
B. Children

C. Newborn

D. Pregnant woman

Correct Answer: C. Newborn

Explanation: Correct Option C - Newborn Navjaat Sishu Suraksha Karyakaram is a 2-day training provided to healthcare workers/medical officers in newborn care and resuscitation. Navjaat Shishu Suraksha Karyakram(NSSK) A training program launched by the Indian Government to equip doctors and nurses with essential newborn care skills, specifically addressing birth asphyxia. The ultimate goal is to reduce newborn mortality and morbidity. Goals/Objectives Reduce Neonatal Mortality Rate: Decrease India's Neonatal Mortality Rate to single digits by 2030. Improve Newborn Care Quality: Enhance the quality of newborn care. Prevent Perinatal Asphyxia-Related Issues: Reduce morbidity and mortality linked to perinatal asphyxia. Strategies Capacity Building: Equip healthcare providers with necessary knowledge and skills. Essential Newborn Care and Resuscitation Training. Updated Curriculum and Training Methodology Standardized Equipment and Supplies: Provide clean, functional equipment. Effective Knowledge and Skill Transfer: Improve practical application of training. Focus on "Golden Minute": Quick assessment and resuscitation. Promoting Clean Birth Practices: Adhere to WHO's "six cleans". Kangaroo Mother Care (KMC). Promotion: Encourage KMC for low birth weight babies. Timely Immunization: Ensure vaccination before discharge. Educate parents on newborn care. Effective Neonatal Transport: Establish protocols for the safe transport of sick newborns.



References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 967

https://nhm.gov.in/New-Update-2022-24/CH-Programmes/NSSK/NSSK-Resource-Manual.zip

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Hyperpigmentation and keratosis can be seen with which of the following: (Q857368)

A. Arsenic

B. Cadmium

C. Copper

D. Zinc

Correct Answer: A. Arsenic

Explanation: Chronic arsenic exposure can lead to skin hyperpigmentation, with dark patches or spots. It can also cause keratosis, leading to thickening and roughening of the skin. • This combination of symptoms is often referred to as "arsenicosis." Heavy metal Source of exposure Clinical features Lead Non-industrial Gasoline from automobile exhaust. Contaminated water from lead pipes. Lead paints in old homes. Industrial Battery and cosmetic manufacturing Printing paint and dye factories Glass manufacturing Shipbuilding Organic lead Wrist and/or foot drop. Insomnia. Headache. Mental confusion. Inorganic lead Anemia. Burton’s line - blue lines on gums. Colic, abdominal pain with diarrhoea/constipation. Arsenic (Option A) Pesticide Contaminated water Copper and lead smelting Wood preservatives Acute poisoning Gastroenteritis (Rice watery diarrhoea) Hypotension Non-cardiogenic pulmonary oedema Proteinuria Seizures, delirium and encephalopathy Subacute poisoning (1-3 weeks) Glove stocking pattern polyneuropathy Absent deep tendon reflex Anemia, Leukopenia Chronic poisoning Raindrop pattern hyperpigmentation Palmar-plantar hyperkeratosis Alopecia Angiosarcoma Hepatomegaly Gangrene of extremities. Mercury Fish (from water pollution) Dental amalgam Gold and mercury mining Contaminated food and grains Greying of the oral mucosa Hemorrhagic gastroenteritis Acute tubular necrosis Shock Excessive irritability Acrodynia (painful extremities) Facial paresthesias Ataxia (loss of coordination), Dementia Blindness Cadmium (Option D ruled out) Smoking Paint manufacturing Nickel-cadmium battery manufacturing Plastic production Acute poisoning Inhalation: Pneumonitis; ARDS Ingestion: GIT hemorrhagic necrosis Chronic poisoning Osteomalacia Parkinson like symptoms Proteinuria Raindrop pigmentation (Arsenic poisoning) Acrodynia (Mercury poisoning) {{caption_text}} {{caption_text}} Copper (Option C): Overt acute copper toxicity presents with gastrointestinal symptoms like abdominal pain, vomiting, and diarrhea, often with blue-green material in emesis/stool. Zinc (Option D): It is generally safe orally, but excessive intake may lead toxicity but hyperpigmentation and keratosis are not typical findings of zinc toxicity.





References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 934-935

Heavy Metals - StatPearls - NCBI Bookshelf

Mercury Toxicity - StatPearls - NCBI Bookshelf

Arsenic Toxicity - StatPearls - NCBI Bookshelf

Cadmium Toxicity - StatPearls - NCBI Bookshelf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: According to WHO, what proportions of GNP should be spent on health services? (Q857985)

A. 2%

B. 2.5%

C. 3.5%

D. 5%

Correct Answer: D. 5%

Explanation: The World Health Organization (WHO) recommends that 5% of a country's Gross National Product (GNP) should be spent on health services. This target is suggested to ensure that countries can provide adequate healthcare services, improve public health infrastructure, and address healthcare needs of the population. 2% (Option A): is incorrect because the WHO's recommendation is higher than 2%. The figure of 2% is often lower than the minimum threshold suggested by the WHO. 2.5% (Option B): is incorrect because the WHO recommends 5% and not 2.5% for a more optimal investment in the health sector. 3.5% (Option C): is incorrect because, although it's a reasonable figure for some countries, the WHO's recommendation is 5% , which is slightly higher.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 20

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: A woman who is 8 weeks pregnant and employed in an industry consults a doctor. According to the Employees' State Insurance (ESI) Act, what is the duration of maternity leave she is entitled to? (Q858106)

A. 4 months

B. 28 weeks, starting from 4 weeks after delivery

C. 26 weeks, starting from 8 weeks before delivery

D. 9 months

Correct Answer: C. 26 weeks, starting from 8 weeks before delivery

Explanation: As per the ESI Act and Maternity Benefit (Amendment) Act, 2017, eligible women are entitled to 26 weeks of paid maternity leave , starting from 8 weeks before the expected delivery date for their first two children. 4 months (Option A) : is incorrect because the ESI Act provides maternity leave benefits up to 26 weeks, not 4 months, and the 28-week clause is not applicable. 28 weeks, starting from 4 weeks after delivery (Option B) : is incorrect because maternity leave typically starts before delivery, not just after delivery, and the duration stated exceeds the legal limit. 9 months (Option D) : is incorrect because the ESI Act does not grant maternity leave for such a long duration.

References:

Park's Textbook of Preventive and Social Medicine, Edition 26, Page 911- 912

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: In a hospital setting, the management seeks to determine the average duration of doctor-patient interactions in order to assess the need for adjusting the number of doctors. This adjustment is aimed at enhancing the quality of care provided. Which management technique would be most appropriate for this purpose? (Q857137)

A. Model

B. Decision making

C. Personnel management

D. Work sampling

Correct Answer: D. Work sampling

Explanation: - Work sampling Work sampling is a management technique used to measure the proportion of time spent on different tasks or activities in a workplace setting. In the context of a hospital, it can be used to estimate the average duration of doctor-patient interactions by observing a random sample of interactions over time. This data helps in identifying patterns and making informed decisions about resource allocation, such as adjusting the number of doctors to improve the quality of care. Work Sampling: It is primarily used to systematically observe and record the activities of individuals at random intervals to estimate how time is allocated among various tasks , aiding in workforce management and efficiency improvement. It is used to evaluate how time is spent by healthcare providers like doctors, nurses, and pharmacists on different activities. It is a type of quantitative health management technique. Health Management Techniques Qualitative (Based on behavioural sciences) POCIMon Quantitative Personal management Cost-benefit analysis Organizational design Cost-effective analysis Communication Cost-accounting Information system Decision making Management by objectives PPBS - Planning, Programming, and Budgeting System Work sampling Network analysis System analysis Model (Option A): does not help in the above case. Decision making (Option B): one should consider the lower level needs and decisions, for example: Differential diagnosis in medical practice. Personnel management (Option C): includes looking after incentives and promotions.

References:

Park’s Textbook of Preventive Medicine 27th edition Pg 1000

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which of the following is not an element of evaluation? (Q856086)

A. Relevancy

B. Adequacy

C. Acceptability

D. Input

Correct Answer: D. Input

Explanation: Components of health program evaluation: Component Definition Key Focus Areas Relevance Assesses whether the program addresses the priority health needs of the target population. Disease burden, target group needs, alignment with public health goals. Adequacy Evaluates whether the resources and scale of the program are sufficient to achieve the intended outcomes. Coverage, resource allocation, unmet needs. Accessibility Measures how easily beneficiaries can access program services. Geographic, financial, and cultural barriers to access. Acceptability Determines whether the program is acceptable to beneficiaries and stakeholders. Community participation, cultural compatibility, stakeholder feedback. Equity Assesses whether the program reduces disparities in health outcomes and services. Reach among marginalized populations, fairness in resource distribution. Efficiency Evaluates the optimal use of resources to achieve desired outcomes. Cost-efficiency, time management, operational performance. Effectiveness Measures the extent to which the program achieves its objectives and desired outcomes. Reduction in morbidity and mortality, behavior changes, program goals met.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 946, 947

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following methods does not rely on the principles of behavioral sciences? (Q858452)

A. Organizational design

B. Personal management

C. Network analysis

D. Management by objective

Correct Answer: C. Network analysis

Explanation: Correct Option C- Network analysis Qualitative type of health management is based on behavioral sciences. It includes Personal management Organizational design Communication Information system Management by objective

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 997

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: In which of the following analyses is the financial advantage quantified? (Q858460)

A. Cost-effective analysis

B. Cost-benefit analysis

C. Network analysis

D. Input-Output analysis

Correct Answer: B. Cost-benefit analysis

Explanation: Correct Option B - Cost-benefit Analysis Cost-benefit analysis: Cost-benefit analysis measures the outcome of a program in monetary terms. It compares the economic benefits and cost of the program. Incorrect Options: Cost-effective analysis (Option A): Cost-effective analysis measures outcome of a program in nonmonetary terms . Network analysis (Option C): A graphic plan of all events to be completed in order to reach an end objective. Input-output analysis (Option D): It is an economic technique. Monetary benefits are not measured in this technique.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 997

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: What is the ultimate desired state towards which objectives and resources are aimed in the medical field? (Q859189)

A. Target

B. Mission

C. Goal

D. Plan

Correct Answer: C. Goal

Explanation: Goal in health planning represents the ultimate desired state that directs all objectives and resources. Not constrained by time and resources Timeframe guideline - should not extend beyond a five-year period. Incorrect Options: Target (Option A): It measures the degree of achievement of objectives. E.g. To complete the objective, i.e., increase immunization coverage by 60%., one needs to target conducting 1 health education session per week. Mission (Option B): It refers to the overall purpose or reason for the existence of an organization or entity. Plan (Option D): It refers to a detailed course of action outlining how specific objectives will be achieved.

References:

Park's Textbook of Preventive and Social Medicine, 27th Ed. Pg.no. 996, 997

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following is defined as the systematic observation and recording of activities of one or more individuals at predetermined or random intervals? (Q859206)

A. Model

B. Decision making

C. Personnel management

D. Work sampling

Correct Answer: D. Work sampling

Explanation: Work sampling refers to the systematic observation and recording of activities performed by one or more individuals at predetermined or random intervals. It is a technique used in industrial engineering and management to gather data about how work is being conducted, how time is allocated, and how resources are utilized. Work Sampling does not involve calculating project costs or evaluating monetary benefits . It is primarily used to systematically observe and record the activities of individuals at random intervals to estimate how time is allocated among various tasks , aiding in workforce management and efficiency improvement. It is used to evaluate how time is spent by healthcare providers like doctors, nurses, and pharmacists on different activities. It is a type of quantitative health management technique. Model (Option A): It refers to a conceptual or mathematical representation used to simulate, predict, or explain real-world phenomena. This option is incorrect. Decision making (Option B): It is a cognitive process involving the selection of a course of action from available alternatives. This option is incorrect. Personnel management (Option C): It involves the administration of human resources within an organization, including recruitment, training, performance evaluation, and employee relations. This option is incorrect.

References:

Park's Textbook of Preventive Medicine 27th edition Pg 999, 1000

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: NITI Aayog has replaced the? (Q859830)

A. Medical council of India (MCI)

B. National institute of health & family welfare (NIHFW)

C. National planning commission (NPC)

D. National board of examinations (NBE)

Correct Answer: C. National planning commission (NPC)

Explanation: The full form of NITI Aayog is National Institution for Transforming India. It replaced the planning commission on January 1, 2015. NITI Aayog is the organization responsible for developing the Health Index in India . The Health Index is a composite measure that tracks the performance of Indian states and Union Territories on various health indicators. Eg. Neonatal Mortality Rate, Under-5 Mortality Rate, etc. NITI Aayog replaced Planning Commission of India in 2015 , acts as a think tank to the central and state governments on policy matters, including health. The Ministry of Health and Family Welfare collaborates with NITI Aayog and provides data but is not the primary organization for evaluating and releasing the Health Index. The Indian Council of Medical Research (ICMR) focuses on biomedical research and is not involved in creating the Health Index. The World Health Organization (WHO) is an international body that provides health-related guidelines and support but does not develop the Health Index for India. Medical Council of India (MCI) (Option A): The MCI was a statutory body that regulates medical education. The MCI has been replaced by by the National Medical Commission (NMC) to enhance transparency and improve medical education standards. National Institute of Health & Family Welfare (NIHFW) (Option B): The NIHFW is an autonomous organization under the Ministry of Health and Family Welfare in India, the NIHFW has not been replaced by NITI Aayog. National Board of Examinations (NBE) (Option D): The NBE is an autonomous body responsible for conducting postgraduate medical examinations in India. The NBE has not been replaced by NITI Aayog.

References:

Park’s Textbook of Preventive Medicine 27th edition Pg 32 & Pg 1002

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9896116/

https://en.wikipedia.org/wiki/Medical_Council_of_India

https://en.wikipedia.org/wiki/National_Board_of_Examinations_in_Medical_Sciences

https://nihfw.ac.in/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Under which benefit in the ESI act do beneficiaries receive 70% of their wages for a duration of 3 months? (Q859946)

A. Sickness benefit

B. Medical benefit

C. Maternity benefit

D. Dependent's benefit

Correct Answer: A. Sickness benefit

Explanation: In the ESI act, the beneficiaries are offered 70% wages for 91 days continuously. An extended sickness benefit is provided for 34 diseases including TB, leprosy, HIV, and mental illness for 2 years at 80% of daily wages. Benefits of ESI (Employees State Insurance) Act Medical Benefit (Option B ruled out) Provides "full medical care," including hospitalization at no cost to insured individuals & families in cases of sickness, employment injury, and maternity. Sickness Benefit (Option A) Provides 70% of average daily wages in cash during medical leave for a maximum of 91 days within 365 days, as certified by the Insurance Medical Officer/Practitioner. Extended Sickness Benefit Extended coverage for long-term diseases beyond 91 days; 34 diseases covered if employed for two years. Extended sickness benefit is paid at 80% of the insured person's wages. Enhanced Sickness Benefit Cash benefits (100% wages) for sterilization procedures: 14 days for tubectomy (women), 7 days for vasectomy (men). Maternity Benefit (Option C ruled out) Cash payments for childbirth, miscarriage, or pregnancy-related sickness: 26 weeks for childbirth, 6 weeks for miscarriage, and 40 days for pregnancy-related sickness. Paid at 100% of the insured woman's average daily wages. Disablement Benefit Temporary Disablement Benefit (TDB): 90% of wages paid from day one for temporary employment injury, until recovery. Permanent Disablement Benefit (PDB): 90% of wages paid monthly for life, based on certified loss of earning capacity. Dependent's Benefit (Option D ruled out) Dependents receive 90% of the deceased's (due to employment injuries) wages as a shared pension, and they are eligible until age 18. If the daughter marries before 18, the benefit is withdrawn. Funeral Expenses It offers a cash payment of up to Rs. 15,000 to cover funeral expenses upon the death of an insured individual. Rehabilitation Insured individuals and their families are entitled to continued medical treatment after permanent disablement or retirement. They have to pay a nominal fee of Rs.10 per month for this benefit. A rehabilitation allowance of Rs.15,000 granted. Unemployment allowance For eligible employees due to factory closure or retrenchment: 50% of wage for up to two years.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 943, 944

https://www.esic.gov.in/benefits

https://www.esic.gov.in/information-benefits

https://www.indiacode.nic.in/handle/123456789/1441?view_type=browse&sam_handle=123456789/1362

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following is the primary objective of the usage of the Health Index by Niti Aayog? (Q879058)

A. Raise funding for private hospitals to improve the public-private partnership

B. Rank the state according to health status

C. Assess the efficiency of the government hospital

D. Identify the aspirational districts

Correct Answer: B. Rank the state according to health status

Explanation: The NITI Aayog Health Index is a composite index created in collaboration with the Ministry of Health & World Bank to evaluate state-level performance in the health sector. Their primary objective is to rank states and UTs based on their overall health performance, which includes health outcomes, governance & information, key inputs/processes and year-to-year incremental improvement. This ranking helps to: Promote healthy competition Encourage states to improve policies Identify which states need stronger interventions Raise funding for private hospitals (Option A): The Health Index is not related to PPP funding or financing private healthcare. Assess the efficiency of government hospitals (Option C): Hospital efficiency is not the main focus; the index looks at state-level health indicators, not individual hospital performance. Identify aspirational districts (Option D): Aspirational districts are identified under a separate program by NITI Aayog (Aspirational Districts Programme), not through the Health Index.

References:

nitiaayog https://www.niti.gov.in/index.php/about-us/objectives-and-features

↑ *Back to this question in Part A*

@Neet_pg_bot

• [16_Health Care of The Community in India] 056 Healthcare Of Community And Health Delivery Systems

« Back to Folder Directory

[16_Health Care of The Community in India] 056 Healthcare Of Community And Health Delivery Systems — Quick Jump

Q1 (p. 1740)	*Q2 (p. 1740)*	*Q3 (p. 1741)*	*Q4 (p. 1744)*	*Q5 (p. 1748)*	*Q6 (p. 1749)*
Q7 (p. 1750)	*Q8 (p. 1750)*	*Q9 (p. 1751)*	*Q10 (p. 1752)*	*Q11 (p. 1753)*	*Q12 (p. 1753)*
Q13 (p. 1754)	*Q14 (p. 1755)*	*Q15 (p. 1755)*	*Q16 (p. 1756)*	*Q17 (p. 1757)*	*Q18 (p. 1757)*
Q19 (p. 1758)					

Q1: What is the population covered by Municipal Boards in urban areas? (Q841159)

A. 5000-10,000

B. 5,00,000

C. 10,000-2,00,000

D. 10,000-50,000

Correct Answer: C. 10,000-2,00,000

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Municipal board operates in urban areas and covers a population of 10,000-2,00,000. Municipal Board Head Chairman or President, elected by members of the Municipal Board. Term Typically 3 to 5 years. Functions Construction and maintenance of roads, bridges, and public infrastructure. Sanitation and drainage systems. Street lighting. Water supply. Maintenance of hospitals and dispensaries. Education. Civil registration (births and deaths). Administration Executive Agency: This includes the Commissioner, Secretary, Engineer, and Health Officer. Councillors: Elected from different wards of the city.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 1006

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A pregnant woman avoids a particular fruit due to a commonly held belief that its consumption can induce abortion, despite there being no scientific evidence to support this claim. Which of the following fruits is most commonly associated with this misconception (Q882296)

A. Banana

B. Grapes

C. Orange

D. Papaya

Correct Answer: D. Papaya

Explanation: Papaya is widely believed in many cultures to cause abortion due to the presence of papain, an enzyme thought to have uterotonic effects. However, there is no scientific evidence that consumption of ripe papaya causes abortion in humans. This belief is therefore considered a misconception. Banana (Option A): No traditional or widespread belief links banana consumption with abortion. Grapes (Option B): Though sometimes avoided due to concerns about acidity or bloating, they are not believed to induce abortion. Orange (Option C): Citrus fruits are often restricted due to myths about acidity but not abortion.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC7981893/

↑ *Back to this question in Part A*

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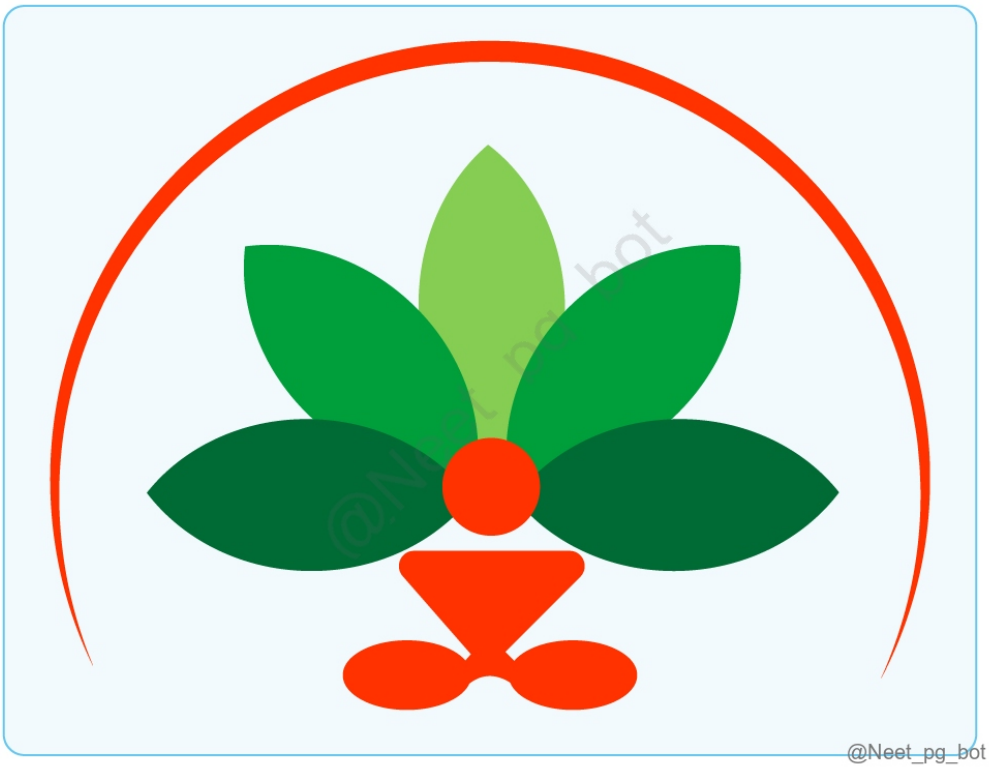
Q3: The logo shown below represents a health scheme launched by the Government of India. What is the primary objective of this program? (Q841173)

A. To provide comprehensive outbreak response essential drugs and diagnostic services.

B. To offer health insurance coverage to the economically disadvantaged

C. To reduce morbidity due to vaccine-preventable diseases in children

D. To promote accessible, affordable, and quality healthcare to the rural population



Correct Answer: B. To offer health insurance coverage to the economically disadvantaged

- *Listen (English)*
- *Listen (Hindi)*

Explanation: The logo represents Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (PMJAY) , a scheme of the Government of India designed to provide health insurance coverage to economically disadvantaged families. Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PMJAY): An initiative launched in 2018 by Govt. of India to achieve UHC Provides all the elements, including NCDS, in primary care. Benefits: Coverage : up to INR 5 lakh per family per year for secondary and tertiary care hospitalization. There is no restriction on the number of family members. Cashless access across the country All pre-existing conditions covered Covers the cost of treatment, up to 3 days of pre-hospitalization and 15 days of post-hospitalization follow-up care. Beneficiaries: Vulnerable and poor populations based on the Socio-Economic Caste Census (SECC) database. Health and Wellness Centre (Option A) established under the National Health Policy in 2017, offers comprehensive health care , including maternal and child health, communicable disease, and non-communicable disease services, as well as free essential medications and diagnostics. Mission Indradhanush (Option C) aims to achieve more than 90% full immunization coverage and reduce child mortality and morbidity due to vaccine-preventable diseases. The National Rural Health Mission (NRHM) (Option D) provides accessible, affordable , and quality healthcare to the rural population, reducing mortality rates and disease transmission.



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References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg 719

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A 30-year-old laborer struggles to access basic healthcare services due to high costs and limited availability. The logo shown below represents an initiative that aims to address issues like the one faced by this patient. Which healthcare concept does this logo represent? (Q841172)

A. National Program for Prevention and Control of cancer and diabetes

B. Universal Health Coverage

C. Integrated disease surveillance project

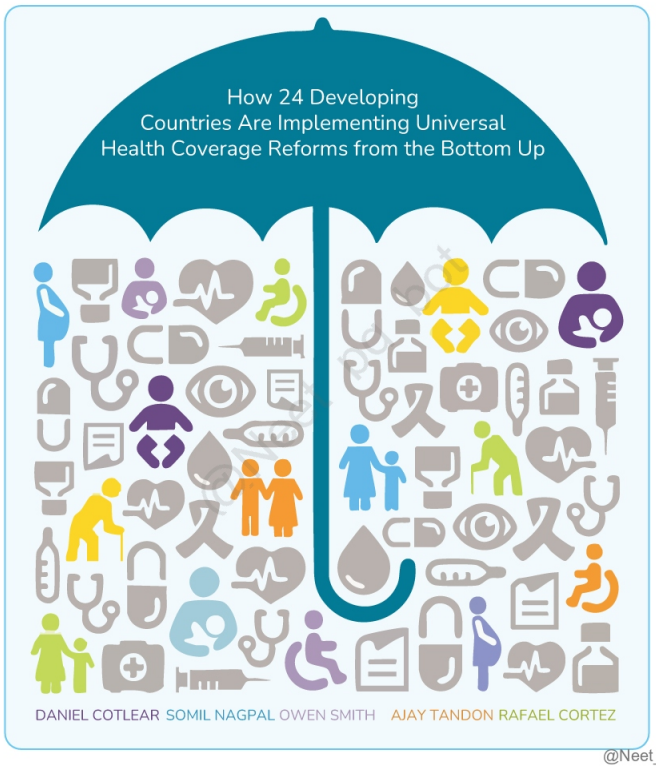
D. Accessible India Campaign



Correct Answer: B. Universal Health Coverage

- *Listen (English)*
- *Listen (Hindi)*

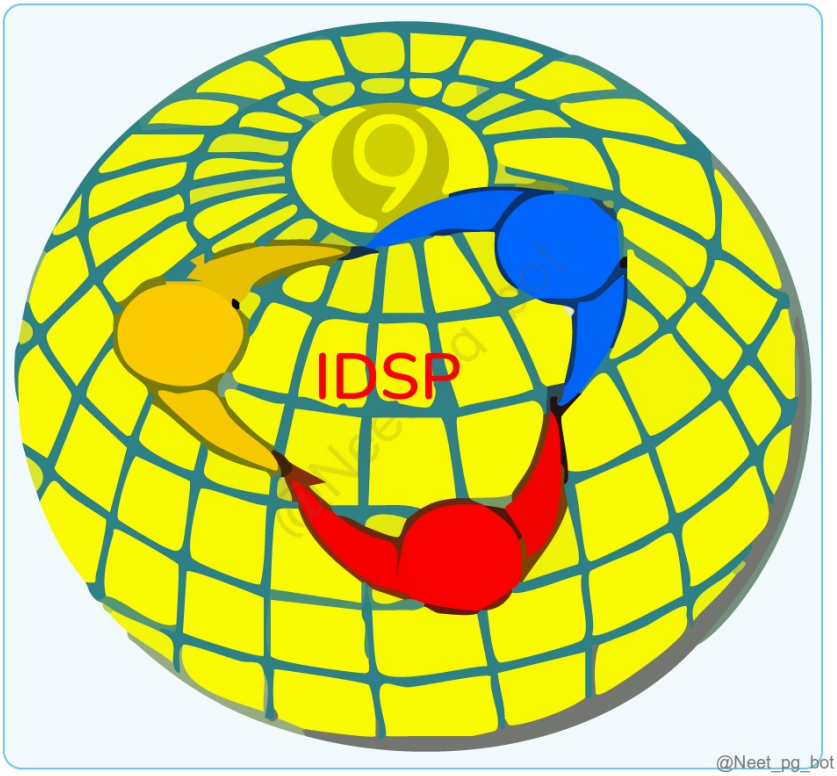
Explanation: The logo represents Universal Health Coverage (UHC) ensuring that all individuals receive health services without suffering financial hardship. Universal Health Coverage: 12th December: International Universal Health Coverage Day given by the United States. Includes a full range of essential health services , from health promotion to prevention, treatment, rehabilitation, and palliative care. Includes non-communicable diseases (NCDS) and AYUSH. Includes financial protection: Insurance coverage. Global program with the key target of the UN Sustainable Development. Goals, aiming to achieve UHC by 2030. Aims : Equity in access (Everywhere, everyone who needs services should get them). Good quality and affordable health service. Protection against financial risk (without having to bear financial hardship). The Accessible India Campaign (Sugamya Bharat Abhiyan) (Option D) was launched to create a barrier-free and favorable environment for universal accessibility to people with disabilities. The Integrated Disease Surveillance Project (IDSP) (Option C) is designed to improve disease surveillance and response to outbreaks. The National Programme for Prevention and Control of Non-Communicable Diseases (NPCDCS) (Option A) aims to tackle non-communicable diseases (NCDs) through prevention, early diagnosis, and management.

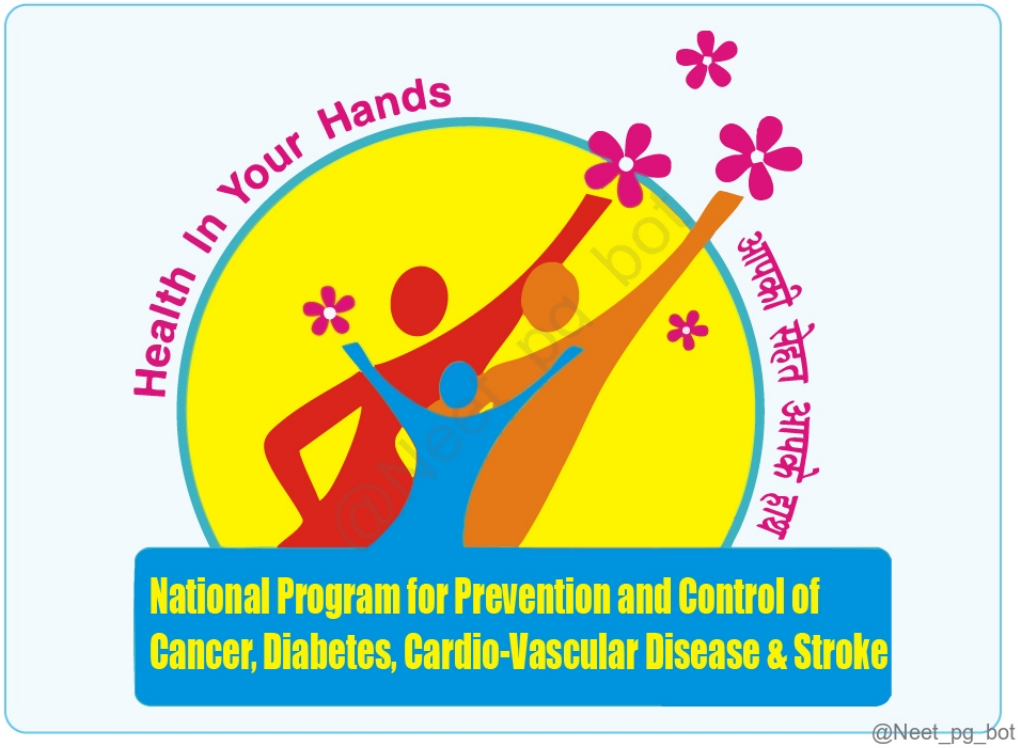


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References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg 824-825

https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=1048&lid=604

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which primary healthcare principle is represented by the displayed image to ensure appropriate usability and quality? (Q841171)

A. Appropriate Technology

B. Community Participation

C. Intersectoral Coordination

D. Equitable Distribution



@Neet_pg_bot

Correct Answer: A. Appropriate Technology

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The usage of Vaccine Vial Monitors (VVMs) to ensure vaccine usability and quality falls under the pillar of appropriate technology in primary healthcare. Four Pillars of Primary Health Care: Equitable distribution (Option D): Equitable distribution of health services irrespective of their socio-economic status. Intersectoral

coordination (Option C): Involves collaboration from other sectors like agriculture, education, etc. Maintains good health. Appropriate technology (Option A): Use of technology that is accessible, affordable, and suitable for the community Eg: ORS VVM (Vaccine Vial Monitor): Heat sensitive label Shakir tape: Malnutrition grading Kangaroo mother care: Preterm care Community participation (Option B): Ensure the participation of the community in planning, implementing and maintaining. For the promotion and maintenance of their health. Eg: ASHA workers are residents of the same community.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg: 693-694

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following statements regarding elements of primary healthcare are true: 1. It includes education concerning health problems and methods of preventing them. 2. It involves the promotion of food supply and appropriate nutrition. 3. It provides essential and non-essential drugs. 4. It consists of individuals who have a common health goal based on community requirements. 5. It emphasizes maternal and child health care, including family planning. (Q841170)

A. 1, 2, and 5

B. 1, 2, 3 and 5

C. 2, 3 and 4

D. All of the above

Correct Answer: A. 1, 2, and 5

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Elements or Components of Primary Health Care according to 'Declaration of Alma Ata'in Kazakhistan: Mnemonic: ELEMENTS E ssential medicines (especially paracetamol) (Statement 3) L ocally endemic diseases -Prevention and Control Health E ducation (Statement 1) M aternal, child health and family planning (Statement 5) E PI (Expanded Immunization Programme) now changed to UIP (Universal Immunization Programme) N utrition and food supply (Statement 2) T reatment of common ailments S afe water supply and sanitation Note: A health team is defined as a group of people sharing a common health goal and objectives, determined by community needs and towards the achievement of which each member contributes with her or his competence and respects the functions of the other. (Statement 4)

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pg 36-37

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following does not come under the 4 A's of primary healthcare? (Q841169)

A. Accessibility

B. Affordability

C. Accountability

D. Acceptability

Correct Answer: C. Accountability

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Accountability, which relates to the responsibility of healthcare providers to deliver quality care, is not listed among the 4 A's of primary healthcare. Health for All: Proposed in 1977 by the World Health Assembly. Attainment of the level of health by all individuals enabling them to lead socially and economically productive lives. The 4 A's of primary healthcare are: Accessibility (Option A): Healthcare services are available and reachable by all. Affordability (Option B): Healthcare services are economically viable for all Acceptability (Option D): Healthcare services are culturally and socially appropriate Availability: Appropriate ratio between the population of an administrative unit and the health facility

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pg 36

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: How many tests are available in Primary Health Centers under the Free Drugs and Diagnostic Service Initiative of the National Health Mission? (Q841167)

A. 19

B. 39

C. 56

D. 73

Correct Answer: A. 19

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Under the Free Drugs and Diagnostic Service Initiative of the National Health Mission: Primary Health Centers: 19 free tests. Community Health Centres: 39 free tests. District hospitals: 6 free tests.



References:

https://nhm.gov.in/New_Updates_2018/NHM_Components/Health_System_Stregthening/Drugs_&_logistics/Free_Diagnostics_Service_Initiative.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: What should be the minimum number of members in the Village Health Sanitation and Nutrition Committee? (Q841163)

A. 10

B. 20

C. 25

D. 15

Correct Answer: D. 15

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Village Health Sanitation and Nutrition Committee-VHSNC Formation Formed at the revenue village level Composition There are at least 15 members , including elected Panchayat members (committee leaders), health workers, community members/beneficiaries, and representatives from vulnerable sections and hamlets. Member Secretary ASHA (also the convener of VHSNC). Roles and Responsibilities Create awareness and conduct surveys about nutritional issues and deficiencies. Identify local nutritious foods and include them in the Village Health Plan. Monitor Village Health and Nutrition Day. Facilitate referral to Nutritional Rehabilitation Centre (NRC). Supervise Anganwadi Centre (AWC). Act as grievances redressal forum on health and nutrition. Relationship with Gram Panchayat Acts as a sub-committee under the overall supervision of Gram Panchayat.

References:

https://www.nhm.gov.in/index1.php?lang=1&level=1&sublinkid=149&lid=225

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 516

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: What is the role of Rogi Kalyan Samiti? (Q841160)

A. Healthcare policymaking

B. Recruiting healthcare professionals

C. Framing Village Action Plans

D. Support the functioning of health facilities

Correct Answer: D. Support the functioning of health facilities

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Rogi Kalyan Samiti Synonyms Patient Welfare Committee Hospital Management Society Purpose Manage hospital affairs, ensure patient welfare, and improve facilities in hospitals. Structure Registered society with community members as trustees. Financial Assistance Provided through untied funds for activities related to patient welfare. Responsibilities Upkeep of hospital facilities. Ensuring the provision of better facilities to patients. Financial management and accountability. Community engagement and participation. Location It is found in almost all DHs, SDHs, CHCs, and PHCs across India.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 516

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: According to the national health policy, how many people should have one health subcenter (HSC) in hilly and tribal areas? (Q841147)

A. 2000

B. 3000

C. 4000

D. 5000

Correct Answer: B. 3000

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: As per the national health policy, Type of health sub-centre Plain population Hilly/tribal/desert population Rural HSC 1 per 5000 1 per 3000 Urban HSC 1 per 15,000-20,000 - Categorisations Type A: No delivery Type B: Delivery happens Urban PHC is called Swasthya Chowki Subcenter and PHC together form Health and wellness clinic

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page 307

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which committee established the Panchayati Raj Institution? (Q841158)

A. Balwant Rai Mehta Committee

B. Ashok Mehta Committee

C. GVK Rao Committee

D. Gadgil Committee

Correct Answer: A. Balwant Rai Mehta Committee

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Panchayati Raj Institution was established by the Balwant Rai Mehta Committee. Panchayati Raj: 3-tier structure of rural self-government. Links village to district. Panchayati Raj Institutions: Panchayat- at the village level. Panchayat samiti- at block level. Zilla parishad - at the district level. Level Institution Description and Functions Village Gram Sabha Assembly of all adults in the village; discusses local issues; elects members of Gram Panchayat. Gram Panchayat The executive body of Gram Sabha; plans and executes local development activities, led by a President (Sarpanch). Nyaya Panchayat Deals with local disputes and minor offences; provides justice at the village level. Block Panchayat Samiti Consists of Sarpanchas (heads) of village Panchayats, MLAs, MPs, and others; implements community development. Block Development Officer (BDO) Secretary of Panchayat Samiti; provides technical guidance for development projects. District Zilla Parishad Represents Panchayat Samitis, MLAs, MPs, and others; supervises and coordinates development activities at the district level. District Administration Includes administrative officers (e.g., District Collector) responsible for overall governance.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 1006-1007

IAPSM 2nd edition, page 862

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which among the following is NOT a function of Mahila Arogya Samiti? (Q841157)

A. Focus on preventive and promotive care

B. Act as a peer education group

C. Facilitate access to identified facilities

D. Providing primary medical care for minor ailments of women

Correct Answer: D. Providing primary medical care for minor ailments of women

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Mahila aryogya samiti is establised under National Urban Health Mission-NUHM Its functions are - Focus on preventive and promotive care Act as a peer education group Facilitate access to identified facilities Community monitoring and referral Risk pooling fund and health insurance

References:

Suryakantha, Community Medicine with Recent Advances, 3rd edition, page 783

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which of the following represents the population norm for an Urban PHC [Primary Health Centre] according to the IPHS [Indian Public Health Standards] guidelines 2022? (Q841156)

A. 20,000

B. 30,000

C. 50,000

D. 45,000

Correct Answer: C. 50,000

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Type of PHC Population covered Population covered in hilly & tribal areas Rural PHC 30,000 20,000 Urban PHC 50,000 - Polyclinic 2.5 to 3 lakhs - Type of health sub-centre Plain population Hilly/tribal/desert population Rural HSC 1 per 5000 1 per 3000 Urban HSC 1 per 15,000-20,000 - Categorisations Type A: No delivery Type B: Delivery happens

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page705

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: An ASHA worker from a rural area ensures antenatal care and institutional delivery for a mother from her village. How much incentive does she get? (Q841155)

A. None

B. 300 per delivery

C. 200 per delivery

D. 500 perdelivery

Correct Answer: B. 300 per delivery

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Area Task Incentive Reproductive health Ensuring antenatal care and institutional delivery Rural-300 Urban-200 Delaying birth of first child by 2 years after marriage 500 Ensuring spacing of 3 years after first child 500 Accompanying for IUCD insertion 150 Home visit for newborn and postpartum mother 250 TB DOTS provider for new cases 1000 DOTS provider for previously treated cases 1500 Treatment and support for drug-resistant TB cases 5000 Leprosy Refers and follows a paucibacillary leprosy case throughout the treatment course 650 Refers and follows a multibacillary leprosy case throughout the treatment course 850

References:

Suryakantha's Community Medicine with Recent Advances, 3rd edition, page 778

https://nhm.gov.in/New-Update-2023-24/ASHA/Orders_and_guidelines/ASHA-Incentives.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Which of the following is NOT an ASHA role? (Q841154)

A. Providing counseling on birth preparedness and safe delivery

B. Administering vaccines to infants and children

C. Mobilizing the community for health awareness programs

D. Providing directly observed treatment short-course (DOTS) for tuberculosis

Correct Answer: B. Administering vaccines to infants and children

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Roles of ASHA: Educating on health determinants Counseling women on birth preparedness, safe delivery, breastfeeding, immunization, contraception, and prevention of infection Mobilizing the community to access health services Working with village health and sanitation committees Escorting pregnant women and children to health facilities Providing primary medical care for minor ailments and first aid Providing DOTS Acting as a depot holder for essential provisions and drug kits Reporting births, deaths, and health issues to health centres Promoting the construction of household toilets

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 700-701

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Which statements about an Accredited Social Health Activist-ASHA is true? (Q841153)

A. Can be a male or female

B. Preferably from the age group 25-45

C. Education level of class 6

D. Only unmarried females are eligible

Correct Answer: B. Preferably from the age group 25-45

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: ASHA should be : A resident of the same village A married/divorced/widow Preferably from the age group 25-45 One ASHA for 1000 population/per habitation

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 700-701

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: Which of the following is a primary function of a Female Health Worker (auxiliary Nurse Midwife - ANM)? (Q841152)

A. Risk pooling fund

B. Promoting the construction of toilets

C. Registering and providing care to pregnant women

D. Providing advice on health insurance

Correct Answer: C. Registering and providing care to pregnant women

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Duty Area Health Worker Male (HWM) Health Worker Female (ANM) Maternal and Child Health Register and provide care to pregnant women Conduct deliveries Postnatal home visits Educate on breastfeeding Family Planning Distribute contraceptives Follow-up with acceptors Maintain eligible couple registers Distribute contraceptives Family planning education Immunisation Administer vaccines Immunise pregnant women and children Cold chain maintenance Communicable Diseases Treat minor ailment Disease education and prevention Nutrition Identify malnutrition cases Provide treatment, advice, and referral Distribute supplements Monitor growth and development Identify malnutrition cases Provide treatment, advice, and referral Record Keeping Maintain health records Submit reports Manage health records Submit reports Environmental Health Chlorinate water sources Educate on sanitation Maintain cleanliness and medical waste disposal Community Education Health education on specific diseases Conduct health education sessions Specific Programme Responsibilities National vector-borne disease control programme Malaria slide preparation- every 15 days Leprosy eradication programme RNTCP National blindness control programme Expanded programme on immunisation. Reproductive and child health programme Universal Programme on Immunization-UIP

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 713-716

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: All of the following are true about a primary health centre (PHC) except? (Q841149)

A. 1/30,000 in plain areas

B. Type A PHC: delivery load >20

C. 1/20,000 in hilly areas

D. The recommended bed count for Type B : 6-10

Correct Answer: B. Type A PHC: delivery load >20

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Type A PHC: delivery load < 20 Standards per PHC Staffing count Type A: 13-18 Type B: 14-21 Categorization Type A: <20 deliveries (Option B) Type B: >20 deliveries Bed count Type A : 4-6 Type B : 6-10 Responsibility to maintain State government

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 706-712

↑ *Back to this question in Part A*

@Neet_pg_bot

• [16_Health Care of The Community in India] 057 Previous Year Questions

« Back to Folder Directory

[16_Health Care of The Community in India] 057 Previous Year Questions — Quick Jump

Q1 (p. 1760)	*Q2 (p. 1761)*	*Q3 (p. 1761)*	*Q4 (p. 1762)*	*Q5 (p. 1763)*	*Q6 (p. 1764)*
Q7 (p. 1765)	*Q8 (p. 1765)*	*Q9 (p. 1766)*	*Q10 (p. 1767)*	*Q11 (p. 1767)*	*Q12 (p. 1768)*
Q13 (p. 1769)	*Q14 (p. 1769)*	*Q15 (p. 1770)*	*Q16 (p. 1771)*	*Q17 (p. 1771)*	*Q18 (p. 1772)*
Q19 (p. 1773)	*Q20 (p. 1773)*	*Q21 (p. 1774)*	*Q22 (p. 1775)*		

Q1: Universal health coverage of India was recently approved by which health committee? (Q852868)

A. Medical education health group

B. MPW in health and family planning

C. High level expert group

D. ealth survey and development committee

Correct Answer: C. High level expert group

Explanation: Equitable Access Everyone should receive healthcare regardless of socioeconomic status. Financial Protection Out-of-pocket expenses should not cause financial hardship. Quality Care Services should be effective, safe, and patient-centered. Sustainability Health systems should be designed for long-term viability. Challenges in Implementing UHC Challenge Reason Limited Financial Resources Low-income countries struggle to fund universal healthcare. Healthcare Workforce Shortage Lack of trained professionals, especially in rural areas. Infrastructure Gaps Inadequate hospitals, equipment, and medical supply chains. Political and Policy Barriers Differences in government commitment to UHC implementation. Global Strategies to Overcome UHC Challenges Strategy Description Innovative Financing Public-private partnerships, health insurance schemes, and global funding. Technology Integration Telemedicine and digital health solutions to expand access. International Support WHO and global organizations aiding low-income countries.

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg 824-825

https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=1048&lid=604

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which statement most accurately describes the criteria for initiating an urban community health center? (Q855632)

A. Caters to a population of 1-1.5 lakh

B. Referral center for 2-3 primary health centers

C. No sub-district and district hospitals present in the area

D. Should have a 100-bed facility in metro cities

Correct Answer: D. Should have a 100-bed facility in metro cities

Explanation: : Urban CHC handles 2.5 lakh population and 5 lakh in metro cities. Referral center for 2–3 primary health centers (option B): UCHCs do act as referral centers, but they act as a referral center for 4-5 PHCs. It is more relevant for rural CHCs , which refer cases from 2–3 PHCs. No sub-district and district hospitals present in the area (option C): UCHCs are established in urban settings regardless of the presence of sub-district or district hospitals.

References:

Park’s Textbook of Preventive and Social Medicine, 25th edition, Page 483, 967-970

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: As a medical professional at a primary health center (PHC) located in a region prone to frequent seismic activities, what measures would you take to ensure preparedness in the event of an emergency? 1. Disaster preparedness by making sure all financial and other resources are available 2. Increase public awareness through campaigns and loudspeakers 3. Conduct a simulation for the disaster and assess the response 4. Follow instructions given over the phone or radio by higher officials (Q855624)

A. 1,2,3,4

B. 2,3,4

C. 1,2,3

D. 1,2,4

Correct Answer: C. 1,2,3

Explanation: isaster preparedness by ensuring financial and other resources are available : This ensures the PHC is well-equipped to handle emergencies like providing medical supplies, staffing, and logistical support. Increasing public awareness through campaigns and loudspeakers : Educating the community on safety measures during an earthquake reduces panic and ensures informed actions. Conducting a simulation for the disaster and assessing the response : Simulations help identify gaps in the disaster response plan and improve coordination during an actual emergency. These actions align with standard disaster preparedness protocols. 1, 2, 3, 4 (Option A) : Includes all measures, but point 4 (following instructions given over the phone or radio) is not a preparedness step—it is part of the response during the event. Preparedness focuses on proactive planning and readiness before the disaster occurs. 2, 3, 4 (Option B) : Excludes disaster preparedness by ensuring financial and other resources (point 1) , which is a critical component of readiness. 1, 2, 4 (Option D) : While 1 and 2 are essential, relying solely on instructions given over the phone or radio (point 4) is reactive and not a proactive preparedness measure.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 926, 927

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: How much financial incentive is provided to mothers residing in urban areas within low-performing states under the Janani Suraksha Yojana? (Q855620)

A. Rs 1000

B. Rs1500

C. Rs 2000

D. Rs 500

Correct Answer: A. Rs 1000

Explanation: - Rs 1000 Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Health Mission (NHM) , aiming to increase institutional deliveries and reduce maternal and neonatal mortality. Started in 2005 Goal: Reduce maternal mortality To promote institutional deliveries Incentives are provided to: Pregnant females delivering in health institutions ASHA workers who mobilize pregnant females to health institutions for delivery Under the JSY , the current incentive structure for institutional deliveries of Low Performing States (LPS) : Urban Areas: ■1,000 (Mother's package) + ■400 (ASHA's package) Rural Areas: ■1,400 (Mother's package) + ■600 (ASHA's package) MATERNAL HEALTH INITIATIVES: Janani Suraksha Yojana (JSY) Janani Shishu Suraksha Karyakram (JSSK) LAKSHYA PMMVY Pradhan Mantri Surakshit Matritva Abhiyan DAKSHATHA SUMAN (Surakshit Matritva Ashwasan)

References:

Park’s Textbook of Preventive and Social Medicine, 25th edition, Page 486, 491

Park’s Textbook of Preventive and Social Medicine, 27th edition, Page 521

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following statements accurately describes Ayushman Bharat? (Q859823)

A. Launched in 2019

B. Aim is to achieve universal health coverage in India

C. Covers only tertiary health care centres

D. Cashless, paperless service by only government hospitals

Correct Answer: B. Aim is to achieve universal health coverage in India

Explanation: The Ayushman Bharat scheme, also known as Pradhan Mantri Jan Arogya Yojana, aims to achieve universal health coverage in India. Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PMJAY): An initiative launched in 2018 (Option A ruled out) by Govt. of India to achieve UHC (Option B) Provides all the elements, including NCDS, in primary care. Benefits: Coverage : up to INR 5 lakh per family per year for secondary and tertiary care hospitalization. (Option C ruled out) There is no restriction on the number of family members. Cashless access across the country (Option D ruled out) All pre-existing conditions covered Covers the cost of treatment, up to 3 days of pre-hospitalization and 15 days of post-hospitalization follow-up care. Beneficiaries: Vulnerable and poor populations based on the Socio-Economic Caste Census (SECC) database.



References:

Park's Textbook of Preventive and Social Medicine 27th Edition Page 719

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: How many individuals are allocated to one ASHA worker for the population in rural areas? (Q859812)

A. 500

B. 1200

C. 2500

D. 1000

Correct Answer: D. 1000

Explanation: An ASHA worker is a grass root level worker who is elected by a village panchayat and under the supervision of a medical officer. The existing population norm is 1/1000. The proposed population norm is 2/1000.

ASHA should be: A resident of the same village A married/divorced/single woman Preferably from the age group 25-45 Educated up to class 10 One ASHA for 1000 population/per habitation

References:

K.Park's Textbook of Preventive and Social Medicine 27th Edition, Page 700-701

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following is not considered a pillar of primary health care? (Q859187)

A. Health education

B. Intersectoral coordination

C. Appropriate technology

D. Equitable distribution

Correct Answer: A. Health education

Explanation: Four Pillars of Primary Health Care: Equitable distribution (Option D ruled out): Equitable distribution of health services irrespective of their socio-economic status. Intersectoral coordination (Option B ruled out): Involves collaboration from other sectors like agriculture, education, etc. Maintains good health. Appropriate technology (Option c ruled out): Use of technology that is accessible, affordable, and suitable for the community Eg: ORS VVM (Vaccine Vial Monitor): Heat sensitive label Shakir tape: Malnutrition grading Kangaroo mother care: Preterm care Community participation: Ensure the participation of the community in planning, implementing and maintaining. For the promotion and maintenance of their health. Eg: ASHA workers are residents of the same community.

References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 693-694

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Which entity is responsible for overseeing the school health programs? (Q856053)

A. Primary health center

B. District hospital

C. Sub-centre

D. Sub-divisional hospital

Correct Answer: A. Primary health center

Explanation: Primary health centers (PHCs) are primarily responsible for overseeing and implementing school health programs. They conduct regular health check-ups, immunizations, and health education in schools, ensuring the overall health and well-being of students. Hierarchical Structure of Health Centers in India : Level Name Function Population Coverage Staffing 1 Sub-Centers (SCs) (Option C ruled out) First point of contact for the community, providing basic healthcare services like immunization, maternal and child health, and health education. 5,000 people in plain areas, 3,000 in hilly/tribal areas 1 Female Health Worker (ANM) and 1 Male Health Worker 2 Primary Health Centers (PHCs) Provides integrated curative and preventive healthcare services for rural populations. Focuses on maternal and child health, immunization, and family planning. Serves 30,000 people Managed by a Medical Officer with supporting healthcare staff 3 Block Primary Health Center (Block PHC) Referral point for PHCs within the block, providing maternal and child health services, basic surgeries, and diagnostics. Serves a block population (typically 30,000–50,000 people) Medical Officer, Nurses, Lab Technicians 4 Community Health Centers (CHCs) Serves as a referral point for PHCs and provides specialized care. Serves 80,000 to 1,20,000 people Staffed with specialists (e.g., surgeons, obstetricians, pediatricians) 5 Sub-Divisional Hospitals (SDHs) (Option D ruled out) Provides more advanced care than PHCs or CHCs at the sub-divisional level, offering a broader range of medical services and treatments. Sub-divisional coverage Specialists, General Medical Practitioners 6 District Hospitals (Option B ruled out) Provide secondary care services and act as referral points for CHCs. Services include emergency care, surgeries, and specialized treatments. District-level coverage Specialists, General Medical Practitioners 7 Tertiary Care Hospitals Provide advanced medical care and specialized services, such as complex surgeries and treatment for rare conditions. Multi-district coverage Highly trained specialists in various medical fields

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 636, 965

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 661

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Which of the following is not a responsibility of an Accredited Social Health Activist (ASHA) worker? (Q857718)

A. Identify target beneficiaries and support ANM in conducting outreach sessions

B. Promote formation of Women's Health Groups/ Mahila Arogya Samiti

C. Accompany pregnant women and children requiring treatment/ admission

D. Water quality : Ensure chlorination and safe water supply

Correct Answer: D. Water quality : Ensure chlorination and safe water supply

Explanation: ct as depot holder : ORS, PCM, Contraceptives, chloroquine, disposable delivery kit (DDK) Maintain necessary information and records

References:

Park’s Textbook of Preventive Medicine, 27th Edition, Page .989,990

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: What are the primary referral centers in India's healthcare system? (Q857127)

A. Primary health centres and district hospitals

B. Medical colleges and district hospitals

C. Community health centres and medical colleges

D. Sub-district hospitals and community health centres

Correct Answer: D. Sub-district hospitals and community health centres

Explanation: : Medical colleges SSH: Superspeciality hospitals Medical colleges SSH: Superspeciality hospitals Secondary Level of Health Care CHC: Community health center, SDH: Sub-district hospital DH: District hospital Urban CHC (u-CHC) Metrocity Non-metrocity Primary Level of Health Care SC: Sub-centers PHCs: Primary health centers Swasthya Chowki Urban PHC or Urban health center Grass Root Level Workers ASHA USHA

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC5144115/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which of the following is not considered a pillar of primary health care? (Q857105)

A. Health education

B. Intersectoral coordination

C. Appropriate technology

D. Equitable distribution

Correct Answer: A. Health education

Explanation: quitable distribution (Option D) Equitable distribution of health services irrespective of their socio-economic status. Intersectoral coordination (Option B) Involves collaboration from other sectors like agriculture, education, etc. Maintains good health. Appropriate technology (Option C) Use of technology that is accessible, affordable, and suitable for the community Eg: ORS VVM (Vaccine Vial Monitor): Heat sensitive label Shakir tape: Malnutrition grading Kangaroo mother care: Preterm care Community participation Ensure the participation of the community in planning, implementing and maintaining. For the promotion and maintenance of their health. Eg: ASHA workers are residents of the same community.

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 693-694

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following is the initial point of contact for individuals seeking medical assistance within a community? (Q793638)

A. Primary health center (PHC)

B. Community health center (CHC)

C. Sub-centre

D. District hospital

Correct Answer: C. Sub-centre

Explanation: Correct Option C-Sub-centre: The first and most fundamental component of India's primary healthcare system, a sub-center serves as the community members' first point of contact when seeking medical attention. Incorrect Options : Option a: PHCs act as a referral link between the Sub-centres and higher-level healthcare facilities, like Community Health Centres (CHCs) and District Hospitals. Option b: PHCs and other lower-level healthcare facilities can be referred to CHCs, which are typically found in semi-urban or rural areas. Option d: A district hospital acts as a referral hub for primary care clinics (PHCs) and community health centers (CHCs), which are among the lower-level healthcare facilities.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which of the following is not a part of the urban health care delivery system? (Q858123)

A. PHC

B. CHC

C. Swasthya Chowki

D. Subcenter

Correct Answer: D. Subcenter

Explanation: Sub-centers are primarily designed for rural healthcare delivery and are typically not part of the formal urban health infrastructure. Urban areas rely more on primary health centers (UPHCs) and Swasthya Chowkis instead. PHC (Option A): is incorrect because Primary Health Centers are part of the urban health care delivery system in certain cities for providing outpatient care and preventive services. CHC (Option B): is incorrect because Community Health Centers, although predominantly in rural areas, can also be established in semi-urban regions for specialty care. Swasthya chowki (Option C): is incorrect because these are urban healthcare units that play a role in healthcare delivery for densely populated urban slums.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 502

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: At which of the following centers are the records of eligible couples maintained? (Q858093)

A. PHC

B. CHC

C. Sub-centre

D. District hospital

Correct Answer: C. Sub-centre

Explanation: In the context of family planning and reproductive health services, sub-centres are responsible for maintaining records of eligible couples (those who are eligible for family planning services). The sub-centre is the lowest level of healthcare delivery and plays a key role in providing basic health services, including maternal and child health services, and managing family planning records. PHC (Option A): is incorrect because while PHCs provide a broader range of services than sub-centres , they do not typically maintain detailed records of eligible couples at the ground level. CHC (Option B): is incorrect because CHCs provide more specialized care and cover a larger area, but the maintenance of records for eligible couples is primarily managed at the sub-centre . District hospital (Option D): is incorrect because district hospitals focus on providing higher-level medical care and are not primarily responsible for maintaining family planning records for eligible couples, which is the role of sub-centres .

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 990, 993, 1001, 1002.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: What is the number of the deliveries performed by Type-A PHC in a month? (Q858089)

A. Less than 20

B. 20 or above

C. Less than 30

D. 30 or above

Correct Answer: A. Less than 20

Explanation: Based on the Indian Public Health Standards (IPHS) guidelines, the delivery load for a Type-A Primary Health Center (PHC) is defined as follows: Type-A PHC: Performs less than 20 deliveries per month. Type-B PHC: Performs 20 or more deliveries per month. HEALTH CARE DELIVERY SYSTEM IN RURAL AREAS - PHC/HWC/AM Level of health care Primary level Population 1/30,000 in plain areas 1/20,000 in hilly areas Categorization (number of deliveries conducted) Type A- < 20 deliveries/month Type B- ≥ 20 deliveries/month Number of staff Type A – 13 to 18 Type B – 14 to 21 Responsibility to maintain State government Number of villages 29 villages Number of beds Type A : 4-6 Type B : 6-10

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 994

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Which of the following should not be included in the school health service? (Q857988)

A. Education of handicapped children

B. Doctor on premises

C. Dental and eye health services

D. School health records

Correct Answer: B. Doctor on premises

Explanation: While it is important for schools to have access to healthcare services, having a doctor on premises is not a mandatory requirement for School Health Services . In many schools, a school health program is run by a nurse or a trained health worker , with doctors available for consultations when needed. The focus of school health services is on preventive care, routine health screenings, and maintaining health records. Having a doctor on-site is not a necessary component, as healthcare professionals can also be consulted through local health centers or clinics. Education of handicapped children (Option A): is incorrect because education of handicapped children is typically part of the school's inclusive education program, which is not directly linked to the medical services provided by the school health service, but is a separate educational initiative. Dental and eye health services (Option C): is incorrect because dental and eye health services are a key component of the school health service program, focusing on the prevention and treatment of common conditions like cavities, vision problems, and other health issues in children. School health records (Option D): is incorrect because maintaining school health records is an essential part of the school health service to monitor and track the health status, vaccinations, and any medical issues of students, ensuring proper care and follow-up when necessary.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 25, Page 663- 667.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: Which of the following is a technology-based surveillance system for tuberculosis (TB) in India? (Q859980)

A. Nikshay

B. Nischay

C. Dots99

D. DOTS

Correct Answer: A. Nikshay

Explanation: Correct Option A - Nikshay Nikshay is a web-based solution for monitoring the Revised National Tuberculosis Control Program (RNTCP) and the National Tuberculosis Elimination Program (NTEP) in India. It is a Health Management Information System (HMIS) - an online software for reporting & compliance with treatment. Incorrect Options: Nischay (Option B): Nischay Kits are home-based UPT testing kits provided free by Asha DOTS 99 (Option C): DOTS 99 is a toll-free number written below anti-TB tablets to ensure the continuity of the treatment. The patients in the continuation phase are expected to call the Toll-free number when they take the medicine. DOTS (Option D): Directly Observed Treatment Short course involves the direct observation of patients taking their TB medication during the intensive phase by a healthcare worker.

References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 692

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: For what population size is an urban Primary Health Centre (PHC) typically intended? (Q859979)

A. 1 per 50,000

B. 1 per 100,000

C. 1 per 250,000

D. 1 per 200,000

Correct Answer: A. 1 per 50,000

Explanation: Correct Option A - 1 per 50,000 1 Urban Health and Wellness Centre (U-HWCs) for 15,000-20,000 population 1 U-PHC for 50,000 population ideally If U-PHC within slum or ½ km radius of slum: 1 U-PHC for 25,000-30,000 population For densely populated slums: 1 U-PHC for 75,000 population Type of primary health centre Plain population Hilly & tribal population Rural PHC 1 per 30,000 1 per 20,000 Urban PHC 1 per 50,000 - Multispeciality UPHC/Polyclinic 1 per 2-3 lakh - Incorrect Options: Options B, C & D: A U-PHC is not intended for such a large population as it might not effectively serve the healthcare needs of the population.

References:

Park’s Textbook of Preventive and Social Medicine 27th edition, Page 307

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Who is primarily responsible for registering eligible couples for family planning and maintaining their records under the national health system? (Q866799)

A. ASHA

B. Multipurpose Worker (Female)

C. Village Health Guide

D. Anganwadi Worker

Correct Answer: B. Multipurpose Worker (Female)

Explanation: Under India's national health system, the Multipurpose Worker (Female), often synonymous with the Auxiliary Nurse Midwife (ANM), is responsible for registering eligible couples for family planning and maintaining their records. This includes updating the Eligible Couple Register, tracking contraceptive use, and ensuring follow-up services. ASHAs and Anganwadi Workers assist in community mobilization and education but do not maintain the official eligible couple records. Multipurpose Worker (Female) / ANM in Family Planning: Role in Family Planning: Maintain Eligible Couple Register (ECR) at the sub-centre level. Identify eligible couples (married women aged 15–49 years). Record contraceptive choices and follow-up dates. Distribute contraceptives (condoms, OCPs) and counsel couples. Refer for IUCD, sterilization, or other services as required. Coordination: Works with ASHAs, Anganwadi Workers, and Medical Officers for outreach. ASHA (Option A): Assists in identifying eligible couples, motivating them for family planning, and distributing contraceptives, but does not maintain the official ECR. Village Health Guide (Option C): Works in basic health education and minor treatment at the village level; not involved in formal family planning registration. Anganwadi Worker (Option D): Focuses on nutrition, child care, and preschool education under ICDS; not responsible for maintaining eligible couple records.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: Which of the following statements is false regarding a primary healthcare center (PHC)? (Q793660)

A. There is 1 PHC per 30,000 population in plain areas

B. Type A PHC conducts <20 deliveries per month

C. Provides maternal and child health care, family planning and MTP

D. Is the first referral unit

Correct Answer: D. Is the first referral unit

Explanation: Correct Option-D: Is the first referral unit They are the most peripheral and basic units of the healthcare system, and their primary role is to provide primary healthcare services, preventive care, and basic treatment. PHCs are not equipped to handle complex medical conditions or provide specialized care beyond primary healthcare. Incorrect Options: Option A. There is 1 PHC per 30,000 population in plain areas - This statement is generally accurate. the ratio of 1 PHC per 30,000 population in plain areas is a common guideline for healthcare infrastructure planning. Option B. Type A PHC conducts <20 deliveries per month - This statement is generally accurate. PHCs conduct a limited number of deliveries per month. Option C. Provides maternal and child health care, family planning, and MTP - This statement is accurate. PHCs play a vital role in providing maternal and child health services, family planning, and medical termination of pregnancy (MTP) services, among other primary healthcare services.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: Which of the following statements is false regarding the staff of an urban primary health center? (Q793616)

A. 2 doctors

B. 5 Multiskilled staff nurse

C. 1 lab technician

D. 1 pharmacist

Correct Answer: B. 5 Multiskilled staff nurse

Explanation: Correct Option B - 5 Multiskilled staff nurse : The statement is not correct about the staff of the Urban Primary Health Center (UPHC). There are 2 Multiskilled staff nurse in UPHC. Incorrect Options : Option a: 2 doctors In UPHC is correct statement. Option c: 1 lab technician In UPHC is correct statement. Option d: 1 pharmacist In UPHC is correct statement.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: What is number of the deliveries performed by Type-A PHC in a month? (Q820638)

A. less than 20

B. 20 or above

C. less than 30

D. 30 or above

Correct Answer: A. less than 20

Explanation: Correct Option A - Less Than 20: This option indicates that the number of deliveries performed by Type-A Primary Health Center (PHC) in a month is fewer than 20. It is the correct answer Incorrect Options: Options B, C & D are incorrect

↑ *Back to this question in Part A*

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• [17_International Health] 058 International Health

« Back to Folder Directory

[17_International Health] 058 International Health — Quick Jump

Q1 (p. 1776) *Q2 (p. 1777)* *Q3 (p. 1778)* *Q4 (p. 1781)* *Q5 (p. 1783)* *Q6 (p. 1785)*
Q7 (p. 1785) *Q8 (p. 1787)*

Q1: Which of the following best describes the services covered under UNICEF's GOBI-FFF strategy? (Q840938)

A. Providing emergency relief and disaster response

B. Promoting environmental sustainability and climate action

C. Enhancing maternal health and prenatal care

D. Addressing essential child health interventions

Correct Answer: D. Addressing essential child health interventions

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The GOBI-FFF strategy is a comprehensive approach developed by UNICEF to address essential child health interventions in resource-limited settings. UNICEF- United Nations International Children's Emergency Fund Headquarters - New York Established in 1946 GOBI-FFF campaign: G rowth monitoring O ral rehydration solution B reastfeeding I mmunisation F emale Literacy F amily Planning F ood Supplements Services provided: Child health Child nutrition: Making high-protein and low-cost food mixes Aids Applied nutrition programme by FAO Family and Child Welfare Education



References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 1024
https://www.unicef.org/media/84666/file/SOWC-1984.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which international organization primarily focuses on reproductive health and population issues? (Q840939)

A. FAO

B. WFP

C. UNFPA

D. Urban HEART

Correct Answer: C. UNFPA

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: UNFPA stands for the United Nations Population Fund. It is an international organization primarily focusing on reproductive health and population issues. United Nations Fund for Population Activity (UNFPA): Headquarters - New York Established in 1967 Addresses population and development issues Develops national capability for the manufacture of contraceptives Food and Agricultural Organisation (FAO) (Option A): Headquarters - Rome. It has taken the initiative for 3 F's: Farming, Forestry, Fisheries Objective - Increase production of food to keep pace with the growing world population World Food Programme (WFP) (Option B): World's largest international food organisation Beneficiaries: Poor women and children at risk, poor first dependent population. WFP developed India-mix—40% maize, 40% wheat, and 20% full-fat soya bean fortified with micronutrients (iron, calcium, vitamin A)—which was distributed through the ICDS project. Urban Health Equity Assessment and Response Tool (Urban HEART) (Option D): Urban HEART is a tool developed by WHO that is designed to address health inequities in urban areas. It helps policymakers identify disparities, assess their causes, and implement strategies to improve health outcomes for disadvantaged populations.



References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 1030

https://www.wfp.org/stories/wfp-glance#

https://wcd.nic.in/integrated-child-development-services-icds-scheme

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following is not a bilateral agency? (Q840941)

A. USAID

B. World bank

C. SIDA

D. DANIDA

Correct Answer: B. World bank

- *Listen (English)*
- *Listen (Hindi)*

Explanation: The World Bank is not a bilateral agency, it is a multilateral agency. Multilateral agencies are formed by 3 or more countries to work on issues. Examples include the UN, WHO, World Bank, and the International Monetary Fund. World Bank Headquarters - Washington. Objective - Help less developed countries to raise living standards by lending money (Bank for countries) Bilateral agencies: Formed between 2 countries, provides funds to developing countries Agencies Headquarters Services in India United States Agency for International Development (USAID) (Option A) Washington Malaria eradication Medical and nursing education Health education Water supply and sanitation Nutrition and Family Planning Control of Communicable Diseases Swedish International Development Agency (SIDA) (Option C) Sweden Assisting the National TB Control Program Danish International Development Agency (DANIDA) (Option D) Denmark Assisting the National Blindness Control Programme





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References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page1030-1

https://www.jstor.org/stable/resrep26672.5

https://dea.gov.in/multilateral-institutions-divisions

https://www.adb.org/about/multilateral-organizations

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which organisation promotes economic and social development in South Asia and the South-East Asia region? (Q840944)

A. Colombo Plan

B. Rockefeller Foundation

C. Ford Foundation

D. CARE

Correct Answer: A. Colombo Plan

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Colombo Plan Bilateral Organization Promotes the concept of collective intergovernmental for economic and social development in South and Southeast Asia. Primary focus is on agricultural and industrial development and sometimes on health. Membership - 20 developing countries. 6 non-regional members - Australia, Canada, Japan, New Zealand, UK, USA. Provides Cobalt Radiotherapy Units to Medical Colleges AIIMS in New Delhi was established with financial assistance from New Zealand. Rockefeller Foundation (NGO) Headquarters - New York. Work in India began in 1920 with a scheme for control of hookworm disease in Madras presidency. Established All India Institute of Hygiene and Public Health at Kolkata Sponsoring visits of medical specialists from the USA. Grants-in-aid to select institutions for research and development. Assistance to research projects and institutions Ford Foundation (NGO) Headquarters - New York. Active in the development of rural health services and family planning. Ford Foundation has helped India with the following projects: Rural Health and Rural environment and sanitation Establishment of the National Institute of Health Administration and Education (NIHAE) at Delhi Kolkata water supply and drainage scheme Supporting research in reproductive biology and family planning fellowship programs CARE- Cooperative for assistance and Relief Everywhere (NGO) Headquarters - Geneva. Provides emergency aid and long-term development assistance In India: Integrated Nutrition and Health Project Improving Women's Health Project Anaemia Control Project Improved Health Care for Adolescent Girls Project Child Survival Project Family Spacing Project Konkan Integrated Development Project


PLANNING PROSPERITY
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References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 1031 Image: https://colombo-plan.org/history/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which of the following organisations has its headquarters in Geneva? (Q840947)

A. UNAID

B. UNDP

C. UNFPA

D. UNICEF

Correct Answer: A. UNAID

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: UNAID (Joint United Nations Programme on HIV/AIDS) has headquarters in Geneva, while all other organization's headquarters are in New York. Headquarters Organizations Function New York UN Framed SDG UNDP Framed SDG, HDI (Human Development Index) UNICEF GOBI, FFF, ICDS, Child health, Applied nutrition plan Ford Foundation Rural health, construction toilets & sanitation, family planning, drainage system (Calcutta), NIHAE Rockefeller Foundation All India institute of hygiene & public health – Kolkata, Rural health research SIDA Assisting TB programme Geneva CARE International red cross War victims, disaster, first aid ILO Labour Washington World Bank Assist financially USAID Family planning, TB & HIV programme Rome FAO Food, forest, fisheries, Nutrition Denmark DANIDA Blindness programme Colombo, Sri Lanka Colombo plan AIIMS, Cobalt radiotherapy unit Note : Headquarters of UNESCO (doesn't deal with health)- Paris UNAIDS (Joint United Nations Programme on HIV/AIDS) (Option A): Headquarters: Geneva, Switzerland Purpose: UNAIDS is the main advocate for accelerated, comprehensive, and coordinated global action on the HIV/AIDS pandemic. Key Fact: It is unique because it is a "joint" program, meaning it coordinates the efforts of 11 other UN system agencies (like WHO and UNICEF) to ensure a unified response to the virus. UNDP (United Nations Development Programme) (Option B): Headquarters: New York City, USA Purpose: UNDP is the UN's global development network. It focuses on poverty reduction, HIV/AIDS, democratic governance, energy and environment, social development, and crisis prevention and recovery. It publishes the annual Human Development Report , which contains the Human Development Index (HDI). UNFPA (United Nations Population Fund) (Option C): Headquarters: New York City, USA Purpose: This is the UN's sexual and reproductive health agency. Its mission is to deliver a world where every pregnancy is wanted, every childbirth is safe, and every young person's potential is fulfilled. It focuses heavily on maternal health and ending gender-based violence. UNICEF (United Nations Children's Fund) (Option D): Headquarters: New York City, USA Purpose: UNICEF provides long-term humanitarian and developmental assistance to children and mothers in developing countries. It was originally created to provide emergency food and healthcare to children in countries devastated by World War II.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page1025,1029,1028,1030,1032

https://www.rockefellerfoundation.org/about-us/offices/

https://www.fordfoundation.org/about/the-ford-foundation-center-for-social-justice/visitor-information/

https://www.unaids.org/en/aboutunaids/contactunaids

https://www.worldbank.org/en/about/contacts

https://www.unfpa.org/contact

https://www.undp.org/about-us/faqs#

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following is NOT one of the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015? (Q840948)

A. End poverty in all its forms everywhere

B. Ensure inclusive and equitable quality education for all

C. Promote sustainable consumption and production patterns

D. Achieve world peace and disarmament

Correct Answer: D. Achieve world peace and disarmament

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Sustainable Development Goals (SDGs), adopted by the United Nations and UNDP in 2015, aim to eradicate poverty, ensure prosperity, and protect the planet by 2030. There are 17 goals: End poverty everywhere in all its forms (Option A ruled out) Zero hunger- Achieve food security, improve nutrition, and promote sustainable agriculture. Ensure healthy lives and well-being for all ages. Provide inclusive and equitable quality education and lifelong learning opportunities (Option B ruled out) Achieve gender equality and empower women and girls. Ensure access to sustainable & clean water and sanitation for all. Ensure access to affordable, clean and modern energy for all. Promote sustainable economic growth, full employment, and decent work. Build resilient infrastructure, promote sustainable industrialization, and foster innovation. Reduce inequality within and among countries. Make cities and human settlements inclusive, safe, resilient, and sustainable Ensure sustainable consumption and production patterns (Option C ruled out) Take urgent action to combat climate change and its impacts. Conserve and sustainably use water bodies - oceans, seas, and marine resources. Protect, restore, and sustainably use terrestrial ecosystems and preserve biodiversity. Promote peaceful and inclusive societies, ensure access to justice, and build effective institutions. Strengthen global partnerships for sustainable development.

References:

https://www.undp.org/sustainable-development-goals

https://www.undp.org/turkiye/projects/sustainable-development-goals-investment-initiative

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the following best describes the services covered under UNICEF's GOBI-FFF strategy? (Q844356)

A. Providing emergency relief and disaster response

B. B. Promoting environmental sustainability and climate action

C. C. Enhancing maternal health and prenatal care

D. D. Addressing essential child health interventions

Correct Answer: D. D. Addressing essential child health interventions

Explanation: The GOBI-FFF strategy is a comprehensive approach developed by UNICEF to address essential child health interventions in resource-limited settings. UNICEF- United Nations International Children's Emergency Fund Headquarters - New York Established in 1946 GOBI-FFF campaign: G rowth monitoring O ral rehydration solution B reastfeeding I mmunisation F emale Literacy F amily Planning F ood Supplements Services provided: Child health Child nutrition: Making high-protein and low-cost food mixes Aids Applied nutrition programme by FAO Family and Child Welfare Education



References:

Park’s Textbook of Preventive and Social Medicine - Edition 27, Page 1024
https://www.unicef.org/media/84666/file/SOWC-1984.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: Select the true statements regarding the World Health Organization. It was the world's first International health agency. It was established on 7th April 1948. Biomedical research is not a duty of the WHO. Weekly epidemiological records are part of the WHO surveillance system. The headquarters of WHO is in Geneva. (Q845077)

A. 2, 4, 5

B. 3, 5

C. 1, 2, 3, 4, 5

D. 1, 3, 4, 5

Correct Answer: A. 2, 4, 5

Explanation: World Health Organization: A specialized agency of the United Nations. It was established on 7th April 1948 (Statement 2) The headquarters of WHO is in Geneva (Statement 5) Structure: The World Health Assembly. The Executive Board. The Secretariat. Roles and responsibilities of WHO: Health statistics Bio-medical research (Statement 3) Health literature and information Cooperation with other organisations Development of comprehensive health services Prevention and control of specific communicable and non-communicable diseases [uses Automatic Telex Reply Service (ATRS) and Weekly Epidemiological records (WER)] (Statement 4) Environmental Health Family Health The Pan American Sanitary Bureau (PASB) was the first international health agency established (Statement 1).



References:

Park’s Textbook of Preventive and Social Medicine - Edition 27, Page -1026.

↑ *Back to this question in Part A*

• [17_International Health] 059 Previous Year Questions

« Back to Folder Directory

[17_International Health] 059 Previous Year Questions — Quick Jump

Q1 (p. 1789) *Q2 (p. 1790)* *Q3 (p. 1791)* *Q4 (p. 1792)* *Q5 (p. 1793)*

Q1: Under which health organization are the Sustainable Development Goals (SDGs) implemented? (Q857076)

A. United nations development programme

B. United nations children's fund

C. United nations educational, scientific and cultural organisation

D. World health organization

Correct Answer: A. United nations development programme

Explanation: P in 2015, aim to eradicate poverty, ensure prosperity, and protect the planet by 2030. There are 17 goals: 1. End poverty everywhere in all its forms. 2. Zero hunger- Achieve food security, improve nutrition, and promote sustainable agriculture. 3. Ensure healthy lives and well-being for all ages. 4. Provide inclusive and equitable quality education and lifelong learning opportunities. 5. Achieve gender equality and empower women and girls. 6. Ensure access to sustainable & clean water and sanitation for all. 7. Ensure access to affordable, clean and modern energy for all. 8. Promote sustainable economic growth, full employment, and decent work. 9. Build resilient infrastructure, promote sustainable industrialization, and foster innovation. 10. Reduce inequality within and among countries. 11. Make cities and human settlements inclusive, safe, resilient, and sustainable 12. Ensure sustainable consumption and production patterns. 13. Take urgent action to combat climate change and its impacts. 14. Conserve and sustainably use water bodies - oceans, seas, and marine resources. 15. Protect, restore, and sustainably use terrestrial ecosystems and preserve biodiversity. 16. Promote peaceful and inclusive societies, ensure access to justice, and build effective institutions. 17. Strengthen global partnerships for sustainable development. UNICEF (Option B): works around the world to strengthen health systems; immunize and treat children for pneumonia, diarrhea, malaria and other health conditions; help countries combat non-communicable diseases; and support children with mental health conditions, developmental delays and disabilities. UNESCO's (Option C): mission is to contribute to the building of a culture of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, communication and information WHO works (Option D): worldwide to promote health, keep the world safe, and serve the vulnerable.

References:

https://www.undp.org/sustainable-development-goals

https://www.undp.org/turkiye/projects/sustainable-development-goals-investment-initiative

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following organizations is the largest international fund dedicated to population and reproductive health issues? (Q857142)

A. World bank

B. UNFPA

C. UNESCO

D. UNICEF

Correct Answer: B. UNFPA

Explanation: : Stands for the United Nations Population Fund. It is an international organization primarily focusing on reproductive health and population issues. {{caption_text}} United Nations Fund for Population Activity (UNFPA): Headquarters - New York Established in 1967 Addresses population and development issues Develops national capability for the manufacture of contraceptives The World Bank Group (Option A): is one of the world's largest sources of funding and knowledge for developing countries. UNESCO (Option C): is the United Nations Educational, Scientific and Cultural Organization. It contributes to peace and security by promoting international cooperation in education, sciences, culture, communication and information UNICEF (Option D): works around the world to strengthen health systems; immunize and treat children for pneumonia, diarrhoea, malaria and other health conditions; help countries combat non-communicable diseases; and support children with mental health conditions, developmental delays and disabilities.



References:

Park’s Textbook of Preventive and Social Medicine - Edition 27, Page 1030

https://www.wfp.org/stories/wfp-glance#:~:text=We%20provide%20access%20to%20healthy,between%20January%20and%20September%202023.

https://wcd.nic.in/integrated-child-development-services-icds-scheme

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which of the following statements is not true according to the sustainable development goals? (Q859213)

A. End the epidemics of AIDS, tuberculosis, malaria and combat hepatitis

B. Reduce the global maternal mortality ratio to less than 70 (per 100,000 liver births)

C. Reduce the neonatal mortality rate to as low as 25 (per 1,000 liver births)

D. Reduce under-5 mortality to as low as 25 (peer 1,000 liver births)

Correct Answer: C. Reduce the neonatal mortality rate to as low as 25 (per 1,000 liver births)

Explanation: Goal 3 and target 3.2 of the sustainable development is: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births. The Sustainable Development Goals (SDGs), adopted by the United Nations and UNDP in 2015, aim to eradicate poverty, ensure prosperity, and protect the planet by 2030. There are 17 goals: 1. End poverty everywhere in all its forms. 2. Zero hunger - Achieve food security, improve nutrition, and promote sustainable agriculture. 3. Ensure healthy lives and well-being for all ages. 4. Provide inclusive and equitable quality education and lifelong learning opportunities. 5. Achieve gender equality and empower women and girls. 6. Ensure access to sustainable & clean water and sanitation for all. 7. Ensure access to affordable, clean and modern energy for all. 8. Promote sustainable economic growth , full employment, and decent work. 9. Build resilient infrastructure, promote sustainable industrialization, and foster innovation . 10. Reduce inequality within and among countries. 11. Make cities and human settlements inclusive, safe, resilient, and sustainable 12. Ensure sustainable consumption and production patterns. 13. Take urgent action to combat climate change and its impacts. 14. Conserve and sustainably use water bodies - oceans, seas, and marine resources. 15. Protect, restore, and sustainably use terrestrial ecosystems and preserve biodiversity. 16. Promote peaceful and inclusive societies, ensure access to justice, and build effective institutions. 17. Strengthen global partnerships for sustainable development. {{caption_text}} Goal 3: Ensure healthy lives and well-being for all ages: Target 3.1: Reduce maternal mortality By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births (Option B ruled out) Target 3.2: End all preventable deaths under five years of age By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births (Option C) and under■5 mortality to at least as low as 25 per 1,000 live births (Option D ruled out) Target 3.3: Fight communicable diseases By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases (Option A ruled out) Target 3.4: Reduce mortality from non-communicable diseases and promote mental health By 2030, reduce by one-third premature mortality from non-communicable diseases

through prevention and treatment and promote mental health and well-being Target 3.5: Prevent and treat substance abuse Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol Target 3.6: Reduce road injuries and deaths By 2020, halve (50% less) the number of global deaths and injuries from road traffic accidents Target 3.7: Universal access to sexual and reproductive care, family planning and education By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs Target 3.8: Achieve universal health coverage Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all Target 3.9: Reduce illnesses and deaths from hazardous chemicals and pollution By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination



References:

https://www.undp.org/sustainable-development-goals

https://www.undp.org/turkiye/projects/sustainable-development-goals-investment-initiative

https://en.wikipedia.org/wiki/Sustainable_Development_Goal_3

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following steps is excluded from the STEP approach of the World Health Organization (WHO)? (Q855626)

A. Therapeutic assessment

B. Physical assessment

C. Psychological assessment

D. Behavioral assessment

Correct Answer: A. Therapeutic assessment

Explanation: P approach of the World Health Organization (WHO) is a framework for assessing and addressing chronic diseases and mental health issues. It primarily focuses on: Physical assessment Psychological assessment Behavioural assessment The STEP approach does not include therapeutic assessment , as its focus is on evaluation and identification of risk factors and conditions rather than providing therapeutic interventions. Physical assessment (option B) : This is a core component of the STEP approach, as it involves measuring physiological parameters like weight, height, blood pressure, and other indicators. Psychological assessment (option C) : This is included to evaluate mental health and emotional well-being, which are critical aspects of chronic disease management. Behavioural assessment (option D): This is an integral part of the STEP approach, focusing on identifying lifestyle behaviours such as smoking, alcohol consumption, diet, and physical activity that influence health outcomes.

References:

Park’s Textbook of Preventive and Social Medicine, 25th edition, Page 47, 287, 373, 394, 452

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: Which organization is responsible for vaccines, child health and nutrition, safe water and sanitation, quality education and skill-building? (Q855873)

A. CARE

B. UNDP

C. UNICEF

D. WHO

Correct Answer: C. UNICEF

Explanation: Correct Option C - UNICEF: The United Nations Children's Emergency Fund (UNICEF) is the primary organization responsible for promoting and protecting the rights of children and ensuring their well-being. It focuses on vaccines, child health, nutrition, safe water and sanitation , and quality education and skill-building as part of its mission to support children's development worldwide. UNICEF works globally to improve the lives of children and women, especially in developing countries, and ensures they have access to essential services.

CARE (option A) is a humanitarian organization focused on fighting global poverty and providing emergency aid. While it works on issues like health and nutrition, its focus is broader and not as specifically centred on child health, vaccines, and education as UNICEF. UNDP (option B): The United Nations Development Programme (UNDP) focuses on sustainable development, poverty reduction, and democratic governance, but does not have the primary responsibility for child health, vaccines, and education. WHO (option D): The World Health Organization (WHO) is responsible for global health, including setting health standards and coordinating health responses. While it works on vaccines and child health, it is not as directly focused on child welfare, nutrition, water, and education as UNICEF.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 634, 710, 982, 985, 986, 987

https://www.unicef.org/media/84666/file/SOWC-1984.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

• [18_Biostatistics] 060 Biostatistics And Measures Of Central Tendency

« Back to Folder Directory

[18_Biostatistics] 060 Biostatistics And Measures Of Central Tendency — Quick Jump

Q1 (p. 1795) *Q2 (p. 1795)* *Q3 (p. 1796)* *Q4 (p. 1797)* *Q5 (p. 1798)* *Q6 (p. 1798)*
Q7 (p. 1799) *Q8 (p. 1800)* *Q9 (p. 1801)* *Q10 (p. 1803)*

Q1: Which of the following is an example of a qualitative variable? (Q841127)

A. Blood Pressure

B. Heart Rate

C. Blood group

D. Cholesterol Level

Correct Answer: C. Blood group

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Blood Type is a qualitative variable because it describes a characteristic, typically categorised as A, B, AB, or O, without numerical measurement. Variables: Properties that can take on different values. Essential for conducting research, analysing data, and understanding population health patterns and outcomes. There are two types: Qualitative & quantitative. Qualitative Variable Quantitative Variable Definition Describe categories or qualities. It cannot be measured or compared. Describes numerical quantities. It can be measured or compared. Data type Non-numeric Numeric Subtypes Nominal, Ordinal Discrete, Continuous Examples Gender Eye Color Type of Car Blood group (Option C) Race Height (cm) Weight (kg) Age (years) Blood Pressure (mm Hg) (Option A) Heart Rate (bpm) (Option B) Body Temperature (°C) Cholesterol Level (mg/dl) (Option D) Blood Glucose Level (mg/dl)

References:

High Yield Biostatistics, 4th Edition, Page 3

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4763618/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A continuous variable is best described as? (Q841130)

A. A variable that can only take on whole numbers.

B. A variable that can take on any value within a specified range.

C. A variable whose value is obtained by counting.

D. A variable that represents distinct, separate values.

Correct Answer: B. A variable that can take on any value within a specified range.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Continuous variables can take on any value within a range and are often measured using real numbers. Discrete Variable Continuous Variable Definition It is a variable whose value is obtained by counting (Option C) It can take on only specific, separate values. It is a variable whose value is obtained by measuring. It can take on any value within a given range (Option B) Data Type Integer values Distinct, separate values (e.g., 0, 1, 2, 3, ...) (Option D) Decimal or fractional values Any value within a range (e.g., 1.5, 2.3, 3.1416) Nature of Values Countable , finite Measurable , infinite possibilities Representation Whole numbers (Option A) Real numbers Examples Number of students in a class Number of cars Height Weight Temperature

References:

High Yield Biostatistics, 4th Edition, Page 3

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: The presence or absence of a disease is an example of? (Q841133)

A. Continuous variable

B. Discrete variable

C. Dichotomous variable

D. Polytomous variable

Correct Answer: C. Dichotomous variable

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Dichotomous Variable Polytomous Variable Definition Variable with two possible outcomes or categories. Variable with more than two possible outcomes or categories. Characteristics Represents binary choices. Has multiple distinct categories or levels. Examples Gender (male/female) Presence of a disease (yes/no) True/false response Blood type (A, B, AB, O) Educational level (high school, college, graduate school) Pain severity (mild, moderate, severe) Usage Common in binary classification tasks (e.g., disease diagnosis). Used in surveys, scales, and assessments for detailed categorisation.

References:

High Yield Biostatistics, 4th Edition, Page 3

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: An investigator studies the life expectancy of IV drug abusers and divides a sample of patients into HIV-positive and HIV-negative groups. What type of data does this division constitute? (Q841137)

A. Ratio

B. Ordinal

C. Nominal

D. Interval

Correct Answer: C. Nominal

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In the scenario provided, the division of patients into HIV-positive and HIV-negative groups constitutes nominal data because it categorises individuals into distinct, non-quantitative groups based solely on their HIV status. Nominal Scale Ordinal Scale Definition Can be expressed in Categories without order or ranking Can be arranged in Ordered categories with ranking Examples Gender (male, female, non-binary) Marital status (single, married, divorced) Blood type (A, B, AB, O) Type of delivery (Cesarean and Non cesarean) HIV Status (Positive, Negative, Indeterminate) Education level (primary, secondary, tertiary) Likert scale responses (strongly agree, agree, etc.) Stages of disease (mild, moderate, severe) Cancer Staging (Stage I, Stage II, Stage III, Stage IV)

References:

High Yield Biostatistics, 4th Edition, Page 3

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3469943/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: America uses Fahrenheit (°F) in temperature measurement, and India uses Celsius (°C). Which type of scale is this an example of? (Q841139)

A. Nominal scale

B. Ordinal scale

C. Interval scale

D. Ratio scale

Correct Answer: C. Interval scale

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: An interval scale is used for data ordered with equal intervals between values but without a true zero point. Temperature measurements in Fahrenheit and Celsius are classic examples of interval scales because the difference between each degree is the same. Still, there is no absolute zero that represents the absence of temperature. Both Fahrenheit and Celsius scales have arbitrary zero points (0°C and 32°F). Interval Scale Ratio Scale Definition Ordered categories with equal intervals but no true zero point Ordered categories with equal intervals and a True Zero point or Absolute Zero point. Examples Temperature in Celsius or Fahrenheit Calendar years (e.g. 2000, 2020) IQ Scores (eg. 90, 100, 110) Temperature in Kelvin Height Weight Age Blood Pressure

References:

High Yield Biostatistics, 4th Edition, Page 3

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following is the most commonly used statistical average? (Q841142)

A. Weighted mean

B. Geometric mean

C. Arithmetic mean

D. Harmonic mean

Correct Answer: C. Arithmetic mean

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The arithmetic mean or simply mean is the most commonly used statistical average, especially when assessing data quantitatively. Advantage : Easier to understand and calculate. Disadvantage : Affected by extreme values and outliers. Weighted Mean (Option A) Similar to arithmetic mean; considers only specified values Geometric Mean (Option B) Used when the given data differs exponentially Harmonic Mean (Option D) Used for fractional variables or inverse relationships

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 975

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A patient who presented yesterday with occasional chest pain on & off for quite a while was found to have a blood pressure of 160/100 mmHg. An ambulatory blood pressure monitoring has been set up and the readings today are 130/90, 158/98, 140/80, 160/90, 150/100 and 138/88 mmHg. What is his mean blood pressure? (Q841143)

A. 139/85mmHg

B. 146/91mmHg

C. 150/89mmHg

D. 154/95 mmHg

Correct Answer: B. 146/91mmHg

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Mean is calculated by summing all the variables and dividing the same by the total number of variables. Statistically mean is the best measure of central tendency as it includes sum of all observations Blood pressure has two values : systolic and diastolic , individual averages of both of these should be taken into consideration. Mean systolic pressure = (130+158+140+160+150+138)/6 = 146 Mean diastolic pressure = (90+98+80+90+100+88)/6 = 91 Hence, his mean blood pressure is 146/91 mmHg.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 975

↑ *Back to this question in Part A*

Q8: TSH values taken from a few antenatal mothers from an area where iodine deficiency is suspected are 4.5, 3.0, 1.9, 6.2, 8.0, 8.4, 2.4 and 9.2 IU/L. Calculate the median TSH in these mothers. (Q841144)

A. 4.12

B. 6.33

C. 5.35

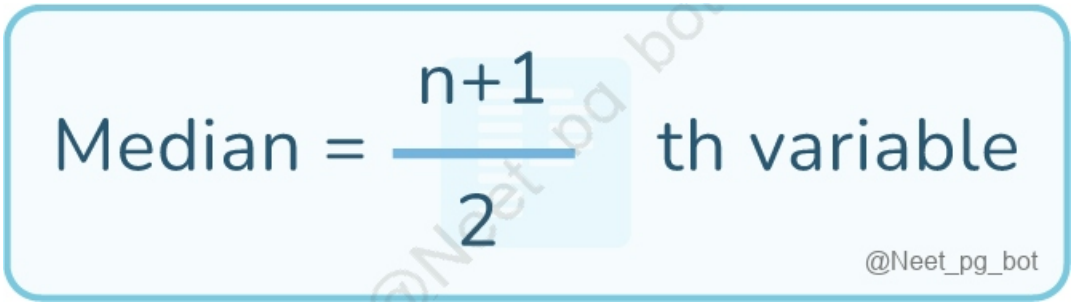
D. 4.78

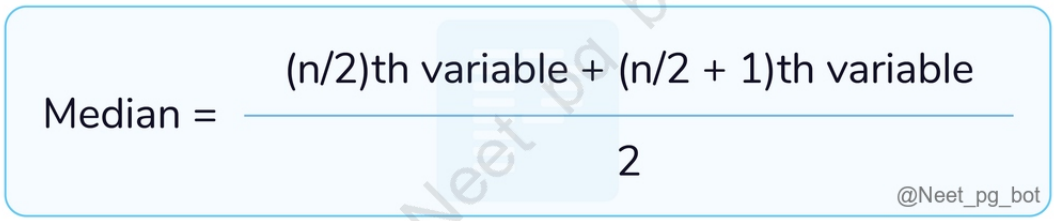
Correct Answer: C. 5.35

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The median is calculated by arranging the variables in ascending order and taking up the middle value. In case of odd number of observations, median is the middle value when data is arranged in ascending/descending order. In case of even number of observations, median is average no of two middle values when data is arranged in ascending/descending order. This applies when an odd number of variables are given, which is given by The median is given for variables in even numbers by averaging the two middle variables. In the given question, arranging the given variables: 1.9, 2.4, 3.0, 4.5, 6.2, 8.0, 8.2, 9.2 (n=8) Hence, median = (4th variable + 5th variable) / 2 = (4.5+6.2) / 2 = 5.35 (which is >5 suggesting possible hypothyroidism)





References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 975

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: The malaria cases reported in the last 10 years are 270, 300, 200, 310, 6000, 110, 250, 320, 330 and 120. An epidemiologist wants to determine the average number of malaria cases reported during these 10 years. Which of the following is the most appropriate measure of average for this data? (Q841145)

A. Weighted mean

B. Median

C. Mean

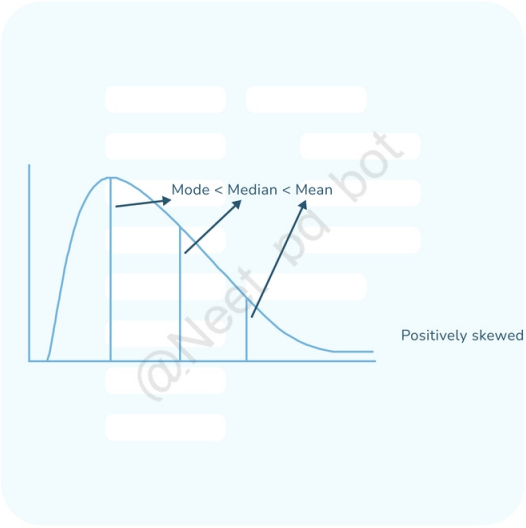
D. Geometric mean

Correct Answer: B. Median

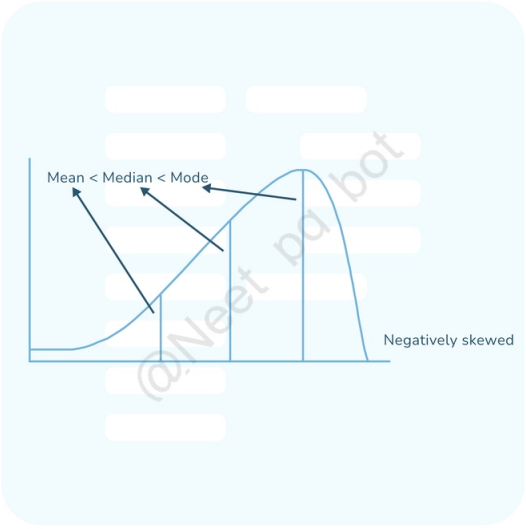
■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The advantage of calculating average by median is that it is least affected by extreme values or outliers , the latter are called skewed observations/variables. Outliers are too high or too low values in a data set. Presence of outliers in a data set makes the data set skewed. In the given example, the variables are arranged as: 110, 120, 200, 250, 270, 300, 310, 320, 330, 6000 (n=10) and the median = (270+300)/2 = 285 matching annual incidence; not affected by the extreme value/outlier (which is 6000 here, most probably a mistaken value). The arithmetic mean (Option C) would be 821 which doesn't match the annual incidence in that population. Note: The measure of central tendency most affected by outliers: Mean The best measure of central tendency in skewed observations: Median The least affected measure of central tendency: Mode



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References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 975

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: In the case of a bimodal distribution, calculate the mode if the median is 2 and the mean is 3. (Q841146)

A. 5

B. 3

C. 0

D. 2

Correct Answer: C. 0

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: When two values repeat twice in a data set, it is called bimodal (two modes) distribution . In the case of a bimodal distribution, Mode = 3×Median – 2×Mean Given: Median = 2 Mean = 3 Substituting: Mode = 3(2) – 2(3) = 6 - 6 = 0 Mode is defined as the frequently occurring value in a given data. Advantage: Not affected by extreme values/outliers. Disadvantage: It is not suitable for medical statistics because just because occurring in increased frequency doesn’t clearly define anything.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 975

↑ *Back to this question in Part A*

@Neet_pg_bot

• [18_Biostatistics] 061 Types Of Dispersion Distribution And Errors

« Back to Folder Directory

[18_Biostatistics] 061 Types Of Dispersion Distribution And Errors — Quick Jump

Q1 (p. 1804)	*Q2 (p. 1805)*	*Q3 (p. 1805)*	*Q4 (p. 1806)*	*Q5 (p. 1807)*	*Q6 (p. 1807)*
Q7 (p. 1808)	*Q8 (p. 1809)*	*Q9 (p. 1809)*	*Q10 (p. 1810)*	*Q11 (p. 1811)*	*Q12 (p. 1812)*
Q13 (p. 1813)	*Q14 (p. 1815)*	*Q15 (p. 1817)*	*Q16 (p. 1818)*	*Q17 (p. 1820)*	*Q18 (p. 1820)*
Q19 (p. 1821)	*Q20 (p. 1822)*				

Q1: Which of the following correctly describes Type I and Type II errors in hypothesis testing? (Q840705)

A. Type I rejects a true null hypothesis; Type II accepts a false null hypothesis.

B. Type I accepts a false null hypothesis; Type II rejects a true null hypothesis.

C. Type I rejects a true alternative hypothesis; Type II accepts a false alternative hypothesis.

D. Type I: Accepting a true null hypothesis; Type II: Rejecting a false null hypothesis.

Correct Answer: A. Type I rejects a true null hypothesis; Type II accepts a false null hypothesis.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Criteria Type I Error Type II Error Definition Rejecting a true null hypothesis Accepting a false null hypothesis Also Known As False positive. False-negative. Implication Concluding there is an effect when there is none. Concluding there is no effect when there is one. Probability Notation Alpha (α) Beta (β) Consequences Believing a result is significant when it is not. Missing a significant result. Example Concluding a drug has an effect when it does not. Concluding a drug does not have an effect when it does. Testing Goal Minimise α to reduce the Type I error rate. Minimise β to reduce the Type II error rate.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 978 An Introduction to Statistics: Understanding Hypothesis Testing and Statistical Errors - PMC Biostatistics Series Module 2: Overview of Hypothesis Testing - PMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which of the following is statistically significant? (Q840730)

A. RR of 2.5 with a 95% CI of 2.0 to 3.1

B. OR of 0.9 with a 95% CI of 0.5 to 8

C. p-value of 0.5 and a RR of 2.5.

D. RR of 5.0 with a 95% CI of 0.1 to 9.8

Correct Answer: A. RR of 2.5 with a 95% CI of 2.0 to 3.1

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A 95% Confidence interval (CI) of 2.0 to 3.1 suggests that the relative risk of 2.5 is statistically significant because the CI does not include 1. Level of significance: Null hypothesis is accepted / results are not statistically significant when 95% CI for the mean difference between 2 variables includes 0 95% CI for odds ratio or relative risk includes 1 CI between 2 groups do not overlap → statistically significant difference exists. Option B) An odd's ratio of 0.9 with a 95% Confidence interval of 0.5 to 8: The CI includes 1, meaning there is no significant difference and hence not statistically significant. Option C) A p-value of 0.5 and a relative risk of 2.5: The p-value is >0.05 hence it is not statistically significant. Option: D) A relative risk of 5.0 with a 95% Confidence interval of 0.1 to 9.8: The CI includes 1, meaning the results are not statistically significant.

References:

www.ncbi.nlm.nih.gov/books/NBK557421/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: A biostatistician studies adults' average systolic blood pressure (SBP) in a certain population. A sample of 40 adults was taken, and the mean systolic blood pressure was 130 mmHg with a standard deviation of 15 mmHg. Which is the correct 95% confidence interval for the true mean systolic blood pressure? (Q840729)

A. (125.25 mmHg, 134.75 mmHg)

B. (138.36 mmHg, 131.64 mmHg)

C. (128.00 mmHg, 127.00 mmHg)

D. (127.36 mmHg, 132.64 mmHg)

Correct Answer: A. (125.25 mmHg, 134.75 mmHg)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Sample Mean (X■)= 130 mmHg. Standard Deviation (SD)= 15 mmHg. Sample Size (n)= 40 Formula of the confidence interval: 95% Confidence interval for mean = mean ± 1.96 * standard error of mean (SEM) This can be considered mean ± 2 * standard error of the mean (SEM). SEM =SD/√n SEM = 15/√40 = 2.37 Confidence interval = 130 ± 2x2.37 = 130 ± 4.75 CI = (125.25, 134.75)

References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC5723800/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: A public health researcher is studying the average weight of newborns in a specific region. The researcher collects a random sample of 100 newborns and calculates a 95% confidence interval for the mean weight (3.2 kg, 3.8 kg). Which of the following statements correctly interprets the 95% confidence level? (Q840728)

A. There is a 95% chance that the mean weight of all newborns in the region falls between 3.2 kg and 3.8 kg

B. 95% of the newborns in the sample weigh between 3.2 kg and 3.8 kg.

C. 95 % of the intervals will include the true mean if we calculate CI for multiple samples

D. Mean weight of all newborns in the region is exactly 3.5 kg, which is the midpoint of the confidence interval.

Correct Answer: C. 95 % of the intervals will include the true mean if we calculate CI for multiple samples

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Confidence interval: The confidence interval is the range of values within which the true mean of the population is expected to fall with a specified probability. A 95% confidence level means that if we take many random samples and compute a confidence interval for each, we expect 95% of those intervals to contain the true population mean. Formula to calculate the confidence interval: 95% Confidence interval for mean = mean ± 2 x standard error of mean 95% Confidence interval for proportion = p ± 2 x standard error of proportion

References:

pubmed.ncbi.nlm.nih.gov/27184382/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: A study was conducted to determine the effectiveness of a new antihypertensive. The study is designed with a significance level (alpha) of 0.05 and a sample size of 50 participants. The type II error is calculated as 0.25. Which of the following is the power of this study, and how can it be increased? (Q840726)

A. The power of the study is 75% and can be increased by decreasing the sample size.

B. The power of the study is 70%, and it can be increased by increasing the sample size.

C. The power of the study is 75% and it can be increased by increasing the sample size.

D. The power of the study is 95% and it can be increased by increasing the sample size.

Correct Answer: C. The power of the study is 75% and it can be increased by increasing the sample size.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The power of a study is calculated as: Power = 1- β From the above result, β (Type II error) = 0.25 Hence power = 1 - 0.25 = 0.75 or 75% Power and type II error: Type II error (beta) occurs when the null hypothesis is false but accepted. The power of a test can be increased by decreasing the Type II error, i.e. by increasing the sample size.

References:

www.ncbi.nlm.nih.gov/books/NBK557530/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: The P-value of a randomized controlled trial comparing operation X which is a new procedure and operation Y which is gold standard procedure is 0.04, the conclusion from the following is: (Q840725)

A. The investigator can be 96% sure that the result is obtained by chance

B. The probability of a false positive conclusion that operation X is better than operation Y, when in truth it is not, is 4%

C. Type II error is small, and we can accept the findings of this study

D. The power of the study to detect a difference between operation X and Y is 96%

Correct Answer: B. The probability of a false positive conclusion that operation X is better than operation Y, when in truth it is not, is 4%

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: p-value: It is the probability of committing a Type 1 error Maximum threshold for committing a Type 1 error is set at 5% When the p-value is less than α, the result is statistically significant. ($p<0.05$) It only tells us about the strength of evidence against the null hypothesis based on the observed data.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 980 P – VALUE, A TRUE TEST OF STATISTICAL SIGNIFICANCE? A CAUTIONARY NOTE - PMC The P Value and Statistical Significance: Misunderstandings, Explanations, Challenges, and Alternatives - PMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: What does the p-value represent in hypothesis testing? (Q840724)

A. Probability that a Type 2 error is being made.

B. Probability of declaring a significant difference when there is none in reality.

C. Probability of declaring a significant difference when it is present.

D. It represents power and is equal to 1 - Beta.

Correct Answer: B. Probability of declaring a significant difference when there is none in reality.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The p-value in hypothesis testing represents the probability of obtaining the observed data or more extreme results, assuming that the null hypothesis is true. It helps researchers determine the strength of the evidence against the null hypothesis; a lower p-value indicates stronger evidence. The maximum value for committing a Type 1 error is 5%. This is known as the α level of significance p-value can be less, equal or more than ■, but the p-value has to be less than ■($p < 0.05$) to be statistically significant.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 980 The P Value and Statistical Significance: Misunderstandings, Explanations, Challenges, and Alternatives - PMC

↑ *Back to this question in Part A*

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Q8: A weighing scale consistently adds 10% to each weight. A true weight of 10 kg is 11 kg, while a true weight of 40 kg is 44 kg. Which type of error is exhibited in this scenario? (Q840722)

A. Random error

B. Non-random error

C. Human error

D. Operator error

Correct Answer: B. Non-random error

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Criteria Random Error Non Random Error Definition Unpredictable variations in measurements due to chance factors Consistent or predictable deviations from the true value Nature of Variation Causes measurements to fluctuate randomly around the true value Causes measurements to deviate in one direction consistently. Cause Typically due to Random chance Environmental factors Sampling variability Often due Instrumental error Methodological error Calibration error Effect on Measurements Increases measurement variability across repeated trials. Introduces a consistent bias or offset from the true value. Reduction Strategy This can be reduced by increasing sample size or conducting more trials Requires adjustments to measurement tools, recalibration, or procedural changes Examples Fluctuations in experimental readings despite controlled conditions. A scale consistently adding 10% to all weights measured.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 978 Error of the method: what is it for? - PMC .

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: A new drug designed to lower cholesterol levels is being tested. The testing involved 1000 participants. The null hypothesis is that "the new drug does not affect cholesterol levels". After analysing the data, the researchers conclude that the drug doesn't work, but in reality, it does have a small but clinically significant effect. What type of error has occurred? (Q840708)

A. Type I error

B. Type II error

C. No error has occurred

D. Both Type I and Type II errors

Correct Answer: B. Type II error

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: This scenario describes a Type II error, also known as a "false negative." Type II error occurs when we fail to reject a false null hypothesis. In this case, a potentially beneficial drug might be overlooked. Type II errors are particularly important in medical research, as they can lead to overlooking potentially beneficial treatments. The power of a statistical test (1 - probability of Type II error) is crucial in designing studies to minimise this risk. Type I error (Option A) occurs when you reject a true null hypothesis .

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pages 978, 980

www.ncbi.nlm.nih.gov/pmc/articles/PMC6785820/

www.ncbi.nlm.nih.gov/pmc/articles/PMC4817436/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: In a clinical trial for a new hypertension drug, the null hypothesis states: "The new drug does not affect blood pressure." If researchers commit a Type 1 error, which of the following is true? (Q840707)

A. Drug lower BP, but it was concluded that it has no effect.

B. Drug has no effect, but it was concluded as it lowers BP.

C. Drug raises BP, but it was concluded that it has no effect.

D. Drug has no effect, and it was correctly concluded.

Correct Answer: B. Drug has no effect, but it was concluded as it lowers BP.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: A Type 1 error, also known as a "false positive," occurs when we reject the null hypothesis when it is true. In this case: Null hypothesis : The drug does not affect blood pressure. Type 1 error : Rejecting this true null hypothesis and accepting an alternative hypothesis. Key points: In a Type 1 error, the truth aligns with the null hypothesis (the drug truly has no effect). The error lies in the researchers' conclusion, which incorrectly rejects the null hypothesis. This error leads to a false claim of a significant effect when there isn't one. Criteria Type I Error Type II Error Definition Rejecting a true null hypothesis Accepting a false null hypothesis Also Known As False positive. False-negative. Implication Concluding there is an effect when there is none. Concluding there is no effect when there is one. Probability Notation Alpha (α) Beta (β) Consequences Believing a result is significant when it is not. Missing a significant result. Example Concluding a drug has an effect when it does not. Concluding a drug does not have an effect when it does. Testing Goal Minimise α to reduce the Type I error rate. Minimise β to reduce the Type II error rate. Drug lowers BP, but it was concluded that it has no effect (Option A): This would be a Type II error : failing to reject H■ when it is false. Drug raises BP, but it was concluded that it has no effect (Option C): Again, H■ is false (it raises BP), but we accept it — a Type II error . Drug has no effect, and it was correctly concluded (Option D): This is a correct decision , not an error at all.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 980 An Introduction to Statistics: Understanding Hypothesis Testing and Statistical Errors - PMC Biostatistics Series Module 2: Overview of Hypothesis Testing - PMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: Which measure of dispersion is considered the most comprehensive and widely used in statistical analysis? (Q840643)

A. Range

B. Standard deviation

C. Mean deviation

D. Variance

Correct Answer: B. Standard deviation

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Standard deviation is considered the most comprehensive and widely used measure of dispersion in statistical analysis. Measures of dispersion Definition Calculation Standard deviation Measures the variation or dispersion of a set of values around the mean. σ = √(∑(x– x■) 2 /n) Range The difference between the highest and lowest values in a dataset. Range = Maximum value - Minimum value Mean deviation Measures the average absolute deviation of data points from the mean. Mean deviation = ∑ X - x■ / n Variance Measures the average of the squared differences from the mean. Variance = σ 2

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 976

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which of the following statements regarding Poisson’s distribution is NOT true? (Q840700)

A. It measures the probability of the occurrence of discrete events.

B. The average rate of events is denoted by lambda.

C. Poisson's distribution is skewed to the left when the rate of occurrence is small.

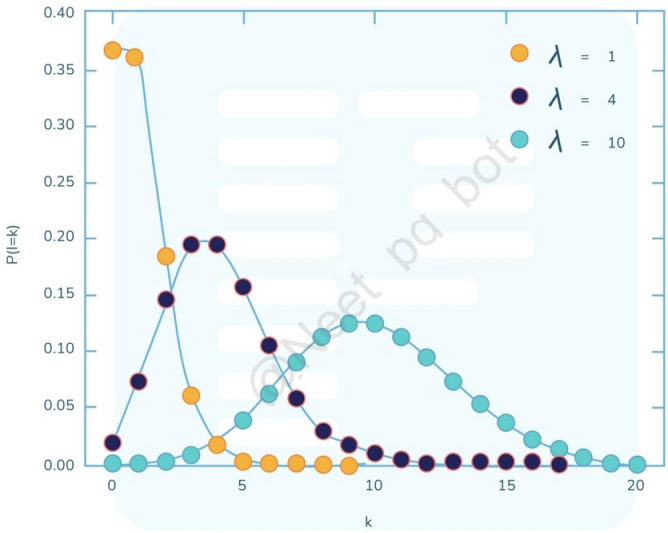
D. The distribution approaches symmetry as its rate of occurrence increases.

Correct Answer: C. Poisson's distribution is skewed to the left when the rate of occurrence is small.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In Poisson's distribution, when the rate of occurrence is small, the graph is skewed to the right and not the left. Poisson’s distribution measures the probability of a discrete event happening in a fixed interval of time or space. (Option A) The average rate of event distribution is denoted by lambda (■) (Option B) When the ■ is small, the distribution is skewed to the right, and as the ■ increases, the distribution approaches symmetry (Options C and Option D) Example of a Possion’s distribution graph



@Neet_pg_bot

References:

www.sciencedirect.com/topics/mathematics/poisson-distribution

↑ *Back to this question in Part A*

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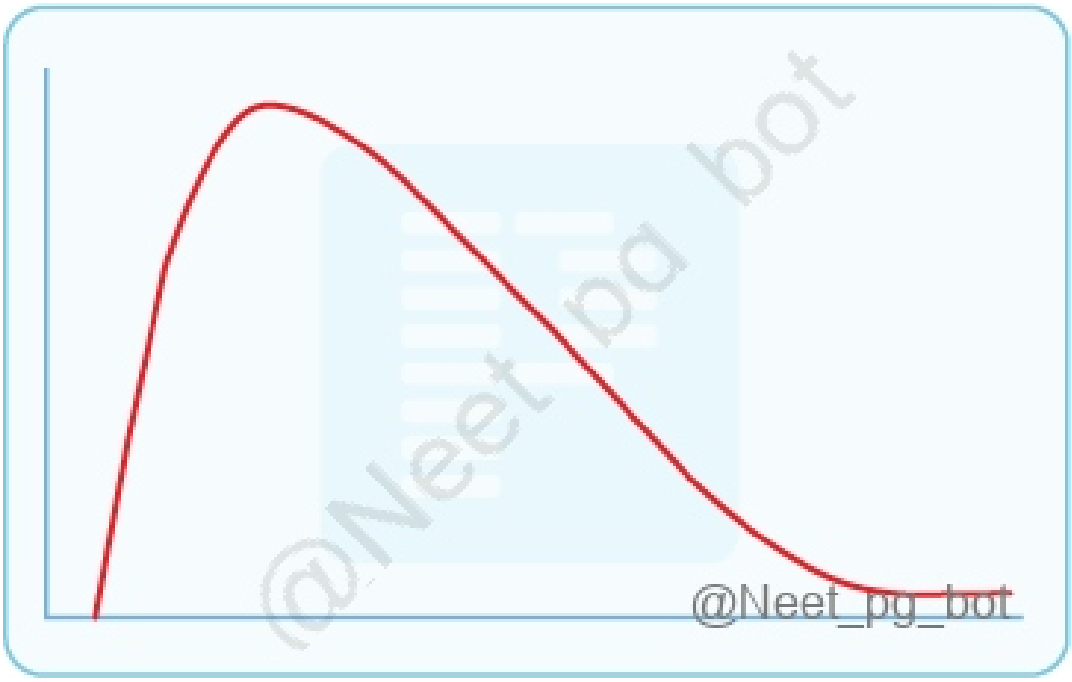
Q13: In the right-sided skewed distribution graph given below, what is the correct order of the measures of central tendency? (Q840695)

A. Mean < median < mode

B. Mean > median > mode

C. Mean = median > mode

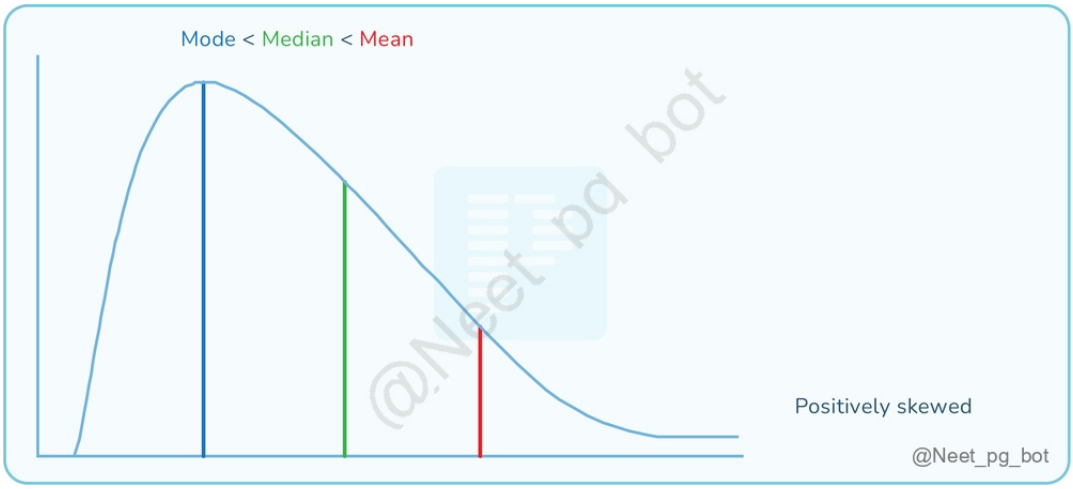
D. Mean = median = mode

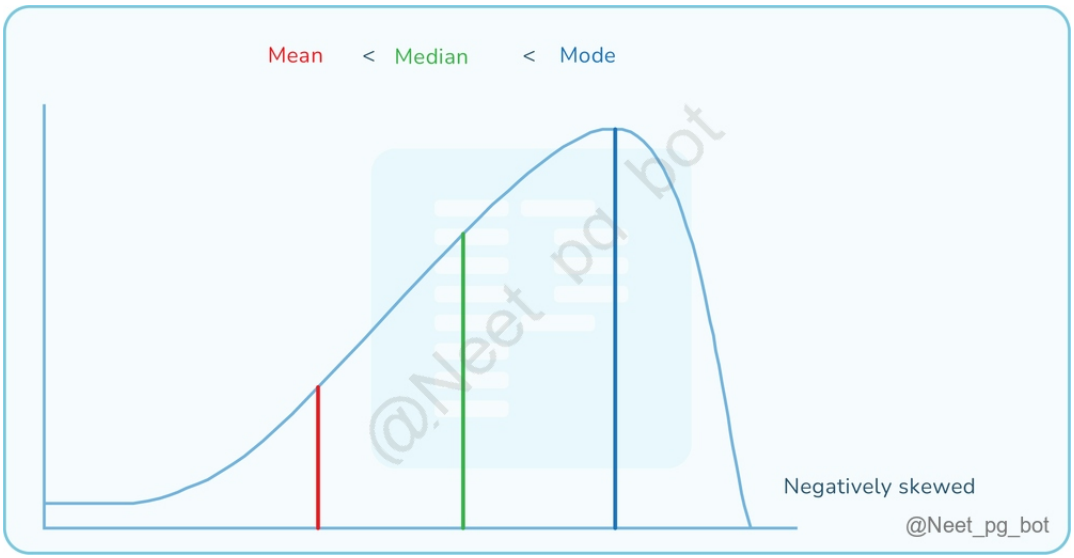


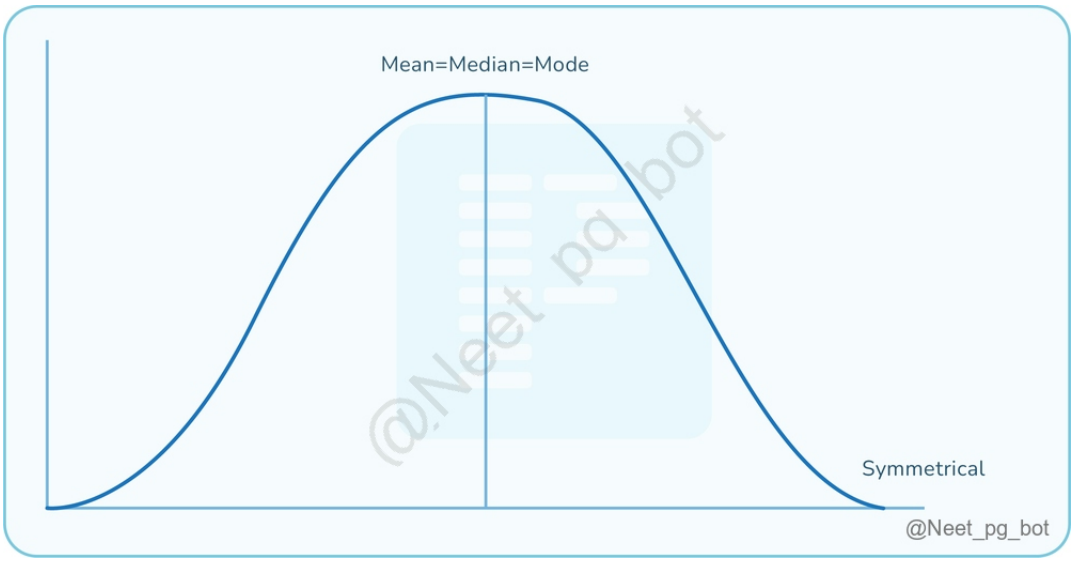
Correct Answer: B. Mean > median > mode

- *Listen (English)*
- *Listen (Hindi)*

Explanation: For a right-sided / Positively skewed curve, Mean > median > mode An asymmetric curve forms when the mean, median, and mode are not equal at the coincidence point, leading to a skewed distribution. Skewness of the curve is determined by the direction of the tail. If the tail is right-sided, it is positively skewed. If the tail is left-sided, it is negatively skewed. Mean is the most affected central tendency in a skewed distribution. {{caption_text}} Option A: If Mean < median < mode , it leads to the formation of a negatively skewed /left-sided curved {{caption_text}} Option C: Mean = median > mode This observation is not possible in a skewed distribution, as for the mean to be equal to the median, the distribution must be symmetrical and not skewed. Option D : Mean = median = mode If all the values of measures of central tendency are equal, this leads to a symmetrical distribution rather than a skewed distribution.







References:

High yield biostatistics, epidemiology and public health, Anthony N Glasser, 4th edition pg 8-9

↑ *Back to this question in Part A*

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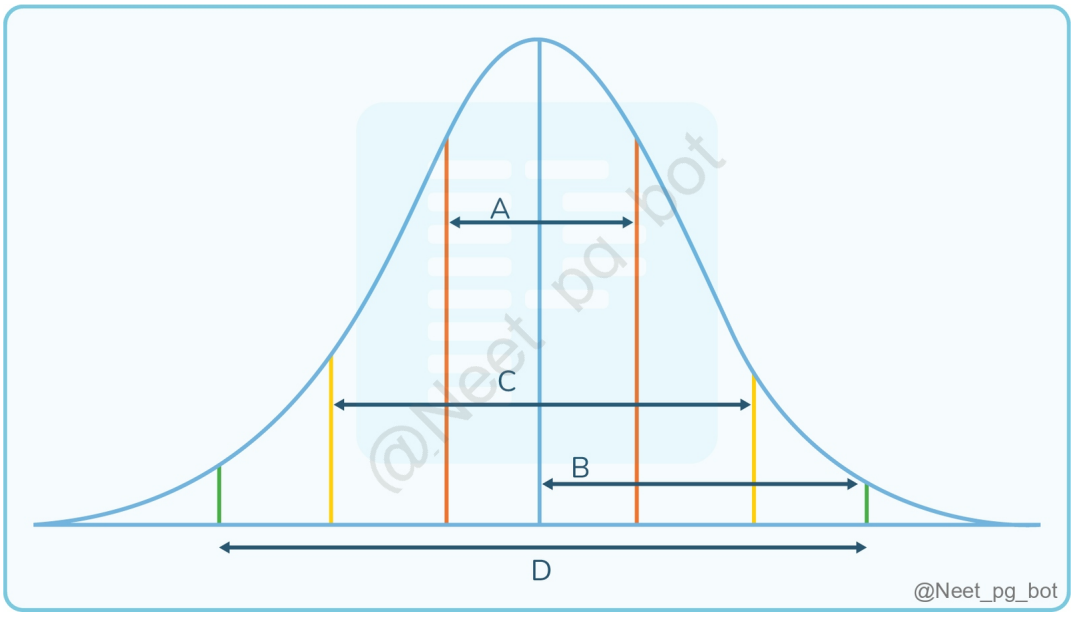
Q14: Based on the Gaussian curve, which ranges under the curve cover 95% of the observations? (Q840689)

A. Range A

B. Range B

C. Range C

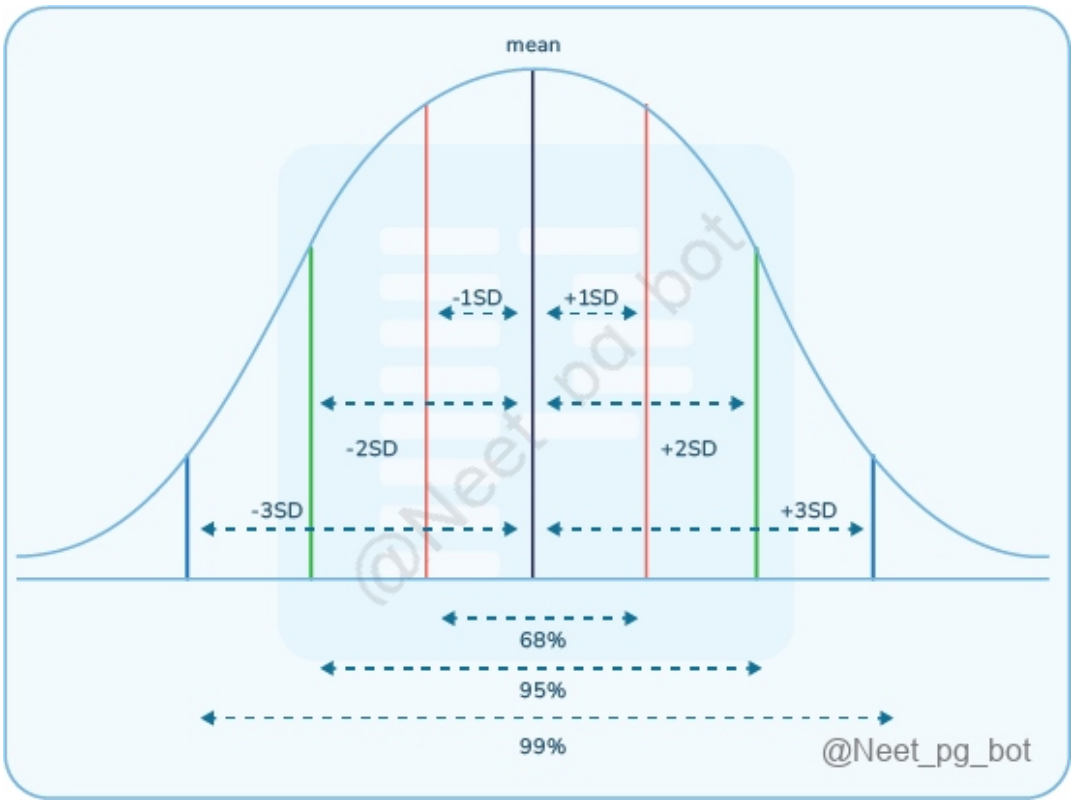
D. Range D



Correct Answer: C. Range C

- *Listen (English)*
- *Listen (Hindi)*

Explanation: If we consider the area under the curve in range C, it is equal to mean +/- 2SD, which covers 95% of observations in a Gaussian/bell-shaped curve.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 977

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: The blood pressure measurement of 120 patients was conducted in a health camp. The first quartile systolic blood pressure was 108 mm Hg, and the third quartile was 136 mm Hg. How many people will have their BP between the 1st and 3rd quartile? (Q840681)

A. 30 patients

B. 60 patients

C. 90 patients

D. 75 patients

Correct Answer: B. 60 patients

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Total number of patients = 120 Q1= 108 mm hg Q3= 136 mm hg We know, Quartiles divide the data set into 4 equal parts. Q1 is the point below which 25% of the data falls, and Q3 is below which 75% falls. If, 25 % of people have systolic BP less than 108 mm Hg = 30 people 75% of people have systolic BP less than or equal to 136 mm Hg = 90 people 25% of people have systolic BP more than 136 mm Hg = 30 people Thus The number of people with BP between 108 and 136 mm Hg (i.e., between the 1st and 3rd quartile) is 75% - 25% = 50% of the total patients. Hence, 50% * 120 = 60 patients will have their BP between the 1st and 3rd quartiles.



References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC3198538/

↑ *Back to this question in Part A*

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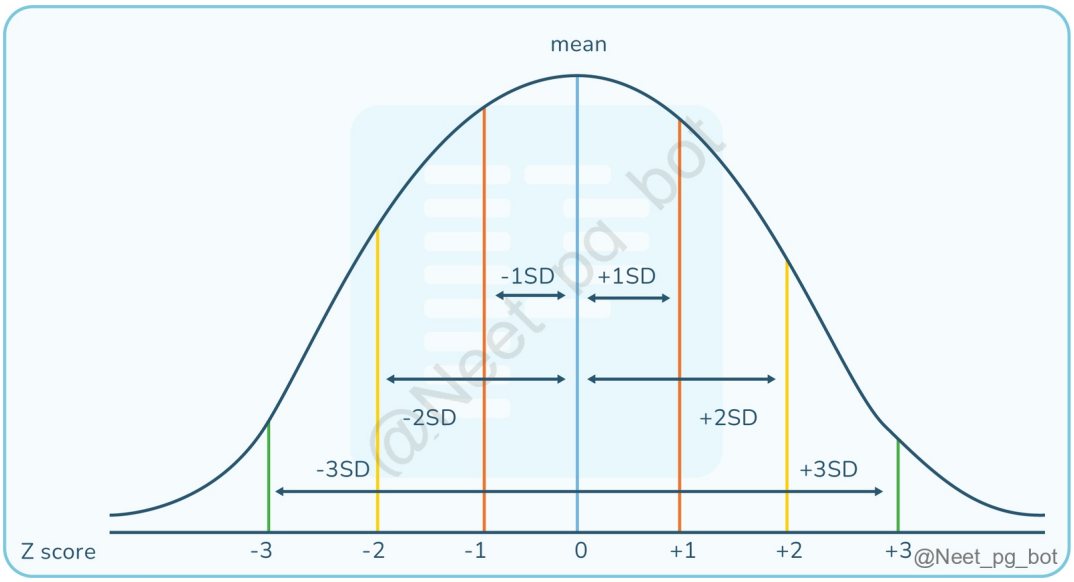
Q16: Where does the data point fall if the Z score equals zero in a normal distribution graph? (Q840666)

A. Between mean and +1 SD

B. Exactly at the mean

C. Between mean and -1 SD

D. Less than -3 SD

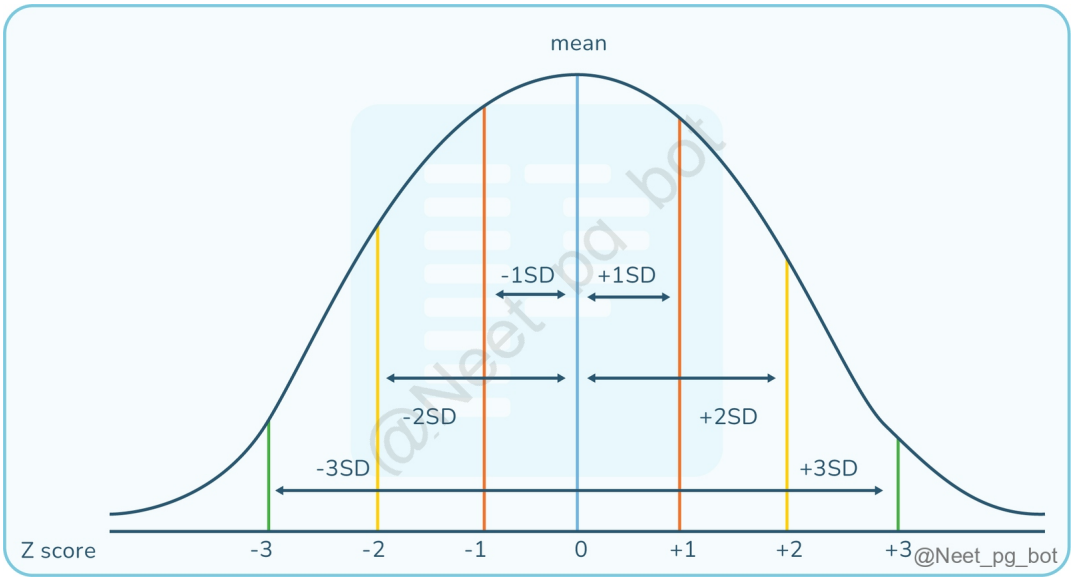


Correct Answer: B. Exactly at the mean

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: In a normal distribution curve, the data point falls exactly on the mean if the Z score equals zero. A Z-score shows how many standard deviations a data point is from the mean in a normal distribution. A score of zero means the point is at the mean, positive values indicate it is above, and negative values indicate it is below. The formula for the calculation of the Z score: Z = (x-μ) / σ X - observed value μ - mean σ - standard deviation



References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 977

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: In a survey, 100 individuals were randomly sampled to estimate the mean age of a population. The sample mean age was 35, with a standard deviation of 5 years. What is the standard error of the mean (SE of mean) for this survey? (Q840661)

A. 0.5 years

B. 0.05 years

C. 5 years

D. 0.25 years

Correct Answer: A. 0.5 years

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: To solve this question, use the formula for the standard error of the mean: Standard error of the mean = standard deviation / √ sample size SE = 5 /√100 = 5 / 10 = 0.5 years

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 978

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: The heights (in centimetres) of students in the two classes are summarised as follows: Class A: Mean height = 170 cm, Standard Deviation = 7.5 cm Class B: Mean height = 162.5 cm, Standard Deviation = 8.2 cm Which class shows a higher coefficient of variation (COV)? (Q840660)

A. Class A

B. Class B

C. Both classes have the same coefficient of variation

D. Cannot be determined from the given information

Correct Answer: B. Class B

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: To solve this question, use the formula for COV: COV = (Standard Deviation / Mean)×100 Calculate COV for Class A: COV A = (7.5 / 170)×100 ≈ 4.41% Calculate COV for Class B: COV B = (8.2 / 162.5)×100 ≈ 5.05 Therefore, Class B has a higher coefficient of variation (COV) than Class A

References:

pubmed.ncbi.nlm.nih.gov/32547779/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: Which of the following is not true regarding the coefficient of variation (COV)? (Q840655)

A. COV compares the relative variability of datasets with different means.

B. Higher COV signifies greater dispersion relative to the mean, indicating lower reliability

C. Lower COV suggests data points are closer to the mean, indicating higher reliability.

D. COV can be negative if the standard deviation is smaller than the mean.

Correct Answer: D. COV can be negative if the standard deviation is smaller than the mean.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The coefficient of variation (COV) is calculated as the ratio of the standard deviation to the mean, and both the standard deviation and the mean are non-negative quantities. Therefore, COV values are always non-negative and cannot be negative. COV = σ/ mean x 100 The coefficient of variation (COV) is specifically designed to compare the variability of datasets with different means. (Option A) It standardises the measure of dispersion by expressing the standard deviation as a percentage of the mean, allowing for meaningful comparison even when the datasets have different scales. A higher COV signifies that the standard deviation is relatively larger than the mean, indicating greater variability or spread of data points around the mean and less reliable (Option B). A lower COV indicates data points are closer to the mean, showing less variability, more consistency, and higher reliability (Option C).

References:

https://pubmed.ncbi.nlm.nih.gov/32547779/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: A small sample of students' weights (in pounds) is recorded to analyse their distribution. The weights are 120,125,130,122,128. Calculate the standard deviation for the weights of students. (Q840646)

A. 4.12

B. 4.00

C. 4.51

D. 5.20

Correct Answer: A. 4.12

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: To find the standard deviation for the weights: 1. Calculate the mean: = 120+125+130+122+128/5 = 625/5 = 125 2. Calculate the deviations from the mean: Deviation for 120: 120−125=−5 Deviation for 125: 125−125=0 Deviation for 130: 130−125=5 Deviation for 122: 122−125=−3 Deviation for 128: 128−125=3 3. Calculate the sum of squared deviations: ∑(xi− x■) 2 =25+0+25+9+9=68 Use n−1 since the sample size is less than 30 and calculate the standard deviation: S =√∑(xi− x■) 2 /n−1 =√68/5−1 = √68/4 = √17 ≈ 4.12

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 976

↑ *Back to this question in Part A*

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• [18_Biostatistics] 062 Test Of Statistical Significance Graphical Representation Of Data Sampling And Probability

« Back to Folder Directory

[18_Biostatistics] 062 Test Of Statistical Significance Graphical Representation Of Data Sampling And Probability — Quick Jump

Q1 (p. 1823)	*Q2 (p. 1824)*	*Q3 (p. 1825)*	*Q4 (p. 1828)*	*Q5 (p. 1829)*	*Q6 (p. 1830)*
Q7 (p. 1833)	*Q8 (p. 1834)*	*Q9 (p. 1838)*	*Q10 (p. 1841)*	*Q11 (p. 1844)*	*Q12 (p. 1846)*
Q13 (p. 1850)	*Q14 (p. 1852)*	*Q15 (p. 1853)*	*Q16 (p. 1854)*	*Q17 (p. 1855)*	*Q18 (p. 1856)*
Q19 (p. 1856)	*Q20 (p. 1857)*	*Q21 (p. 1858)*	*Q22 (p. 1859)*	*Q23 (p. 1859)*	*Q24 (p. 1860)*
Q25 (p. 1861)	*Q26 (p. 1862)*	*Q27 (p. 1862)*	*Q28 (p. 1863)*	*Q29 (p. 1864)*	*Q30 (p. 1865)*
Q31 (p. 1865)	*Q32 (p. 1866)*	*Q33 (p. 1867)*	*Q34 (p. 1867)*		

Q1: A researcher wants to compare the effectiveness of three different types of exercise programs on reducing blood pressure in individuals with hypertension. Which parametric test is most appropriate for analyzing the data? (Q840927)

A. Paired Student's t-test

B. Unpaired Student's t-test

C. ANOVA

D. Z- test

Correct Answer: C. ANOVA

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: ANOVA is used to compare means in more than two different groups of individuals . Here, we have three different exercise groups and comparison is made on the effectiveness of these exercises on hypertension. Parametric Test Description Paired Student's t-test Used to compare means (± SD) in paired data from the same group of individuals before and after an intervention. Unpaired Student's t-test Used to compare means (± SD) in two different groups of individuals. The Z-test is a variant of the unpaired Student's t-test used when the sample size is > 30. ANOVA Used to compare means (± SD) in more than two different groups of individuals. Pearson correlation coefficient Measures the linear association between two variables and can range from -1 (perfect negative correlation) to +1 (perfect positive correlation).

References:

https://www.wjpmr.com/download/article/120032024/1711972240.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: A study aims to compare the mean weight (in kilograms) of children diagnosed with severe protein-energy malnutrition before and after receiving a nutritional intervention program. Which type of statistical test is appropriate for analyzing the data in this scenario? (Q840925)

A. Both parametric and non-parametric

B. Non-parametric only

C. Parametric only

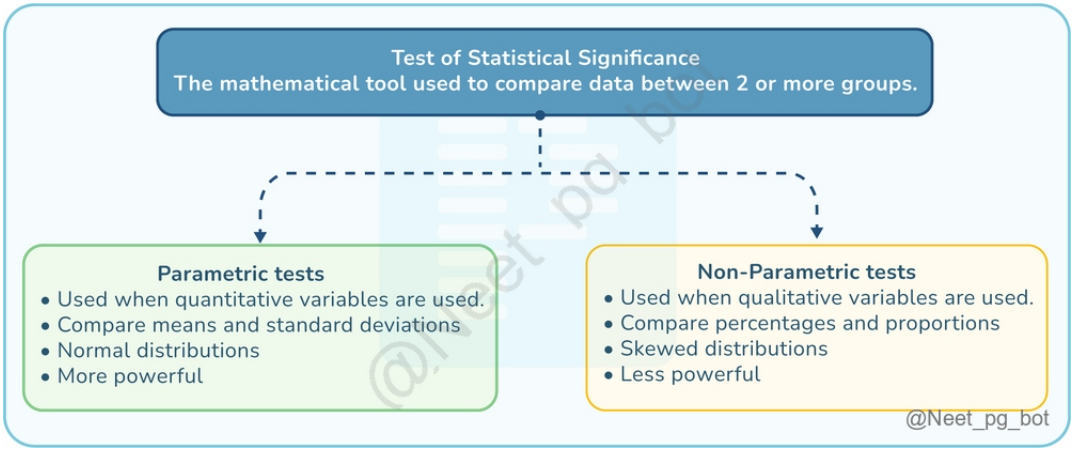
D. None of the Above

Correct Answer: C. Parametric only

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The appropriate test in this scenario is the t-test , which is a parametric test . This test is suitable because it compares the means of quantitative data (weight in kilograms) and analyzes data from the same group of individuals (children with malnutrition) Two main categories of tests of statistical significance : Parametric tests - Used when quantitative variables are used (Student’s T-test, ANOVA, Pearson's Correlation Coefficient, and Z-test) Non Parametric tests - Used when qualitative variables are used (McNemar’s test, chi-square test, Kruskal Wallis test). Data Setup Parametric test Non-Parametric test 1 Variable 2 Categories Between Subjects Independent t-test Mann-Whitney U test 1 Variable 2 Categories Within-Subjects Paired t-test Wilcoxon Signed Rank Test 1 Variable >2 Categories Between Subjects One-way ANOVA Kruskal Wallis Test 1 Variable >2 Categories Within Subjects Repeated measures ANOVA Friedman test Mood's median test 1 Variable (Correlation) Pearson's r Spearman's p (rho)



References:

https://www.wjpmr.com/download/article/120032024/1711972240.pdf

↑ *Back to this question in Part A*

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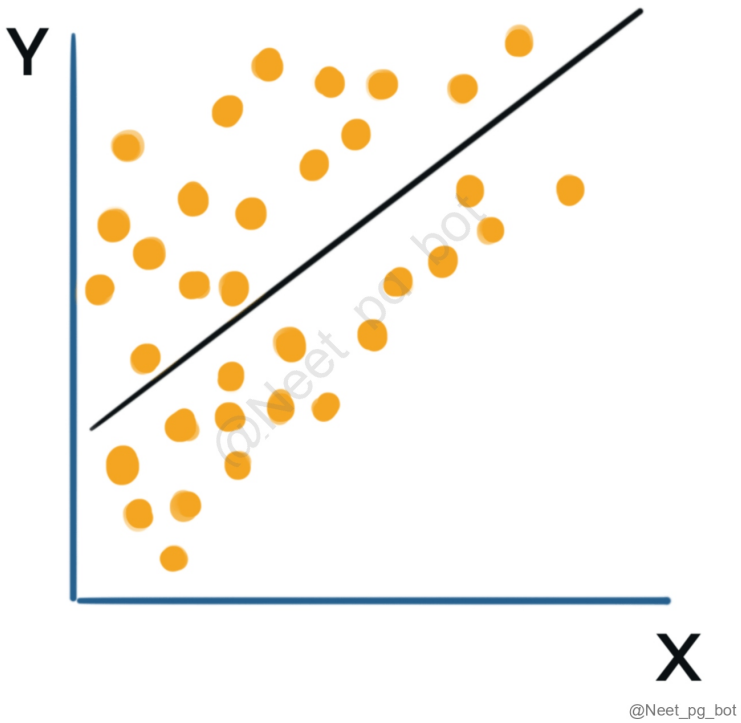
Q3: A Scatter Diagram /Dot diagram used in the depiction of correlation is given in the image below. Interpret the Statistical graph. (Q882191)

A. Positive correlation

B. Negative correlation

C. Absent correlation

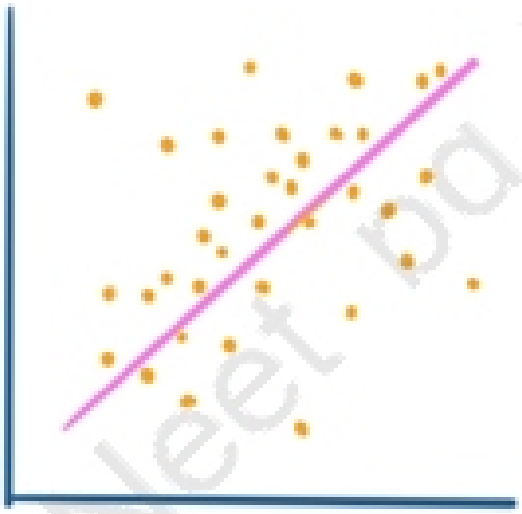
D. Spurious correlation



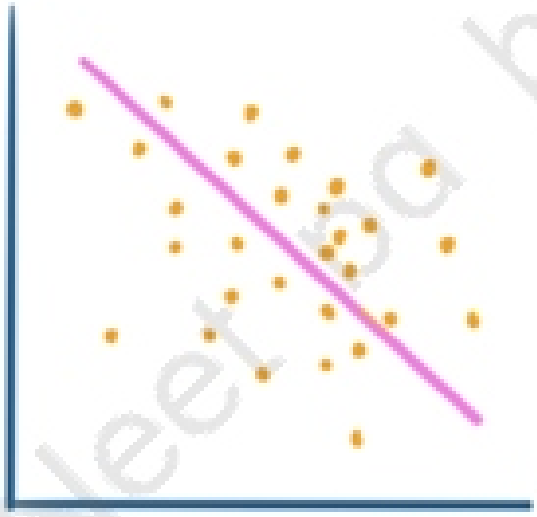
Correct Answer: A. Positive correlation

Explanation: Option A: Positive correlation The statistical graph given shows a positive correlation. Scatter Diagram /Dot Diagram is used in the depiction of correlation(Relation B/W two quantitative variables). This line's slope also reveals whether the correlation is positive or negative. Correlation is measured by correlation coefficient

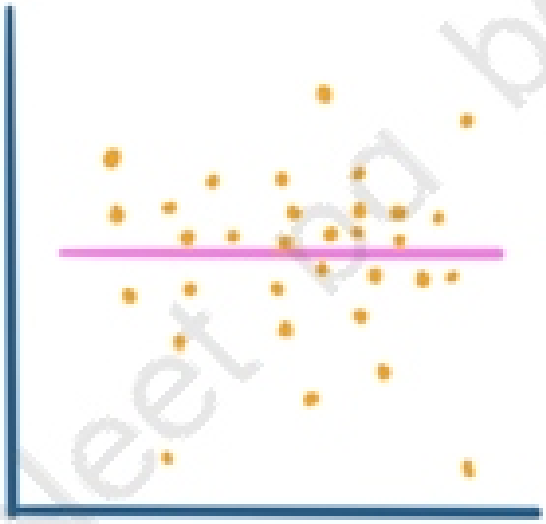
(r). If we increase one variable, the other will increase in a positive correlation. Positive correlation : 0 > r > +1 (+1 is a perfectly positive/ strong correlation) Option B: Negative correlation Negative correlation: -1 < r < 0 (-1 is a perfectly negative correlation) If we increase one variable, the other will decrease in a negative correlation. Option C: Absent correlation Absent correlation is also known as no correlation. If we increase one variable, the other will neither increase or decrease. No correlation r = 0 Option D: Spurious correlation No particular pattern is observed in a spurious correlation.



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Negative correlation



No correlation

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References:

Park 25/e p909-910

↑ *Back to this question in Part A*

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Q4: A researcher is conducting a study to estimate the prevalence of diabetes among patients with obesity. The researcher divides the patients into two gender groups (male and female) and then selects the study sample from each of these two groups separately. Which type of random probability sampling method is being used in this study? (Q841112)

A. Simple Random Sampling

B. Systematic Random Sampling

C. Stratified Random Sampling

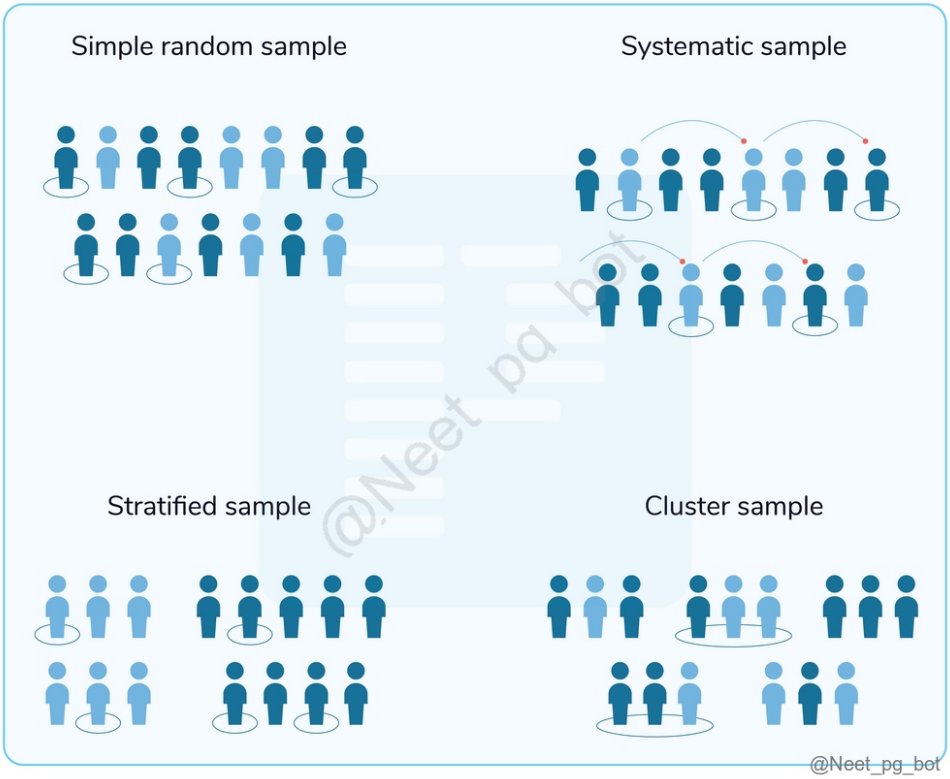
D. Cluster Random Sampling

Correct Answer: C. Stratified Random Sampling

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Stratified Random Sampling is the method used in this study. The researcher divides the population into subgroups (strata) based on gender and then selects random samples from each subgroup. This approach ensures that both male and female patients are appropriately represented in the study, allowing for separate estimates of diabetes prevalence among the different gender groups.



References:

Park's Textbook of Preventive Medicine, 27th Edition, Pg 978 IAPSM Textbook of Community Medicine, 2nd Edition, Pg. 174 Pubmed

↑ *Back to this question in Part A*

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Q5: Which of the following correctly defines Systematic Random Sampling? (Q841110)

A. It involves selecting units from the population purely by chance, ensuring each unit has an equal probability of being chosen.

B. It involves selecting every nth unit from the population after a random starting point.

C. It involves systematically dividing the population into subgroups and randomly sampling from each subgroup.

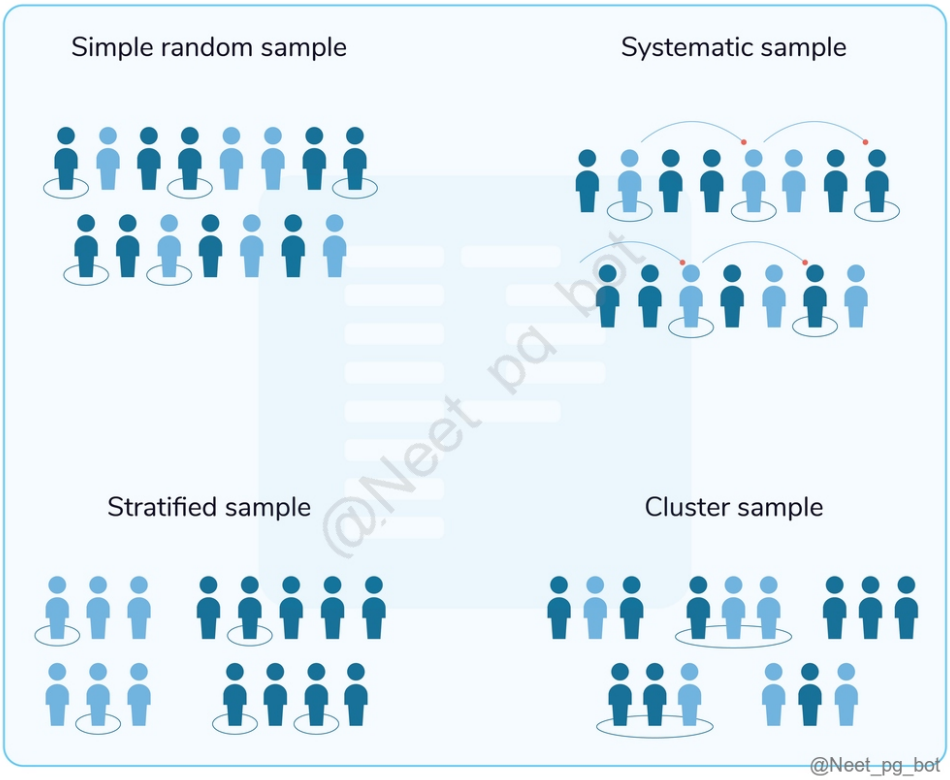
D. It involves dividing the population into groups and randomly selecting entire groups to be included in the sample.

Correct Answer: B. It involves selecting every nth unit from the population after a random starting point.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Systematic Random Sampling is a type of Random Probability Sampling Method . It involves choosing every nth unit from the population after a randomly determined starting point , ensuring a systematic and uniform coverage of the population. Random Probability Sampling Methods: Sampling Method Description Simple Random Sampling (Option A) Selecting units purely by chance, ensuring each unit has an equal probability of being chosen. Systematic Random Sampling Selecting every nth unit from the population after a random starting point. Stratified Random Sampling (Option C) Dividing the population into subgroups (strata) and randomly sampling from each subgroup. Cluster Random Sampling (Option D) Dividing the population into clusters and randomly selecting entire clusters to be included. Multi-Stage Sampling Combining several sampling methods in stages.



References:

Park’s Textbook of Preventive Medicine 27th Edition Pg 978 IAPSM Textbook of Community Medicine 2nd Edition Pg. 174 Pubmed

↑ *Back to this question in Part A*

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Q6: Which of the following is an incorrect statement regarding sampling methods? (Q841108)

A. In a probability sampling method, each individual in the representative population is provided with an equivalent likelihood of being included in the study.

B. Non-probability sampling includes convenience sampling, voluntary response sampling, purposive sampling, and snowball sampling.

C. As the size of the sample increases, sampling error decreases.

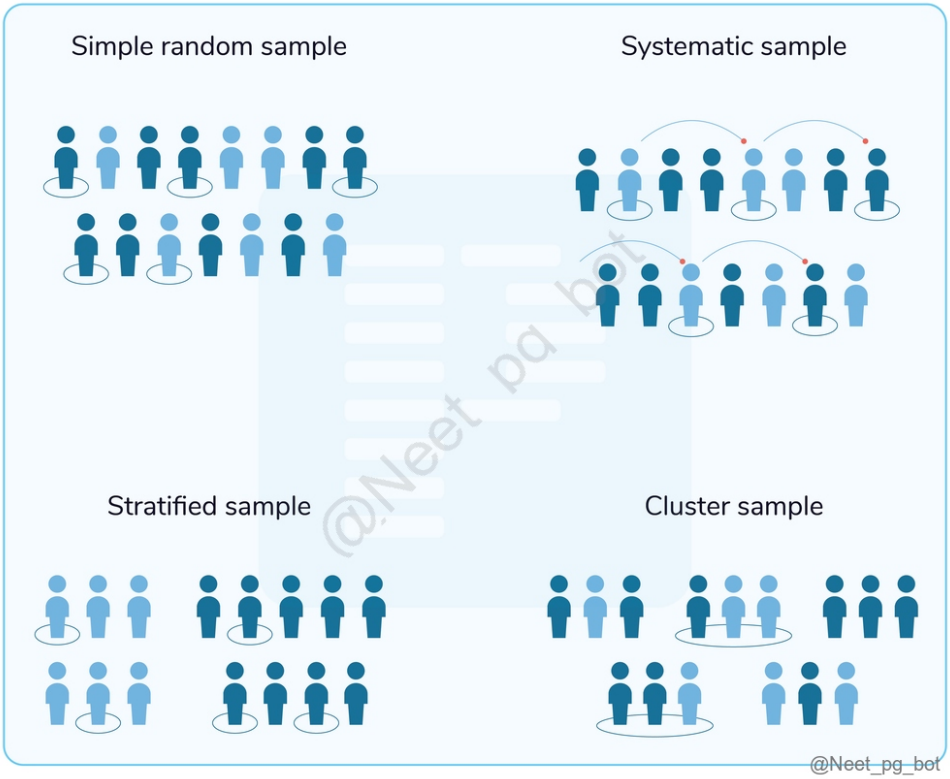
D. Cluster sampling is a type of Non-Random Non-Probability Sampling method.

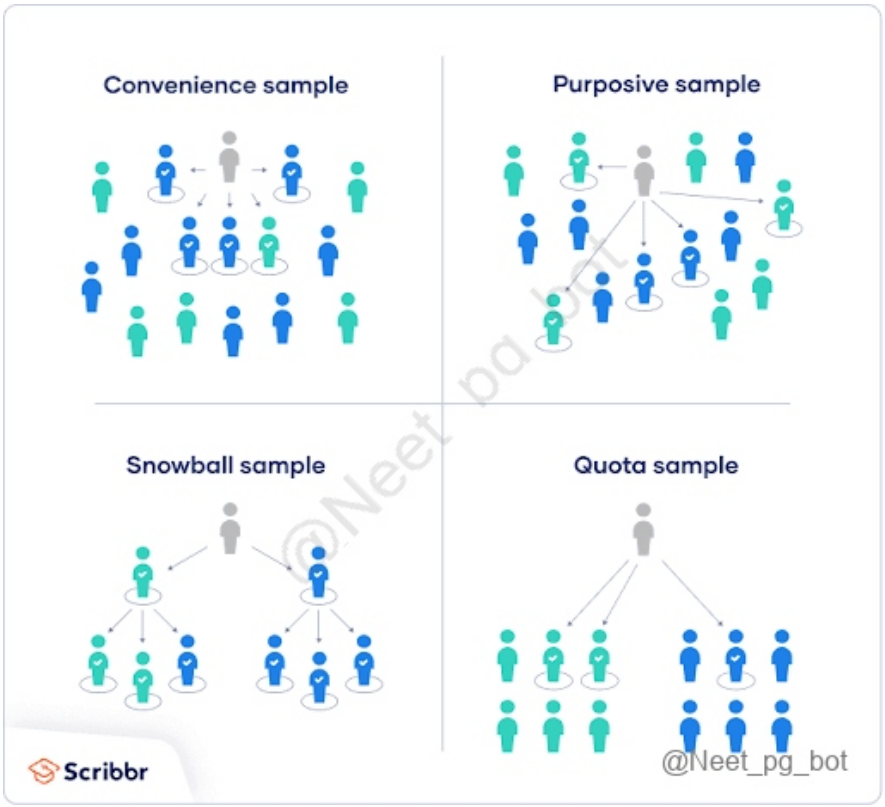
Correct Answer: D. Cluster sampling is a type of Non-Random Non-Probability Sampling method.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Cluster Sampling is a Random probability sampling method where the population is divided into clusters, and entire clusters are randomly selected to be included in the study. This method ensures that every individual has an equal chance of being included in the sample through random selection of clusters. Sampling methods are of two types:- Probability sampling methods- Each individual in the population has an equal chance of getting selected. (Option A) Non-probability sampling methods- Not every member of the population has an equal chance of getting selected. It does not guarantee that the sample is representative of the population, thus can introduce bias. Types of Sampling Method: Random – Probability Non-Random – Non-Probability (Option B) Simple random sampling Systematic random sampling Stratified random sampling Cluster random sampling Multi-stage sampling Multi-phase sampling Convenient sampling Purposive sampling Quota sampling Snowball sampling Sampling Error: Sampling error is the difference between the results obtained from a sample and the actual characteristics of the entire population. This type of error depends on:- Sample Size: Generally, as the size of the sample increases, the sampling error decreases. (Option C) Variability of Individual Readings : The natural variability or diversity within the population also affects sampling error


Simple random sample
Systematic sample
Stratified sample
Cluster sample
@Neet_pg_bot


Convenience sample
Purposive sample
Snowball sample
Quota sample
Scribbr
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References:

Park’s Textbook of Preventive Medicine 27th Edition Pg 978 IAPSM Textbook of Community Medicine 2nd Edition Pg. 174 Pubmed

↑ *Back to this question in Part A*

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Q7: Which of the following statements is incorrect about regression? (Q841103)

A. It measures the strength and direction of the relationship between two or more variables.

B. It is used to predict the value of a dependent variable based on one or more independent variables.

C. Multiple Linear Regression describes the effect of multiple independent (Qualitative, Quantitative or Mixed) variables on dichotomous qualitative variables (discrete i.e., yes or no)

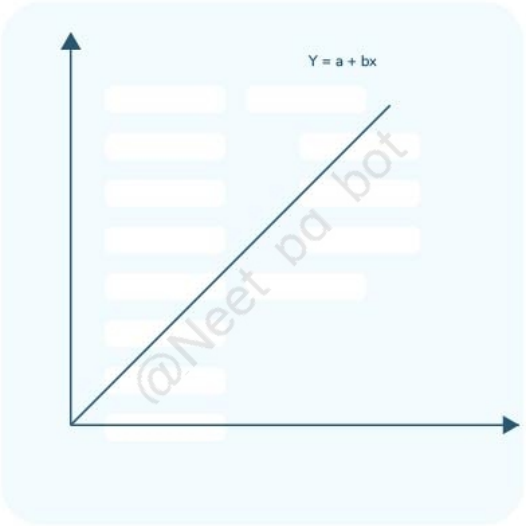
D. It can be linear or nonlinear depending on the relationship between variables.

Correct Answer: C. Multiple Linear Regression describes the effect of multiple independent (Qualitative, Quantitative or Mixed) variables on dichotomous qualitative variables (discrete i.e., yes or no)

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The effect of multiple independent variables on dichotomous qualitative variables is logistic regression, not multilinear regression Regression analysis is a statistical technique used to describe relationships between variables. It represents unitary change. It quantifies how changes in one variable are associated with changes in another variable(s). It provides insights into the direction (positive or negative correlation) and strength (the magnitude of the relationship) between variables. (Option A) The process involves fitting a mathematical model to observed data to describe the effect of ≥1 independent variable on a dependent variable. (Option B) Equation: y = a + bx where, y = Dependent variable; a = Constant ; b = Regression coefficient ; x = Independent variable E.g., Blood pressure is a continuous variable, it can be affected by age, cholesterol. Regression analysis can be applied to both linear and nonlinear relationships between variables. (Option D) Linear Regression describes the effect of one independent variable on a dependent variable (y = a + bx 1). Non-Linear Regression involves more complex mathematical forms, including logarithmic functions.



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References:

K.Park's Textbook of Preventive and Social Medicine, 27th Ed, Pg. 980-981

↑ *Back to this question in Part A*

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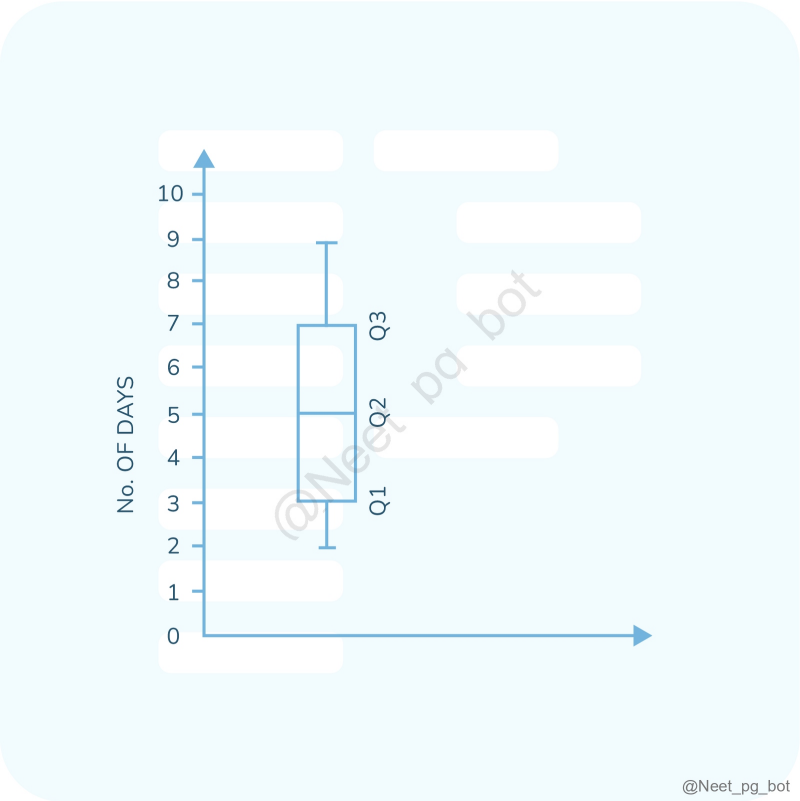
Q8: A hospital conducted a study on the recovery times (in days) of patients after a specific surgical procedure. The data was summarized using a box and whisker plot as shown below: Which of the following statements best describes the skewness of the recovery time data shown in the plot above? (Q841098)

A. The data has no skewness.

B. The data is positively skewed.

C. The data is negatively skewed.

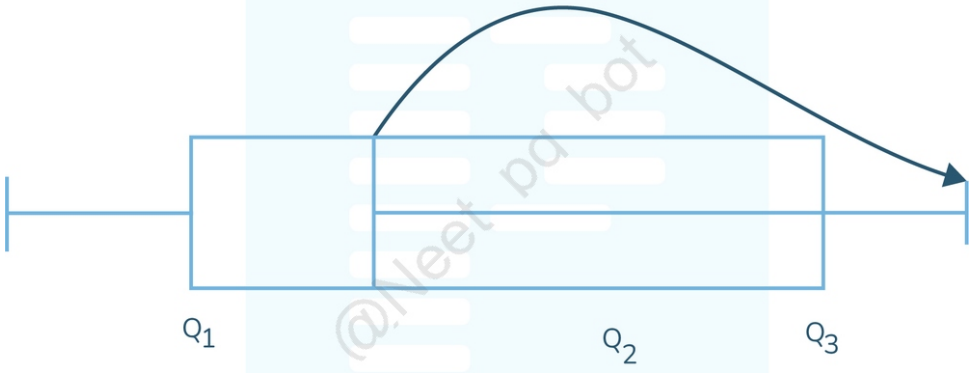
D. The data is both positively and negatively skewed.



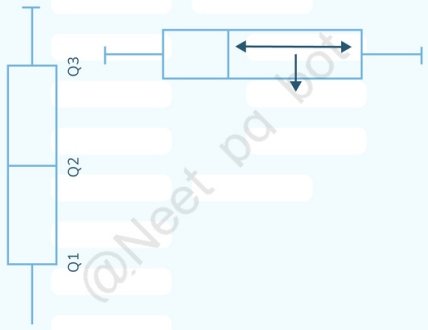
Correct Answer: A. The data has no skewness.

- *Listen (English)*
- *Listen (Hindi)*

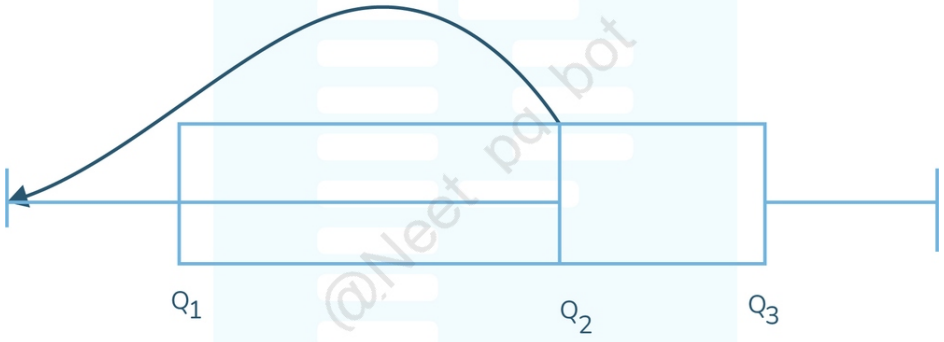
Explanation: In the given box and whisker plot , the right whisker is equal to the left whisker, indicating Symmetrical distribution or no skewness. It is used to show the distribution of data based on a five-number summary [minimum, first quartile (Q1), median(Q2), third quartile (Q3), and maximum]. It comments on the type of distribution i.e., normal or skewed. Interpretation of a Box and Whisker Plot: Skewness: A longer whisker on one side suggests that the data is skewed towards that direction (positive skew for a longer right whisker, negative skew for a longer left whisker). Central Tendency: The median (Q2) provides a measure of central tendency. Its position within the box indicates whether the data is symmetrically distributed around the median or skewed (long gap suggests skew in that direction). Right skew (Option B): i) Gap is more on the right side ii) Rotate the image clockwise and interpret - gap on the right is longer - right sided skewness Left skew (Negatively skewed): (Option C) i) Gap is more on the left side - Mean<Median<Mode ii) Normal gap but left whisker is longer - left-sided skewness Normal distribution: It represents symmetrically distributed data or that the data has no skewness (Option A) i) Horizontal box ii) Vertical box



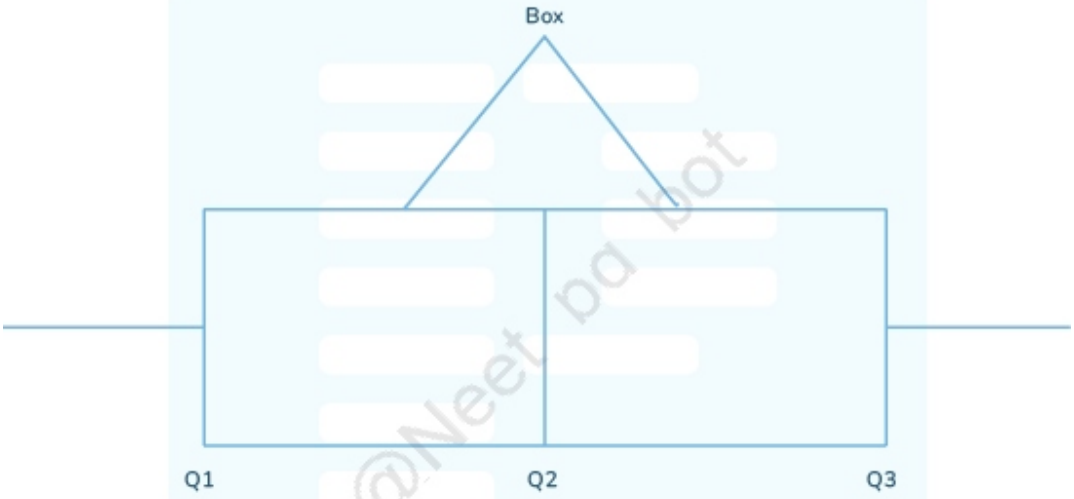
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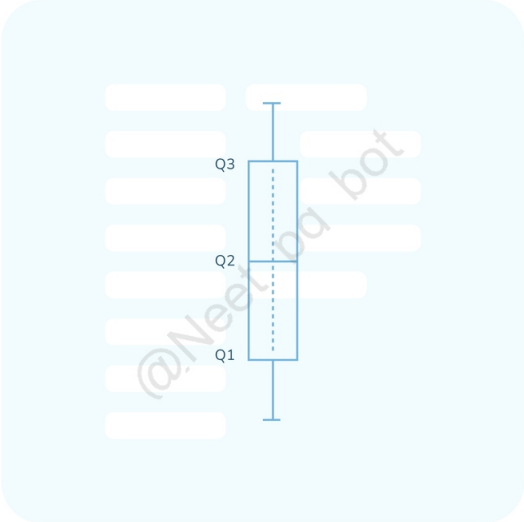
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References:

www.sciencedirect.com/topics/mathematics/box-and-whisker-chart

↑ *Back to this question in Part A*

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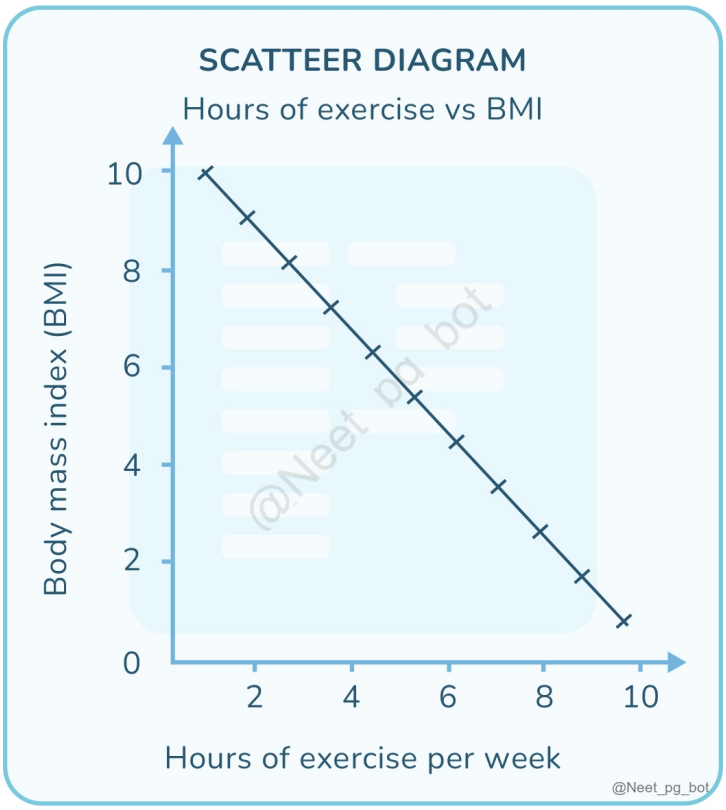
Q9: A study is conducted to examine the relationship between hours of exercise per week and body mass index (BMI) among adults. Data from 30 participants are collected and plotted, with hours of exercise on the x-axis and BMI on the y-axis. The resulting scatter diagram is as shown below. What type of correlation is depicted, and what is the correlation coefficient (r) value? (Q841095)

A. Positive correlation; r = 1

B. Negative correlation; r = -1

C. No correlation; r = 0

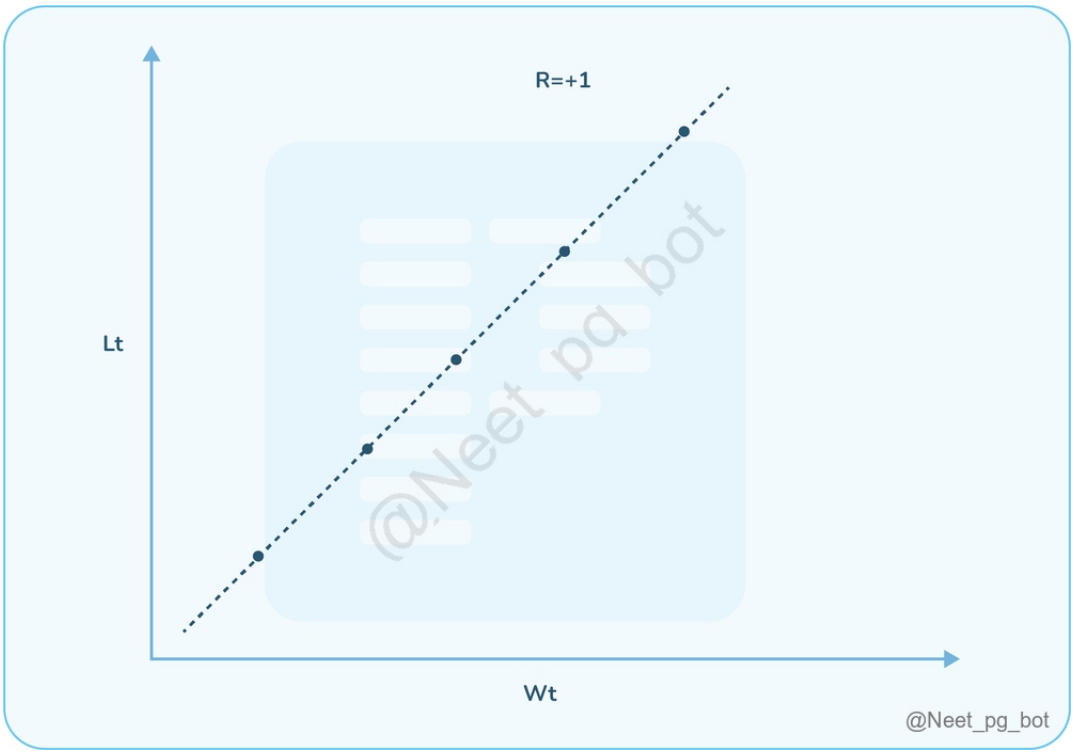
D. Weak negative correlation; r = -0.5

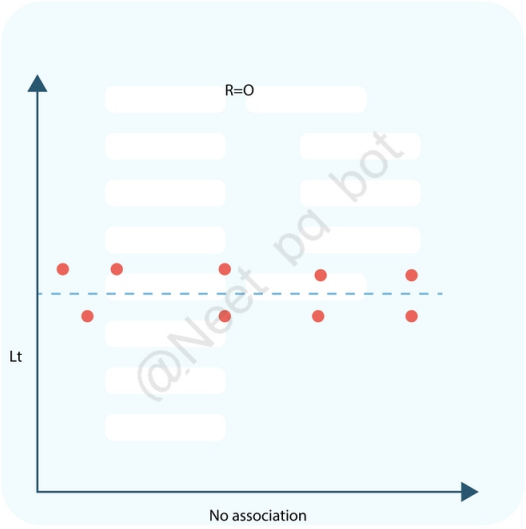


Correct Answer: B. Negative correlation; r = -1

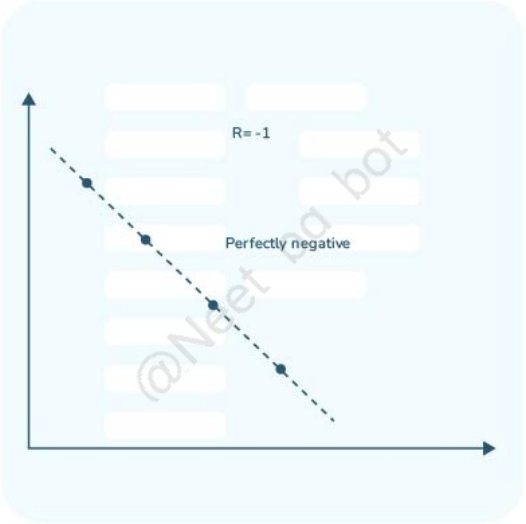
- *Listen (English)*
- *Listen (Hindi)*

Explanation: Scatter Diagram: Represents correlation between two continuous variables i.e., association and direction of association. Represented by correlation coefficient 'r'. Value of 'r' ranges from: -1 < 0 < +1 Perfectly positive association: Weight is increasing with the increase in height (perfectly linear association) Value of r = +1 No association between x-axis and y-axis (r=0) Perfectly negative association: Variables on the x-axis increase with decreasing in the variables on the y-axis. Value of r = -1 Possible values of r: r = +1 (perfectly positive) r ≥ 0.7 (Strong positive) r = 0.4 to 0.6 (moderate positive) r ≤ 0.3 (Weak positive) r = -1 (perfectly negative) r ≥ - 0.7 (Strong negative) r = -0.4 to -0.6 (moderate negative) r ≤ - 0.3 (weak negative)





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References:

K.Park’s Textbook of Preventive and Social Medicine, 27th Ed. Pg.974 12.2 Scatter Plots - Introductory Statistics 2e | OpenStax

↑ *Back to this question in Part A*

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Q10: A clinic wants to analyze the cumulative number of patients who have completed a new vaccination program over the past year to evaluate the program's uptake and identify any trends in vaccination rates. Which type of graph should they use? (Q841091)

A. Line Chart

B. Ogive

C. Pie Chart

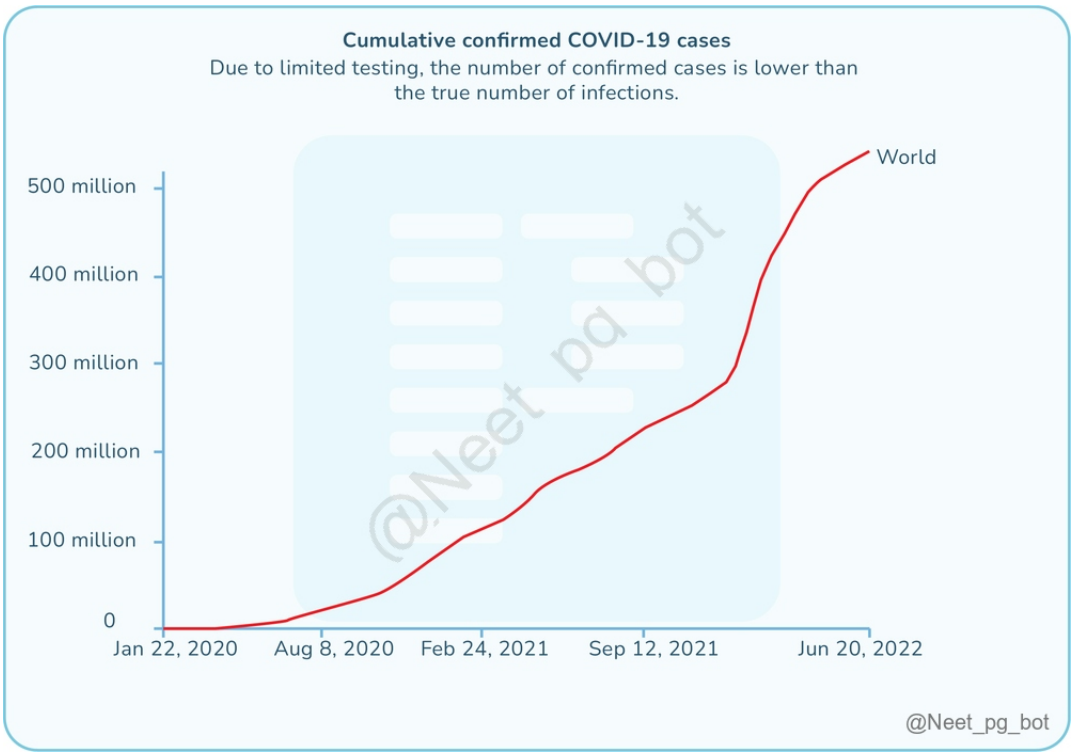
D. Box Plot

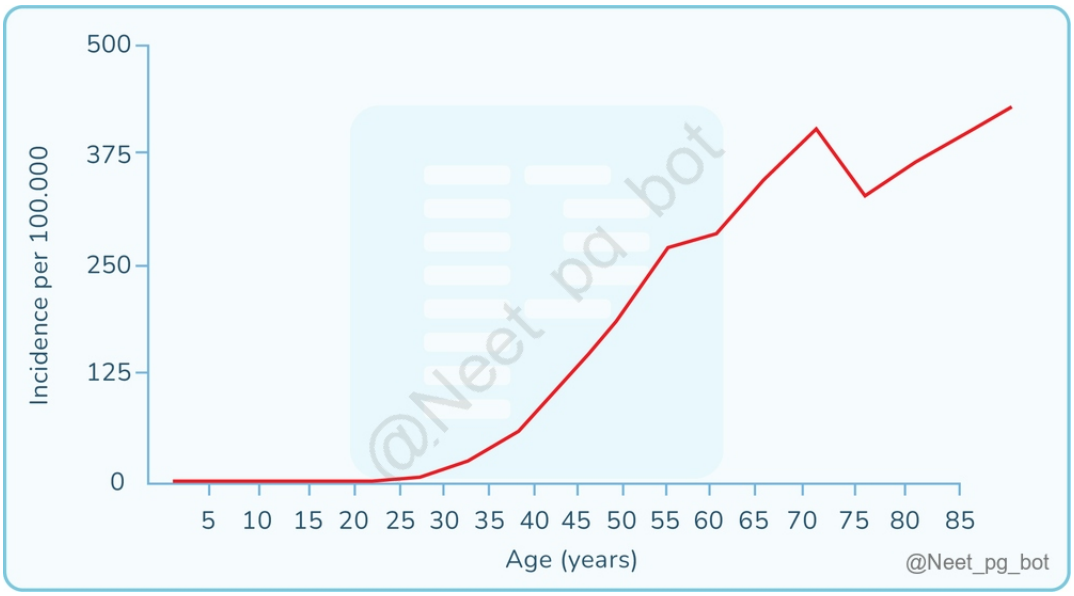
Correct Answer: B. Ogive

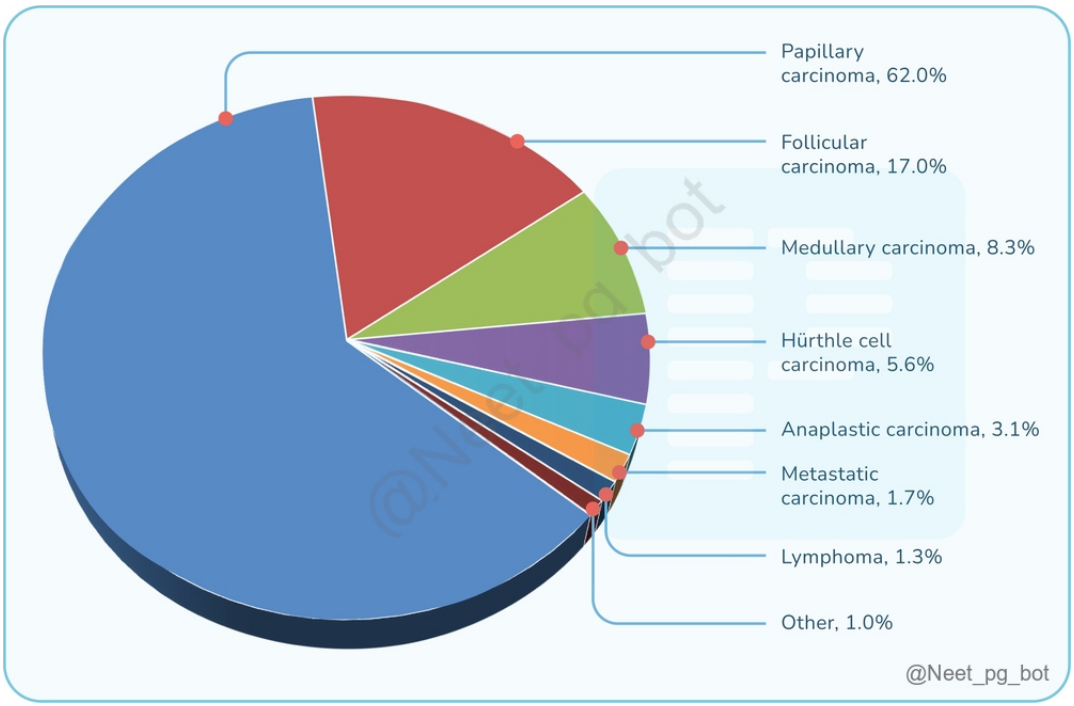
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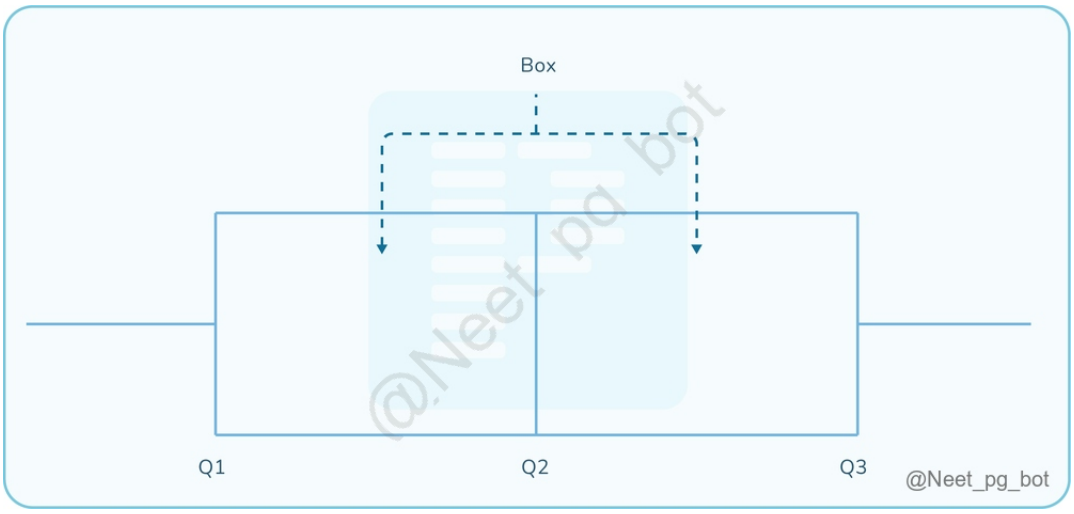
■ *Listen (Hindi)*

Explanation: An ogive or cumulative frequency curve is useful for understanding how quantities accumulate over time. By plotting cumulative vaccination completion data on an ogive, the clinic can easily visualize the total number of patients vaccinated up to each month and observe trends in the rate of increase in vaccinations. There is no dip or no fall of the curve. Cases are constantly increasing Fig. Ogive A line chart (Option A) is used for showing trends of events or incidence of cases over time. It has both rise and fall. Fig. Line chart A pie chart (Option C) displays the proportions of different categories using slices of a circle. Used to represent variables in percentages and proportions. Represents qualitative variables. Entire pie chart is 100% Maximum divisions: 6 - 7 parts Fig. Pie chart A box plot (Option D) is used to show the distribution of data based on a five-number summary (minimum, first quartile (Q1), median, third quartile (Q3), and maximum). It comments on the type of distribution, i.e., normal or skewed. Fig. Box and Whiskerplot




500
375
250
125
0
Incidence per 100.000
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85
Age (years)
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Papillary carcinoma, 62.0%
Follicular carcinoma, 17.0%
Medullary carcinoma, 8.3%
Hürthle cell carcinoma, 5.6%
Anaplastic carcinoma, 3.1%
Metastatic carcinoma, 1.7%
Lymphoma, 1.3%
Other, 1.0%
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References:

K.Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg.974 2.2: Histograms, Ogives, and Frequency Polygons - Statistics LibreTexts

↑ *Back to this question in Part A*

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Q11: A teacher measured the heights of students in her class and wanted to visualize the distribution of these heights. She is considering using either a histogram or a frequency polygon for this purpose. Which of the following statements correctly distinguishes between a histogram and a frequency polygon? (Q841090)

A. A histogram uses bars to represent frequencies of height intervals, while a frequency polygon uses dots connected by straight lines.

B. A histogram displays cumulative frequencies of student heights, whereas a frequency polygon displays individual height measurements.

C. A histogram can only display continuous data like heights, while a frequency polygon can only display categorical data.

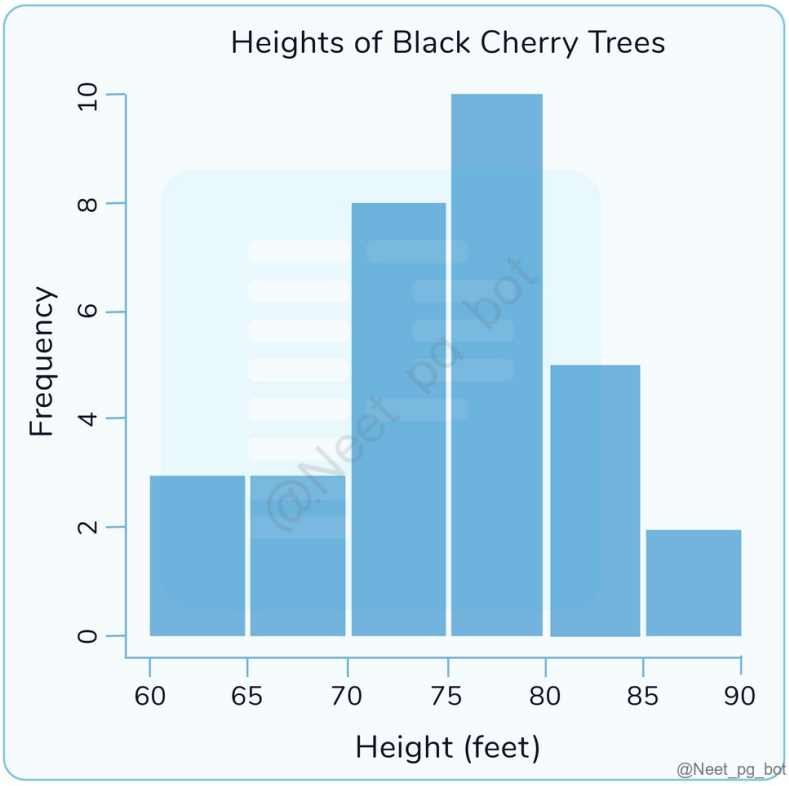
D. A histogram provides a clearer representation of changes in student heights over time compared to a frequency polygon.

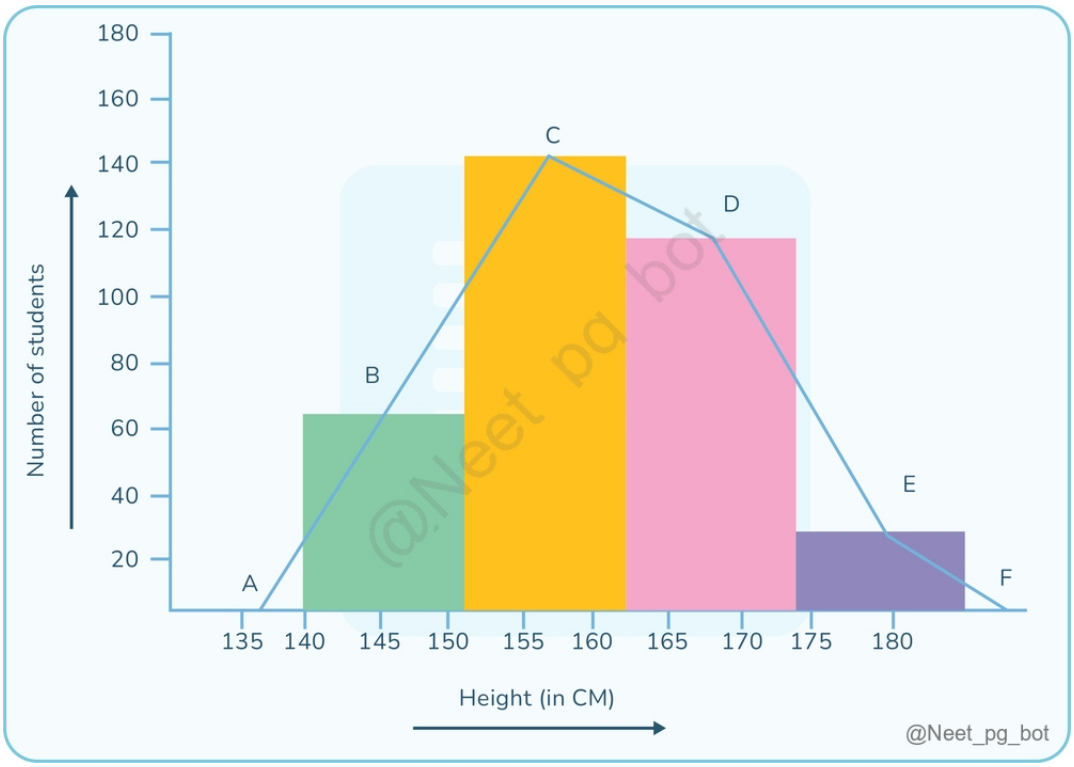
Correct Answer: A. A histogram uses bars to represent frequencies of height intervals, while a frequency polygon uses dots connected by straight lines.

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Histogram: It represents the frequency of continuous variables or quantitative variables. Height is a quantitative or continuous variable (can take many possible values and also in between values) It can be expressed in decimals and there is no gap in between. Frequency Polygon: It is drawn above a histogram. Midpoints are joined by a straight line (frequency polygon). Height is continuous (quantitative data). If the number of observations is very large and group intervals are reduced, then the frequency polygon loses its angulature and becomes a curve, i.e., frequency curve. Options B, C and D are incorrect because a histogram represents frequency of continuous variables or quantitative variables and a frequency polygon is drawn on top of it, connecting its mid-points by straight lines and they both have a similar accuracy in representation of changes in students' heights over time.





References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg: 973-975

↑ *Back to this question in Part A*

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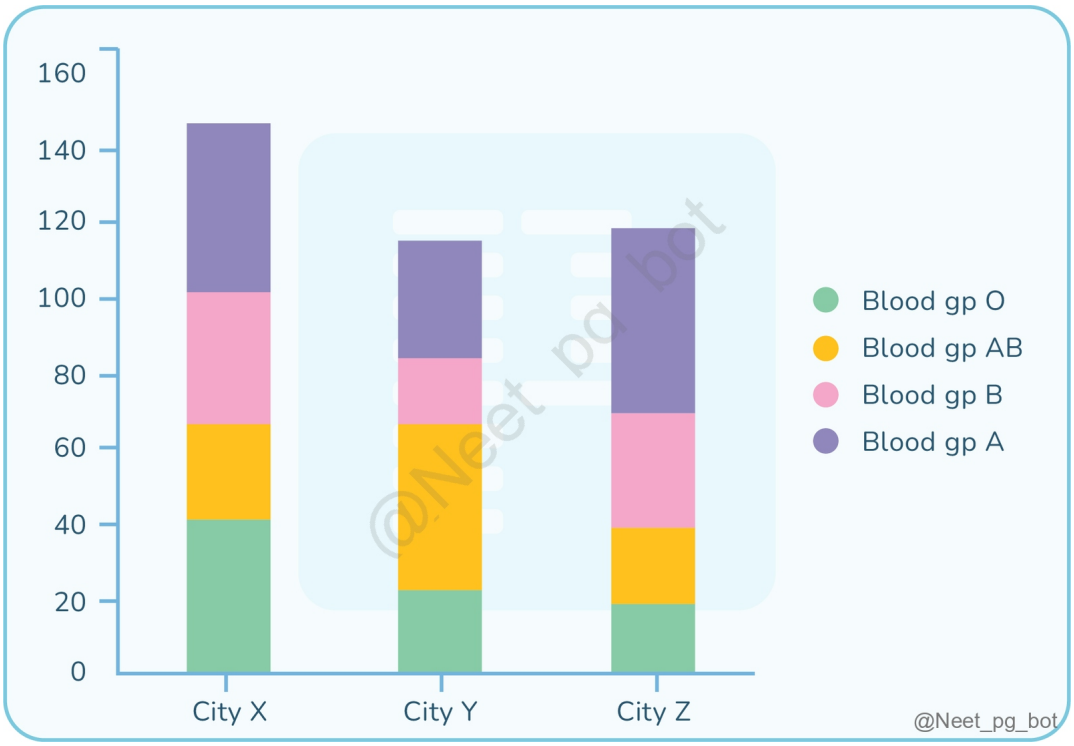
Q12: Given below is a graphical representation of different blood groups of people in three different cities, what is the type of graphical representation used here? (Q841087)

A. Simple Bar Diagram

B. Compound Bar Diagram

C. Component Bar Diagram

D. Histogram

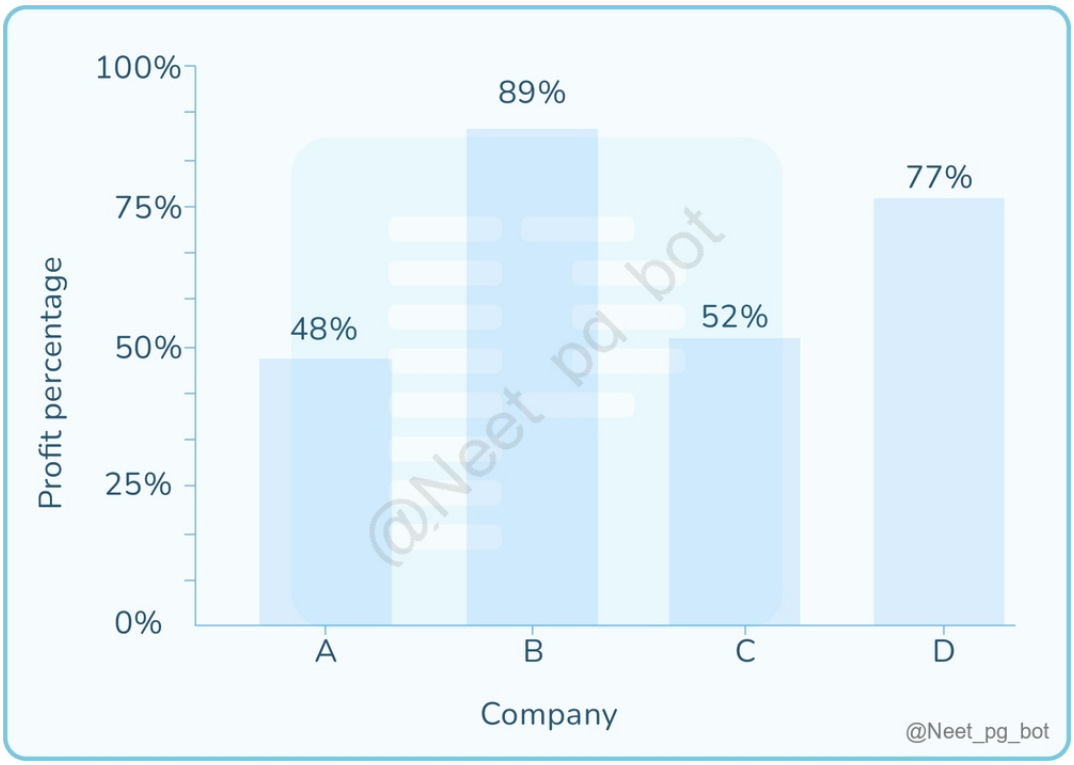


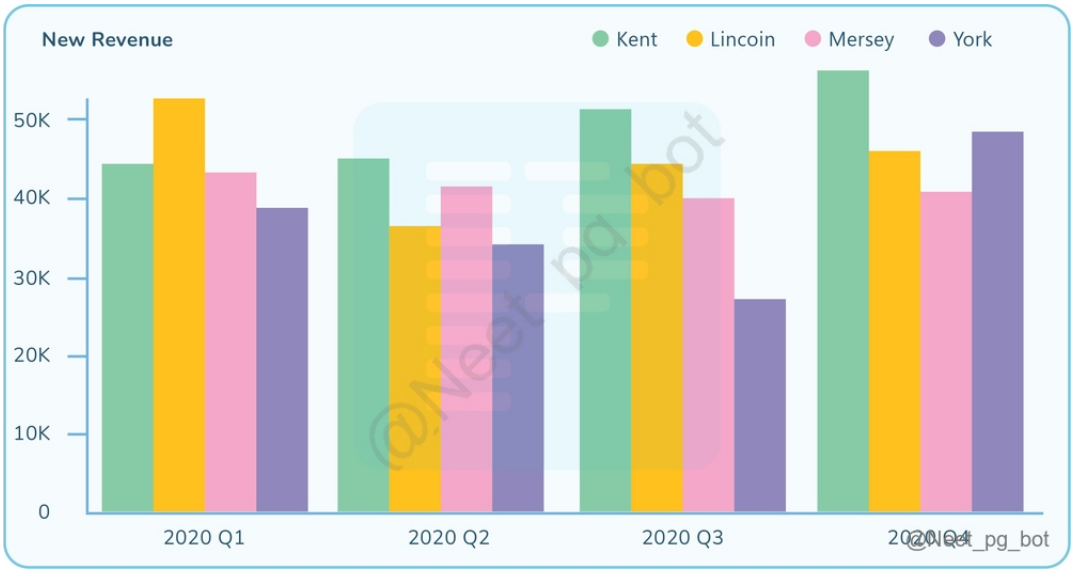
Correct Answer: C. Component Bar Diagram

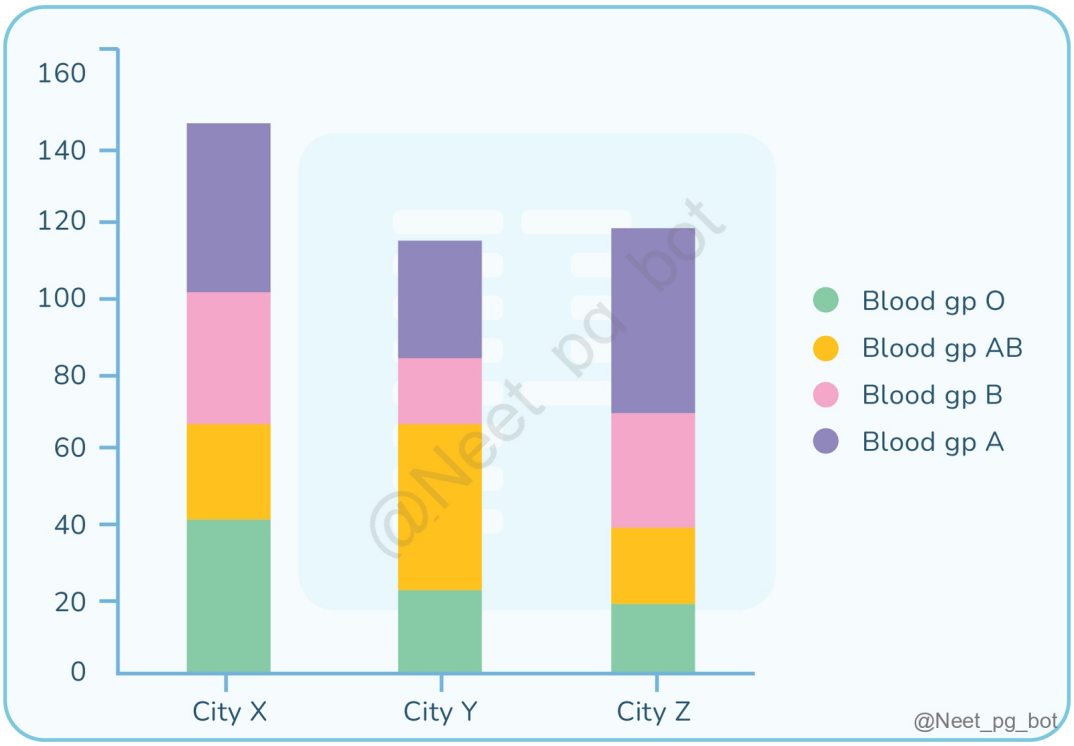
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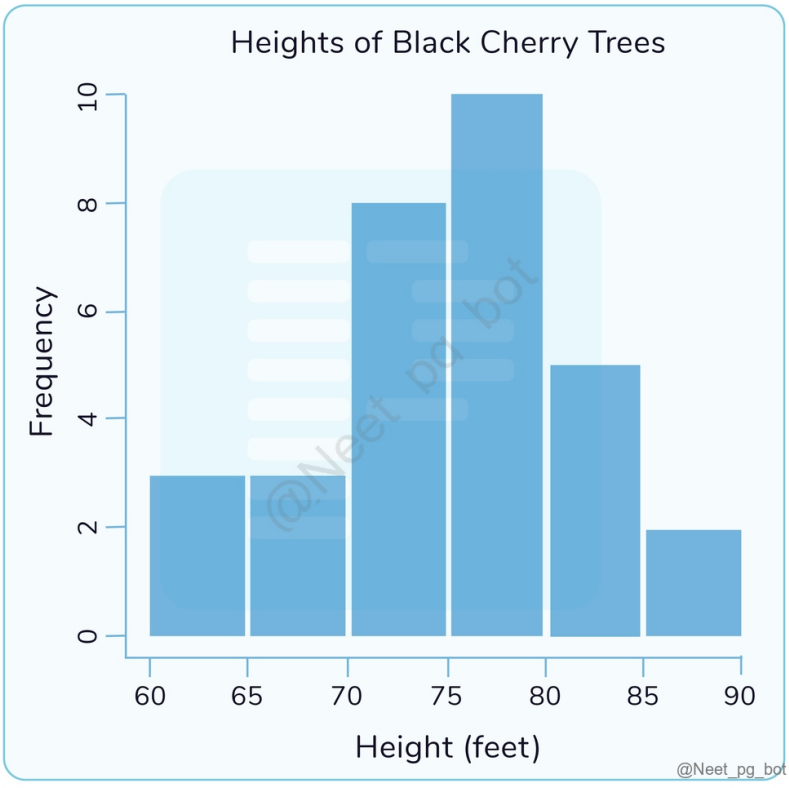
■ *Listen (Hindi)*

Explanation: Here, the same bar has been divided into different components and each component represents its frequency. This is known as a component bar diagram. Types of bar diagrams: Image


100%
75%
50%
25%
0%
Profit percentage
48%
89%
52%
77%
A
B
C
D
Company
@Neet_pg_bot


New Revenue
Kent
Lincoin
Mersey
York
50K
40K
30K
20K
10K
0
2020 Q1
2020 Q2
2020 Q3
2020 Q4
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References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg: 973-975

↑ *Back to this question in Part A*

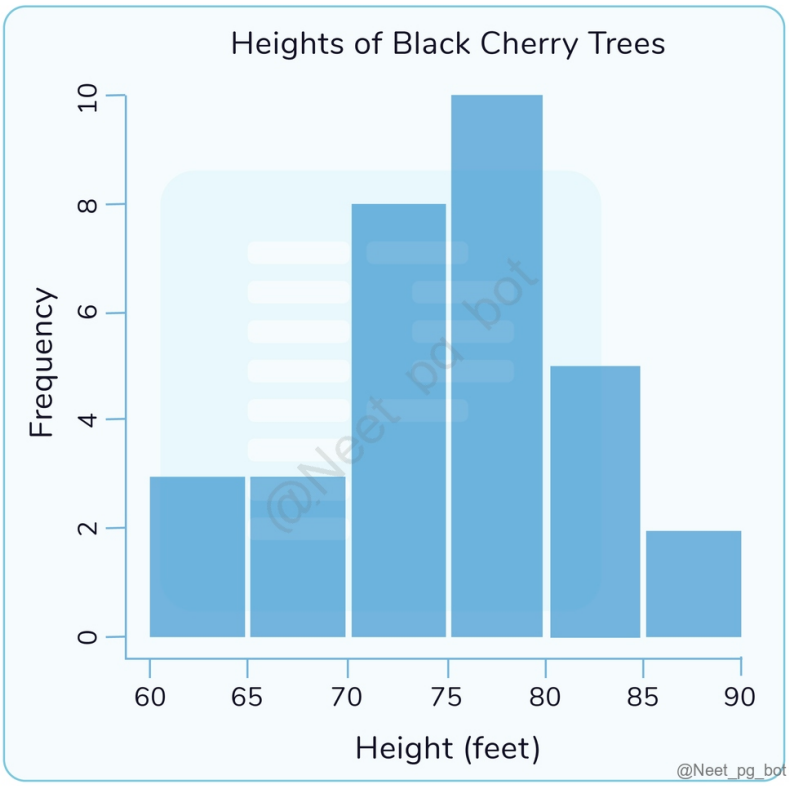
Q13: What is this graphical representation of frequency of quantitative data called? (Q840934)

A. Histogram

B. Bar Diagram

C. Pictograph

D. Box and Whisker Plot



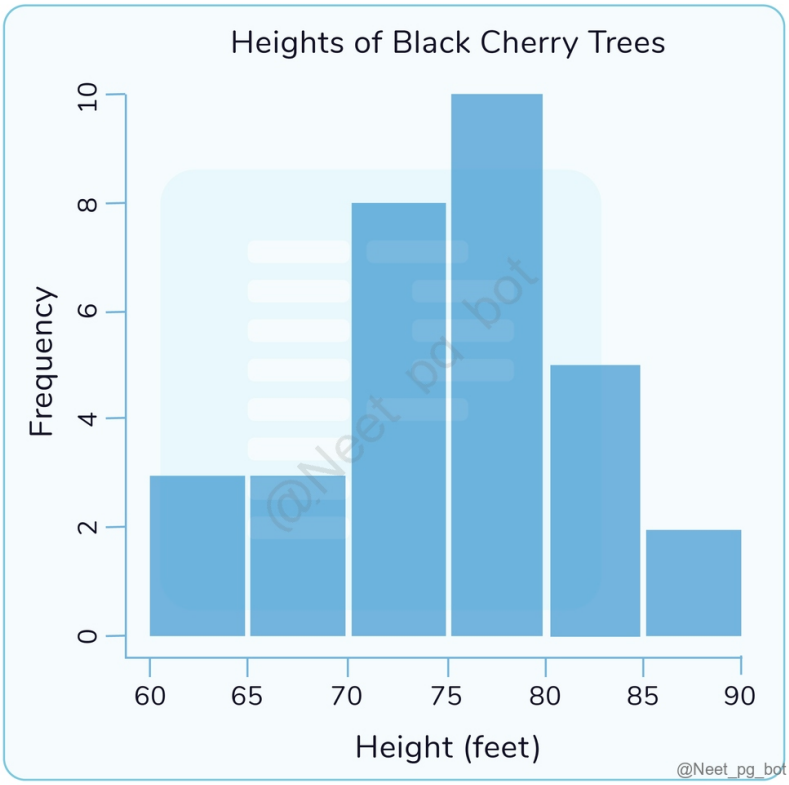
Correct Answer: A. Histogram

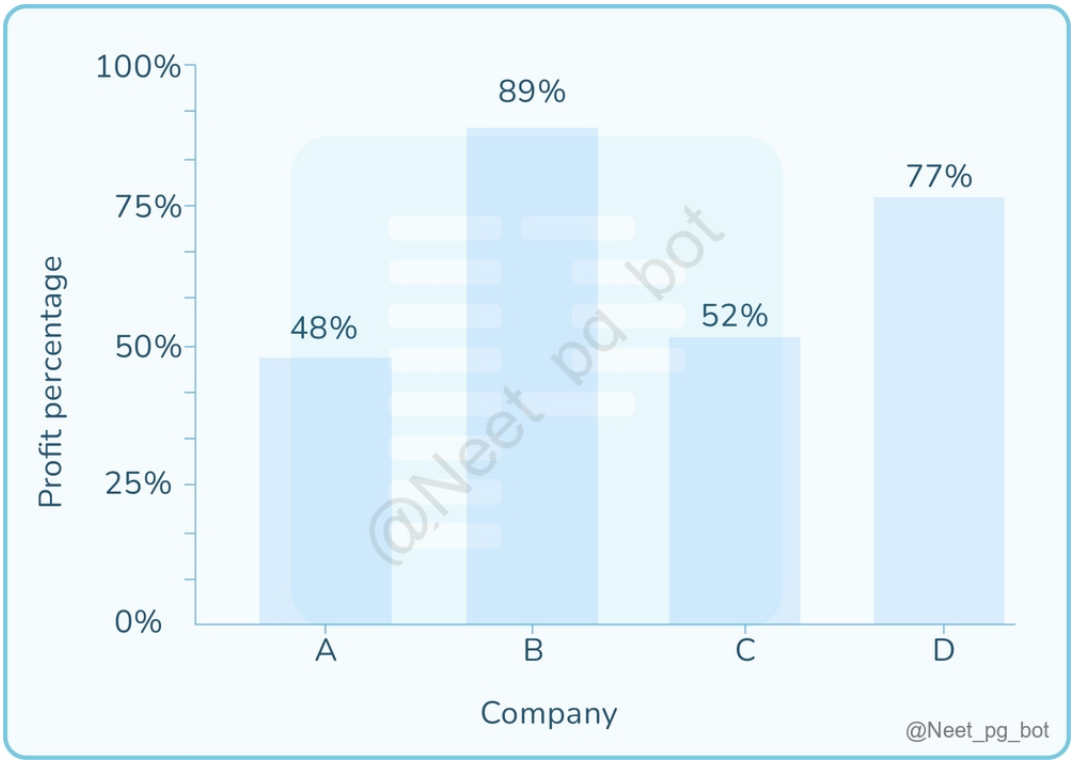
Listen (English)

Listen (Hindi)

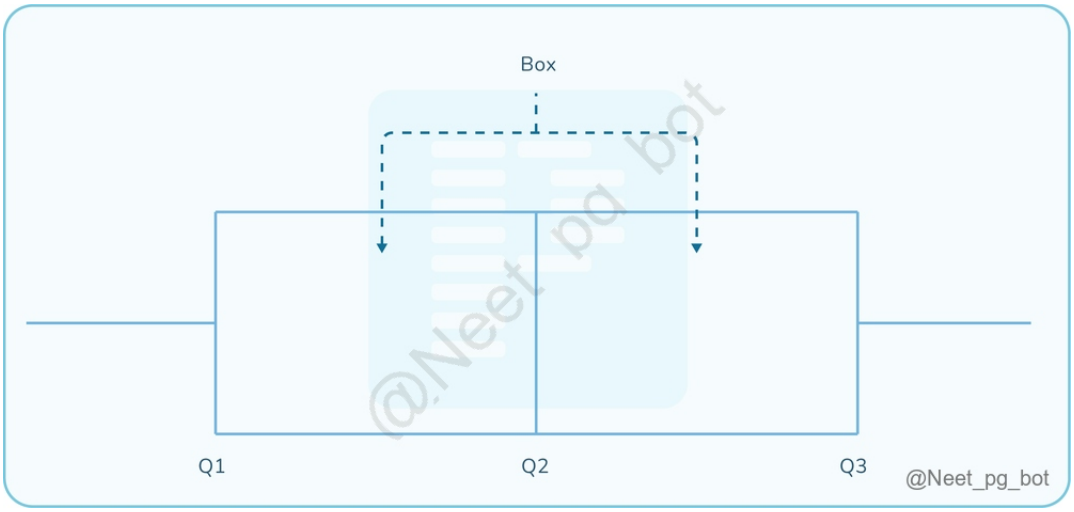
Explanation: Histogram: It represents the frequency of continuous variables or quantitative variables. Height is a quantitative or continuous variable (can take many possible values and also in between values) It can be expressed in decimals and there is no gap in between. Bar Diagram: Simple bar diagrams represent the frequency of discrete variables like gender. Discrete variables: These variables take fewer values and no in-between values. Examples: Religion, Blood groups These are not represented in decimals, so there are gaps. Pictograph: Used for graphical

representation of qualitative variables Used to teach something to a layman (illiterate). Box and Whisker Plot: A method of quantitative data representation. Used to represent quartiles. It comments on the type of distribution i.e., normal or skewed..









References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg: 973-975

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: A hospital administrator wants to determine if there is a significant association between the type of hospital ward (General, Intensive Care, and Pediatric) and the

number of patients who experienced postoperative infections. The data collected over a month is as follows: Ward Patients with infections Patients without infections Total General 20 80 100 Intensive Care 30 70 100 Pediatric 10 90 100 Total 60 240 300 Using the Chi-Square test, what is the expected number of patients with infections in the General Ward if there is no association between the ward type and infection status? (Q840932)

A. 15

B. 20

C. 30

D. 60

Correct Answer: B. 20

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The expected number for each cell in a Chi-square test is calculated by multiplying the row total by the column total and dividing by the grand total. The formula for the expected frequency in a cell is: E=(Row Total)×(Column Total) / Grand Total For the General ward and infections: = (Total patients in General ward x Total patients with infections) / Total number of patients = (100 x 60) / 300 = 6000 / 300 = 20

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg: 980

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which one of the following tests is used to study the association between the use of oral contraceptive pills (OCP) and breast cancer? (Q840930)

A. Paired T-test

B. Chi-Square Test

C. Unpaired T-test

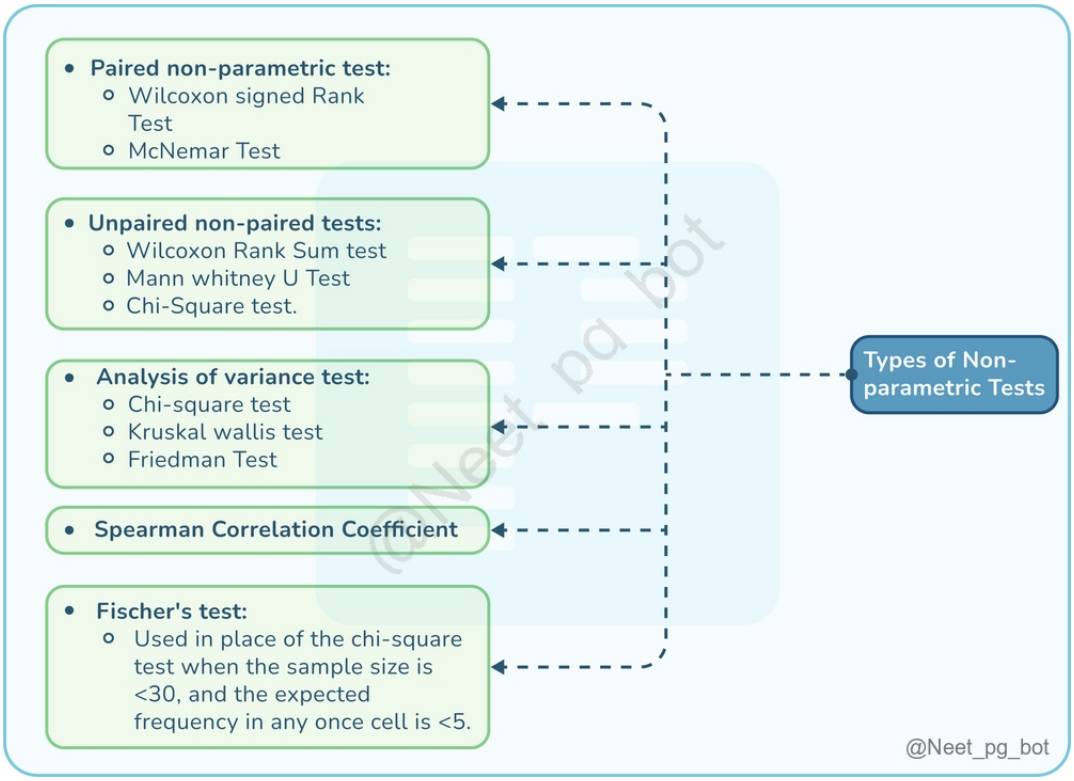
D. ANOVA

Correct Answer: B. Chi-Square Test

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Chi-Square Test is a non-parametric test used to study the association between two qualitative variables. In this scenario, breast cancer and OCP use are both qualitative variables.



References:

https://www.wjpmr.com/download/article/120032024/1711972240.pdf Park's Textbook of Preventive and Social Medicine, 27th Edition, Pg: 980

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: A contingency table used in a Chi-square (χ^2) test contains 3 rows and 4 columns. What is the appropriate degree of freedom (d.f.)? (Q892266)

A. 12

B. 7

C. 6

D. 9

Correct Answer: C. 6

Explanation: The degree of freedom is calculated using: d.f.=(r−1)(c−1) Here, r = 3; c = 4 d.f. = (3−1)(4−1) = 2×3 = 6 Degree of Freedom Calculation: In a Chi-square test , d.f. depends on the number of rows (r) and columns (c) in the contingency table. Standard formula: d.f. = (r−1)(c−1) Determines which critical value to use from χ^2 tables for hypothesis testing. Examples: 2×2 table → d.f. = 1 3×2 table → d.f. = 2 3×4 table → d.f. = 6 Essential for accurate interpretation of statistical significance

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 996

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: A researcher constructs a contingency table and plans to apply a Chi-square (χ^2) test. Which of the following formulas is used to calculate the degree of freedom (d.f.) for this test? (Q892263)

A. n−1

B. (c−1)(r−1)

C. c+r−2

D. c×r

Correct Answer: B. (c−1)(r−1)

Explanation: The degree of freedom (d.f.) in a Chi-square test is calculated using the formula (columns − 1) × (rows − 1) which determines the appropriate reference distribution. Degree of Freedom Calculation: In a Chi-square test , d.f. depends on the structure of the contingency table . Used to select the correct critical value from χ^2 tables . Examples: 2×2 table → d.f. = 1 3×2 table → d.f. = 2 Essential for accurate hypothesis testing and interpretation of significance . As highlighted in your PDF, proper statistical calculations like d.f. are crucial for valid analysis of categorical health data n−1 (Option A): Used in sample variance/standard deviation calculations. c+r−2 (Option C): Incorrect formula. Not used in Chi-square analysis. c×r (Option D) : Represents the total number of cells. Does not define degrees of freedom.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 996

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: While comparing two independent group means using statistical testing, a researcher interprets the probability (P value) of the observed difference. At what threshold is a result considered “more significant”? (Q892262)

A. P < 0.10 (1 in 10)

B. P < 0.05 (1 in 20)

C. P < 0.01 (1 in 100)

D. P > 0.05

Correct Answer: C. P < 0.01 (1 in 100)

Explanation: A P value < 0.01 indicates a very low probability (less than 1%) that the observed difference is due to chance and is therefore regarded as “more significant” in statistical testing. Unpaired t-Tests (Significance Levels): Used to compare the means of two independent groups. Interpretation is based on P values derived from the test statistic. Common thresholds: P > 0.05 → not significant P < 0.05 → statistically significant P < 0.01 → highly/more significant Lower P value → stronger evidence against the null hypothesis. Helps determine whether differences between groups reflect true population differences or chance variation. Statistical testing is used to assess the reliability and significance of observed differences in health data. P < 0.10 (1 in 10) (Option A): Considered weak evidence. Not typically accepted as statistically significant. P < 0.05 (1 in 20) (Option B): Standard threshold for "significant," not “more significant.” Less stringent than 0.01. P > 0.05 (Option D) : Indicates a non-significant result. Suggests the difference is likely due to chance.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 994, 995

↑ *Back to this question in Part A*

@Neet_pg_bot

Q19: A researcher compares the mean values of a variable between a control group and an experimental group using the standard error of the difference between two means. What is the primary conceptual goal of this calculation? (Q892261)

A. To determine if the variables have a strong linear correlation

B. To calculate the total dispersion of the combined population

C. To determine if the samples represent two different populations (“universes”)

D. To find the most frequent value in the distribution

Correct Answer: C. To determine if the samples represent two different populations (“universes”)

Explanation: The standard error of the difference between two means helps determine whether the observed difference is statistically significant, indicating that the two samples likely come from different populations (“universes”) rather than the same one. Unpaired t-Tests: Used to compare the means of two independent groups (control vs experimental). Key idea: assess whether the difference between means is real or due to chance. Steps involve: Calculate the difference between means Compute the standard error of the difference (SED) Derive test statistic (t or Normal Deviate) If the difference is large relative to SED → statistically significant → different populations. If small → not significant → same population likely. Forms the basis for hypothesis testing in biomedical research To determine if the variables have a strong linear correlation (Option A): Measured using the correlation coefficient (r). Not related to comparing group means. To calculate the total dispersion of the combined population (Option B): This refers to standard deviation/variance. To find the most frequent value in the distribution (Option D) : Refers to the mode. A measure of central tendency, not comparison.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 994, 995

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: In constructing a contingency table for a Chi-square (χ^2) test, a researcher needs to calculate the expected frequency (E) for each cell. Which of the following formulas is used to determine the expected value? (Q892259)

A. Average of observed values in that row

B. Grand total minus observed value

C. (Row total × Column total) ÷ Grand total

D. (Observed value)² ÷ Degree of freedom

Correct Answer: C. (Row total × Column total) ÷ Grand total

Explanation: The expected frequency (E) in a Chi-square test is calculated as (row total × column total) ÷ grand total , ensuring proportional distribution under the null hypothesis. Chi-square Test: A non-parametric test used for categorical data (frequencies) . Compares observed (O) vs. expected (E) frequencies to test association. Expected values assume no association (null hypothesis) . Formula for expected value: These expected values are then used in the χ^2 formula: O = Observed frequency; E = Expected frequency; Σ = Sum over all cells Essential for determining whether observed deviations are due to chance or true association . Chi-square analysis is fundamental for testing relationships in categorical health data. Average of observed values in that row (Option A): Does not account for column distribution or total sample size. Grand total minus observed value (Option B): No statistical basis. Does not reflect proportional expectation. (Observed value)² ÷ Degree of freedom (Option D) :

Part of the χ^2 computation conceptually. Not used to calculate expected values.

$$E = \frac{\text{Row total} \times \text{Column total}}{\text{Grand total}}$$

$$x^2 = \sum \frac{(O - E)^2}{E}$$

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References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 996, 997

↑ *Back to this question in Part A*

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Q21: A researcher wants to compare the mean values across multiple independent groups to determine whether any group differs significantly from the others. Which of the following best defines the statistical test used? (Q892258)

A. A test used to compare proportions between two groups

B. A test used to compare means between two independent groups

C. A test used to compare means among three or more groups

D. A test used for categorical data only

Correct Answer: C. A test used to compare means among three or more groups

Explanation: ANOVA (Analysis of Variance) is specifically designed to compare the means of three or more groups simultaneously and determine if at least one group differs significantly. ANOVA Test: A parametric test used for comparing multiple group means. Extension of the unpaired t-test (which is limited to two groups). Based on comparing: Between-group variance (differences among group means) Within-group variance (variability inside each group) Produces an F-statistic (F-ratio) for hypothesis testing. Helps avoid multiple t-tests, thereby reducing Type I error. Assumptions: Normal distribution Homogeneity of variances Independence of observations Widely used in clinical and experimental research, aligning with statistical analysis principles. A test used to

compare proportions between two groups (Option A): Refers to the chi-square test. A test used to compare means between two independent groups (Option B): Refers to an unpaired t-test. A test used for categorical data only (Option D) : ANOVA uses continuous variables. Not applicable for categorical data.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 994, 995

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: A researcher analyses outcomes (recovered vs not recovered) across three treatment groups using a Chi-square (χ^2) test. What is the degree of freedom (d.f.) for this analysis? (Q892257)

A. 1

B. 2

C. 3

D. 6

Correct Answer: B. 2

Explanation: The degree of freedom in a Chi-square test is calculated as d.f.=(rows − 1)(ccolumns − 1) Here: Rows = 2 (outcomes) Columns = 3 (treatment groups) d.f .= (2–1) × (3–1) = 1 × 2 = 2 Chi-square Test: Used to test the association between categorical variables . Based on a comparison of observed vs. expected frequencies . Degrees of freedom (d.f.) determine the correct critical value from χ^2 tables. General rule: d.f. = (rows – 1)(columns – 1) .\ Accurate calculation of d.f. is essential for valid hypothesis testing

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 996, 997.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: In a Chi-square (χ^2) test, the calculated (observed) value is found to be greater than the critical value from the probability table for the corresponding degrees of freedom. What is the most appropriate conclusion? (Q892253)

A. The null hypothesis is true, and the difference is due to chance

B. The difference is statistically significant and unlikely to be due to chance

C. The test is invalid and must be recalculated with larger samples

D. The correlation coefficient must be used to prove causation

Correct Answer: B. The difference is statistically significant and unlikely to be due to chance

Explanation: When the observed χ^2 value exceeds the critical value, the result is statistically significant, and the null hypothesis is rejected, indicating the difference is unlikely due to chance. Chi-square Test: A non-parametric test used to analyse categorical data (frequencies/proportions). Compares observed vs expected frequencies. Decision rule: Observed χ^2 > Critical value → Reject null hypothesis (significant) Observed χ^2 < Critical value → Fail to reject null (not significant) Indicates presence of association between variables, not causation. Requires adequate expected frequencies for validity. Chi-square is a key tool for testing significance in health data and population studies. The null hypothesis is true, and the difference is due to chance (Option A): Applies only when the observed value is less than the critical value. The test is invalid and must be recalculated with larger samples (Option C): A high χ^2 value indicates significance, not invalidity. The correlation coefficient must not be used to prove causation (Option D) : Statistical association does not imply causation. A different statistical concept altogether.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 996, 997.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q24: In comparing the means of two independent groups, a researcher calculates a Normal Deviate (N.D.) of 2.0. What is the most appropriate interpretation of this result? (Q892250)

A. The difference is not significant (P > 0.05)

B. The difference is just significant at the 5% level (P = 0.05)

C. The difference is highly significant (P < 0.01)

D. The samples represent the same population (“universe”)

Correct Answer: B. The difference is just significant at the 5% level (P = 0.05)

Explanation: An N.D. value of exactly 2 corresponds to P = 0.05, indicating the result is just statistically significant at the 5% level. Unpaired t-Tests (Normal Deviate): Used to compare means between two independent groups. Normal Deviate (N.D.) = difference between means / standard error of difference. Interpretation

thresholds: N.D. < 2 → not significant (P > 0.05) N.D. = 2 → just significant (P = 0.05) N.D. > 2 → significant (P < 0.05) Higher values (e.g., ~2.58) → highly significant (P < 0.01) Determines whether observed differences are due to chance or represent a true effect. Part of the statistical methods used to test differences between group means. The difference is not significant (P > 0.05) (Option A): Applies only when N.D. < 2. Here, the threshold for significance is reached. The difference is highly significant (P < 0.01) (Option C): Requires higher N.D. values (~2.58 or more). N.D. = 2 indicates borderline significance only. The samples represent the same population ("universe") (Option D) : A significant difference suggests the groups likely differ. Does not support identical populations.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 994, 995

↑ *Back to this question in Part A*

@Neet_pg_bot

Q25: A researcher compares the mean kidney weight between two independent groups of mice (control vs experimental). Which of the following must be calculated first to assess whether the difference between the two means is statistically significant? (Q892248)

A. The coefficient of correlation (r) between the groups

B. The standard error of the difference between the two means

C. The pooled arithmetic mean of all mice

D. The range of the experimental group

Correct Answer: B. The standard error of the difference between the two means

Explanation: To test the significance of the difference between two independent means (using an unpaired t-test), the key step is to compute: t = (Mean■ – Mean■) / Standard Error of the Difference The first step in testing significance between two independent means is calculating the standard error of the difference (SED), which quantifies variability between the groups. Unpaired t-Tests: Used to compare means of two independent groups (e.g., control vs experimental). Key steps: Calculate the difference between means Calculate the standard error of the difference (SED) Compute test statistic (t or normal deviate). The SED determines how large the observed difference is relative to variability. A larger difference relative to SED → more likely statistically significant. Assumes normal distribution and independence of observations. Part of the statistical methods used to compare group means and assess significance. The coefficient of correlation (r) between the groups (Option A): Used to assess the relationship between variables, not to compare group means. The pooled arithmetic mean of all mice (Option C): Not required for testing significance directly. The focus is on the difference between group means, not the combined average. The range of the experimental group (Option D) : A simple measure of dispersion. Does not help determine statistical significance between groups.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 994-996

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: A Chi-square (χ^2) test yields an observed value of 1.79. The critical value at d.f. = 1 and P = 0.05 is 3.84. What is the most appropriate conclusion? (Q892245)

A. The difference is significant, and the null hypothesis is rejected

B. The difference is due to chance, and the null hypothesis is true

C. The test must be repeated because the observed value is too low

D. A regression coefficient must be calculated to verify the result

Correct Answer: B. The difference is due to chance, and the null hypothesis is true

Explanation: The observed χ^2 value (1.79) is less than the critical value (3.84), so we fail to reject the null hypothesis, indicating the difference is not statistically significant and likely due to chance. Since 1.79 < 3.84 , the result is not statistically significant → we fail to reject the null hypothesis . The best interpretation is that the observed difference could be due to chance (not enough evidence against H■) Chi-square Test: A non-parametric test used for categorical data (frequencies/proportions). Compares observed vs expected frequencies to assess association. Decision rule: Observed χ^2 > Critical value → Reject null hypothesis (significant) Observed χ^2 < Critical value → Accept/fail to reject null (not significant) Requires a correct degree of freedom (d.f. = (r−1)(c−1)). Valid when expected frequencies are adequate. Widely used in epidemiology for testing the association between categorical variables. The difference is significant, and the null hypothesis is rejected (Option A): Incorrect application of the decision rule. Significance requires an observed value greater than the critical value. The test must be repeated because the observed value is too low (Option C): A low χ^2 value does not invalidate the test. It simply indicates no significant association. A regression coefficient must be calculated to verify the result (Option D) : Regression is used for continuous variables and prediction. Not required for testing categorical associations.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 996, 997

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: A researcher plans to compare measurements taken from the same individuals under two conditions. Which of the following is the key requirement for applying a paired t-test? (Q892241)

A. Data must be categorical

B. Observations must be independent

C. Observations must be paired or matched

D. Sample size must exceed 100

Correct Answer: C. Observations must be paired or matched

Explanation: A paired t-test requires observations to be related (paired), such as measurements taken from the same subjects or matched pairs, allowing direct comparison within each pair. Paired t-Tests: A parametric test used for dependent (paired) samples. Each subject acts as their own control, reducing variability. Analyses the difference between paired observations, not raw values. Assumes differences are normally distributed. Common applications: Before vs after treatment Matched case-control pairs Left vs right side measurements Improves statistical power by controlling inter-individual variation. Part of the statistical methods used to analyse differences in health data, Data must be categorical (Option A): A paired t-test requires continuous data. Not suitable for categorical variables. Observations must be independent (Option B): This defines an unpaired t-test. A paired t-test requires dependent observations. Sample size must exceed 100 (Option D) : No fixed sample size requirement. Depends on study design and assumptions.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 994, 995

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: In comparing the means of two independent groups, the Normal Deviate (N.D.) is calculated as the difference between means divided by the standard error of the difference. At what value is the difference considered statistically significant at P < 0.05? (Q892240)

A. N.D. < 2

B. N.D. = 0

C. N.D. > 2

D. N.D. = 1

Correct Answer: C. N.D. > 2

Explanation: When the normal deviate (N.D.) exceeds 2, the difference between two independent means is considered statistically significant at the 5% level (P < 0.05). Unpaired t-Tests (Normal Deviate): Used to compare means between two independent groups. Normal Deviate (N.D.) = (difference between means) / standard error of difference. Interpretation rule: N.D. > 2 → statistically significant (P < 0.05) N.D. < 2 → not significant (P > 0.05) Reflects how large the difference is relative to variability. Basis for determining whether observed differences are likely due to chance or a true effect. Falls under statistical methods used to analyse and test differences between groups N.D. < 2 (Option A): Indicates non-significant difference. N.D. = 0 (Option B): Means no difference between means. N.D. = 1 (Option D) : Less than the threshold of 2. Not statistically significant.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 994, 995.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: A study comparing two vaccines reports an observed Chi-square (χ^2) value of 1.79. The critical value at 1 degree of freedom (P = 0.05) is 3.84. What is the correct interpretation of this result? (Q892238)

A. The null hypothesis is rejected because 1.79 is less than 3.84

B. Vaccine B is statistically superior to Vaccine A

C. The null hypothesis is accepted, and the difference is likely due to chance

D. The test is invalid because the expected number in one cell was less than two

Correct Answer: C. The null hypothesis is accepted, and the difference is likely due to chance

Explanation: In a Chi-square test: If observed $\chi^2 \geq$ critical value → reject null hypothesis (significant) If observed χ^2 < critical value → fail to reject null hypothesis (not significant) Here: Observed $\chi^2 = 1.79$ Critical value = 3.84 Since 1.79 < 3.84 , the result is not statistically significant Because the observed χ^2 value (1.79) is less than the critical value (3.84), we fail to reject the null hypothesis, indicating that the observed difference is not statistically significant and likely due to chance. Chi-Square Test Interpretation: Used to test the association between categorical variables. Decision rule: Observed χ^2 > Critical value → Reject null hypothesis (significant) Observed χ^2 < Critical value → Accept/fail to reject null (not significant) Here: 1.79 < 3.84 → Not significant → Difference due to chance. Requires a correct degree of freedom (d.f. = (r−1)(c−1)); here d.f. = 1. Valid when expected frequencies are adequate. Commonly applied in vaccine trials, exposure-outcome studies, and categorical comparisons.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 996

↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: A researcher applies a Chi-square (χ^2) test to analyse categorical data in a contingency table. Which of the following is an essential requirement for the validity of this test? (Q892236)

A. The total sample size must exceed 1,000 individuals

B. The observed values in every cell must be equal

C. The expected number in each cell must not be less than two

D. The data must be presented as a frequency polygon

Correct Answer: C. The expected number in each cell must not be less than two

Explanation: The chi-square test is valid only when the expected frequency in each cell is ≥ 2, ensuring a reliable approximation to the chi-square distribution. Concept of Chi-square Test: A non-parametric test used for categorical (frequency) data. Compares observed vs. expected frequencies to assess statistical significance. Validity conditions include: Expected frequency in each cell should be ≥ 2 (ideally ≥ 5 for better accuracy). Data should be presented as counts (frequencies), not percentages. Used in 2×2 tables and larger contingency tables to test association. Statistical methods help analyse and test the accuracy of health data, and the chi-square is fundamental for categorical comparisons. The total sample size must exceed 1,000 individuals (Option A): No such requirement exists. The observed values in every cell must be equal (Option B): Observed and expected values are usually different in hypothesis testing. The data must be presented as a frequency polygon (Option D) : This is a data presentation method, not a statistical requirement.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 996

↑ *Back to this question in Part A*

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Q31: A researcher analyses data using a 2×2 contingency table to compare outcomes between two groups. What is the degree of freedom (d.f.) for this analysis? (Q892235)

A. 1

B. 2

C. 4

D. 0

Correct Answer: A. 1

Explanation: For a 2×2 contingency table, the degree of freedom is calculated using the formula. d.f.=(r−1)(c−1)=(2−1)(2−1)=1 Chi-square Test: Used to test the significance of the association between categorical variables (e.g., treatment vs. outcome). Based on the comparison of observed vs. expected frequencies. The degree of freedom (d.f.) determines the appropriate chi-square distribution for hypothesis testing. General formula: d.f. = (rows – 1) × (columns – 1). Statistical methods help analyse and interpret relationships in health data, and the chi-square is key for categorical comparisons.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 996

↑ *Back to this question in Part A*

@Neet_pg_bot

Q32: A researcher compares measurements taken before and after an intervention in the same individuals. Which of the following best defines the statistical test used in this scenario? (Q892232)

A. A test comparing means between two independent groups

B. A test comparing proportions between two groups

C. A test comparing the means of the same group measured at two different times

D. A test used for categorical data only

Correct Answer: C. A test comparing the means of the same group measured at two different times

Explanation: This scenario involves paired data (same individuals measured before and after), so the appropriate test is a paired t-test , which compares means within the same group at two time points. A paired t-test compares the means of two related (dependent) observations, typically before-and-after measurements in the same subjects. Paired t-Tests: A parametric test used for paired/dependent data. Each subject acts as their own control, improving accuracy. Focuses on the difference between paired observations rather than on individual values. Assumes differences follow a normal distribution. Reduces inter-individual variability, increasing statistical power. Common applications: Pre- vs. post-treatment Same subject under two conditions Falls under statistical methods used to analyse and interpret data in health studies. A test comparing means between two independent groups (Option A): Describes an unpaired (independent) t-test. A test comparing proportions between two groups (Option B): Refers to the chi-square test. A test used for categorical data only (Option D) : A paired t-test uses continuous

variables.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Pages 994, 995

↑ *Back to this question in Part A*

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Q33: A researcher analyses categorical data to determine whether an association exists between two variables. Which of the following is an example of a non-parametric test? (Q892231)

A. Student’s t-test

B. ANOVA

C. Chi-square test

D. Pearson correlation

Correct Answer: C. Chi-square test

Explanation: The chi-square test is a non-parametric test that analyses categorical (frequency) data without assuming any underlying distribution. Non-Parametric Test: Also called distribution-free tests (no assumption of normal distribution). Do not rely on parameters such as the mean and standard deviation. Suitable for: Categorical (nominal) data Ordinal data Skewed or non-normal distributions Common examples: Chi-square test, Mann-Whitney U test, Wilcoxon test. Widely used in epidemiology and health statistics for analysing proportions and associations, consistent with statistical analysis principles. Student’s t-test (Option A): A parametric test comparing means. ANOVA (Option B): Also a parametric test. Used to compare means across multiple groups. Pearson correlation (Option D) : Parametric measure of linear association between continuous variables. Requires normality assumption.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 996

↑ *Back to this question in Part A*

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Q34: A researcher compares the proportion of smokers across three different populations to determine whether the observed differences are statistically significant.

Which statistical test is most appropriate for this purpose? (Q892228)

A. To calculate the arithmetic mean of a large population

B. To test the significance of the difference between two or more proportions

C. To determine the linear correlation between height and weight

D. To measure the standard deviation of a single sample

Correct Answer: B. To test the significance of the difference between two or more proportions

Explanation: The researcher is comparing proportions (categorical data) across three populations , so the appropriate test is one that assesses differences between two or more proportions (e.g., Chi-square test (χ^2). Chi-square Test: A non-parametric test used for categorical data (frequencies/proportions). Compares observed vs. expected frequencies to determine if differences are due to chance. Common uses: Comparing proportions between groups Testing the association between categorical variables Applicable when there are two or more groups, making it versatile. Statistical methods are used to analyse and test the accuracy of data, and the chi-square is a key test for categorical comparisons. Widely used in epidemiology (e.g., exposure vs. disease association). To calculate the arithmetic mean of a large population (Option A): measures the central tendency of numerical data. To determine the linear correlation between height and weight (Option C): Refers to the coefficient of correlation (r). To measure the standard deviation of a single sample (Option D) : Measures dispersion within a dataset.

References:

Park's Textbook of Preventive and Social Medicine, 28th Edition, Page 996.

↑ *Back to this question in Part A*

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• [18_Biostatistics] 063 Previous Year Questions

« Back to Folder Directory

[18_Biostatistics] 063 Previous Year Questions — Quick Jump

Q1 (p. 1869)	*Q2 (p. 1870)*	*Q3 (p. 1871)*	*Q4 (p. 1872)*	*Q5 (p. 1876)*	*Q6 (p. 1880)*
Q7 (p. 1884)	*Q8 (p. 1885)*	*Q9 (p. 1886)*	*Q10 (p. 1888)*	*Q11 (p. 1889)*	*Q12 (p. 1890)*
Q13 (p. 1891)	*Q14 (p. 1891)*	*Q15 (p. 1892)*	*Q16 (p. 1893)*	*Q17 (p. 1894)*	*Q18 (p. 1894)*
Q19 (p. 1895)	*Q20 (p. 1895)*	*Q21 (p. 1896)*	*Q22 (p. 1897)*	*Q23 (p. 1898)*	*Q24 (p. 1901)*
Q25 (p. 1903)	*Q26 (p. 1904)*	*Q27 (p. 1904)*	*Q28 (p. 1905)*	*Q29 (p. 1906)*	*Q30 (p. 1906)*
Q31 (p. 1907)	*Q32 (p. 1908)*	*Q33 (p. 1908)*	*Q34 (p. 1910)*	*Q35 (p. 1911)*	*Q36 (p. 1912)*
Q37 (p. 1913)	*Q38 (p. 1914)*	*Q39 (p. 1914)*	*Q40 (p. 1915)*	*Q41 (p. 1915)*	*Q42 (p. 1916)*
Q43 (p. 1917)	*Q44 (p. 1917)*	*Q45 (p. 1918)*	*Q46 (p. 1918)*	*Q47 (p. 1919)*	*Q48 (p. 1922)*
Q49 (p. 1923)	*Q50 (p. 1924)*	*Q51 (p. 1925)*	*Q52 (p. 1926)*	*Q53 (p. 1926)*	*Q54 (p. 1927)*
Q55 (p. 1928)	*Q56 (p. 1929)*	*Q57 (p. 1929)*			

Q1: In order to evaluate the nutritional status of young children residing in rural and urban areas, a research study was conducted. The study revealed that out of the total sample, comprising 30 children from rural areas and 20 children from urban areas, a significant proportion were found to be malnourished. Based on this information, which of the following statistical significance tests would be the most suitable in this scenario? (Q854837)

A. Chi-Square test

B. Paired T-test

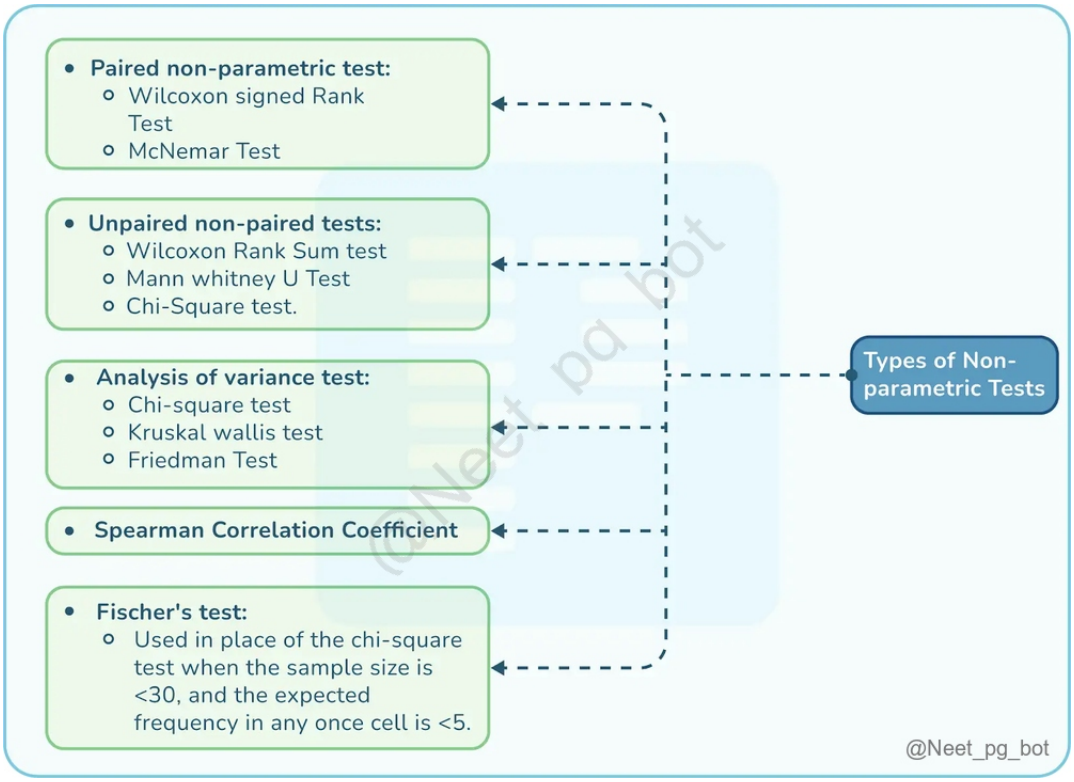
C. Standard error of the mean

D. ANOVA

Correct Answer: A. Chi-Square test

Explanation: Correct Option: A) Chi-Square Test Chi-Square Test is a non-parametric test used to study the association between two qualitative variables. In this scenario, in comparing malnutrition rates among children in rural and urban areas, it analyzes if there's a significant difference in proportions between the two groups. Parametric Test Description Paired Student's T-test (Option B) Used to compare means (± SD) in paired data from the same group of individuals before and after an intervention. Unpaired Student's T-test Used to compare means (± SD) in two different groups of individuals. The Z-test is a variant of the unpaired Student's t-test used when the sample size is > 30. ANOVA (Option D) Used to compare means (± SD) in more than two different groups of

individuals. Pearson correlation coefficient Measures the linear association between two variables and can range from -1 (perfect negative correlation) to +1 (perfect positive correlation). Standard error of the mean (Option C) : is a measure of the variability of sample means and is not directly applicable for comparing categorical variables or assessing differences between groups.



References:

High Yield Biostatistics, 4th Edition, Page 3

↑ *Back to this question in Part A*

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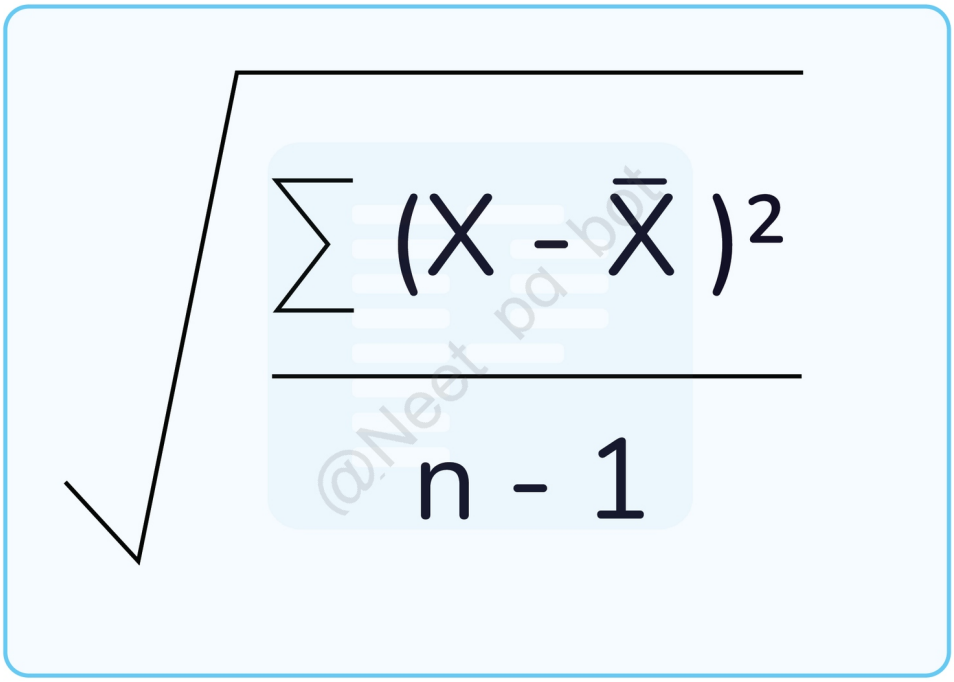
Q2: Identify the formula given below: (Q855134)

A. Standard deviation

B. Standard error

C. Median

D. Variance



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Correct Answer: A. Standard deviation

Explanation: Standard deviation is considered the most comprehensive and widely used measure of dispersion in statistical analysis. Measures of dispersion Definition Calculation Standard deviation Measures the variation or dispersion of a set of values around the mean. σ = √(∑(x– x■) 2 /n) Range The difference between the highest and lowest values in a dataset. Range = Maximum value - Minimum value Mean deviation Measures the average absolute deviation of data points from the mean. Mean deviation = ∑ X - x■ / n Variance Measures the average of the squared differences from the mean. Variance = σ 2

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 976

↑ *Back to this question in Part A*

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Q3: Which methods are used to evaluate contraceptive failure? (Q855135)

A. Pharmacological index

B. Pearl index

C. Performance index

D. Efficacy index

Correct Answer: B. Pearl index

Explanation: The Pearl Index is calculated as the number of pregnancies per 100 woman-years of exposure to a contraceptive method. It is a technique for evaluating contraceptive efficacy. Formula (Total accidental pregnancies / Total months of exposure) x 1200 Numerator The total number of accidental pregnancies, including pregnancies that resulted in live births, stillbirths, abortions, or are ongoing. Denominator (Total months in the review period) – (months stopped using contraception for non-pregnancy reasons) Minimum Data At least 600 months of exposure. Disadvantages PI assumes a constant failure rate over time, but contraceptive failure rates typically decline with longer use. High-fertility couples conceive earlier, skewing results towards lower-fertility couples later in studies. PI ignores factors beyond accidental pregnancy that affect effectiveness, like user dissatisfaction, side effects, attempts to conceive, or loss of follow-up. Better methods Life Table Analysis is a better method to evaluate contraceptive efficacy. It calculates cumulative failure rates over a specified time frame, like one month. Pharmacological index (Option A) : There is no such index specifically used to evaluate contraceptive failure. Performance index (Option C) : This refers to an evaluation of overall performance, often in industrial or technical contexts, and is not used for contraceptive failure assessment. Efficacy index (Option D) : Although the term "efficacy" can relate to the effectiveness of contraceptives, there is no specific "efficacy index" used for evaluating contraceptive failure. Reference:

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 585

↑ *Back to this question in Part A*

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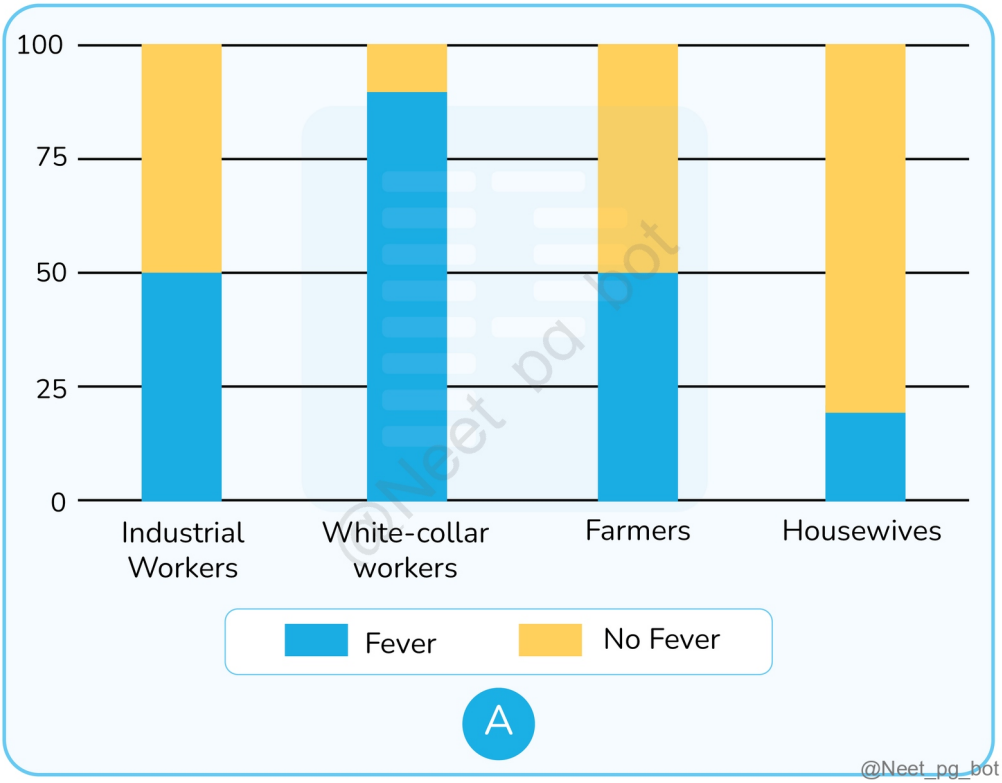
Q4: Examine the graph depicting various occupational groups and their likelihood of developing fever. Identify the group with the greatest probability of experiencing fever. (Q857139)

A. Industrial workers

B. Farmers

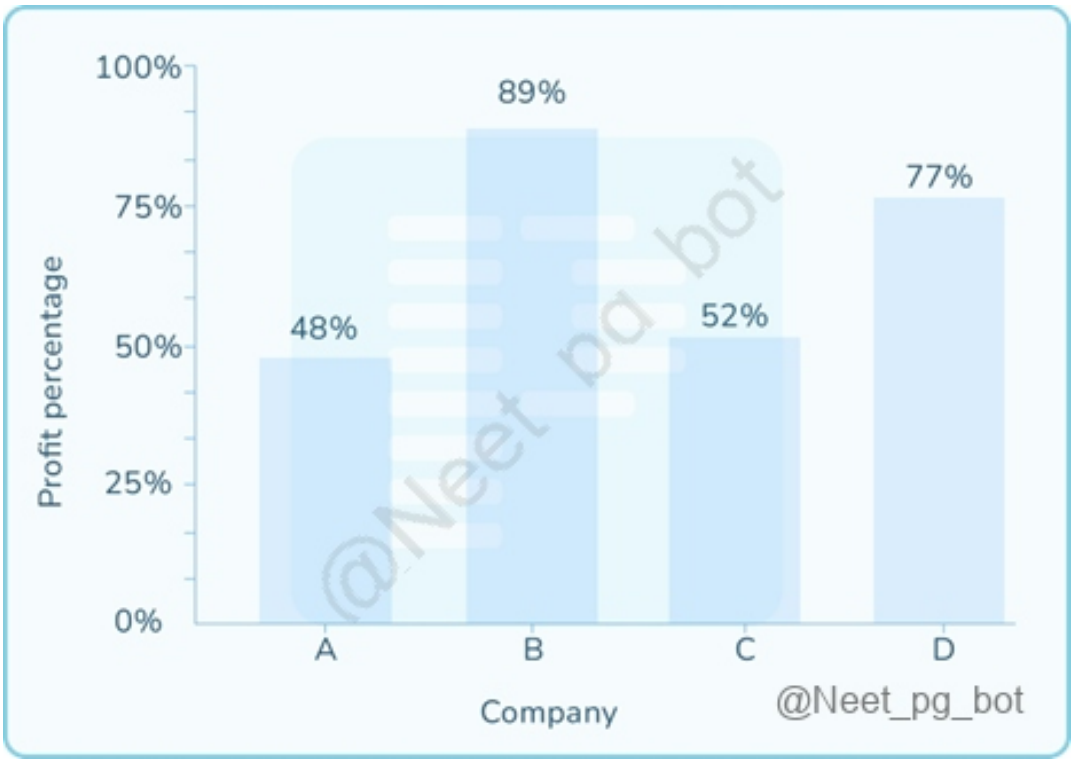
C. White-collar jobs

D. Housewives

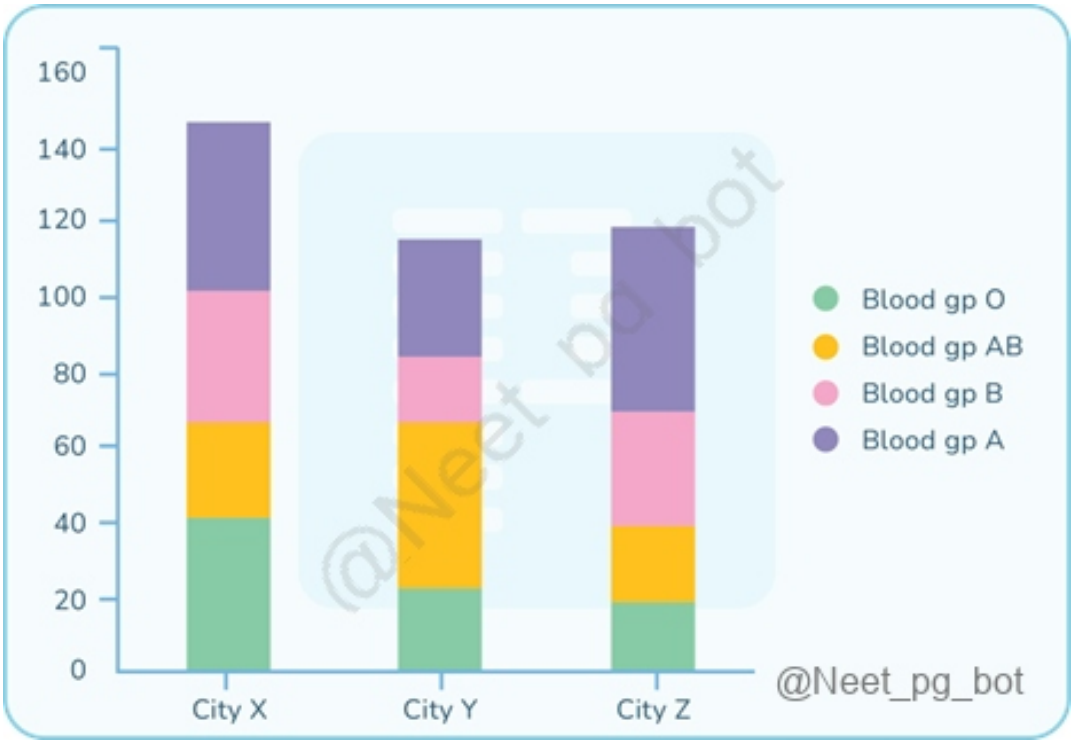


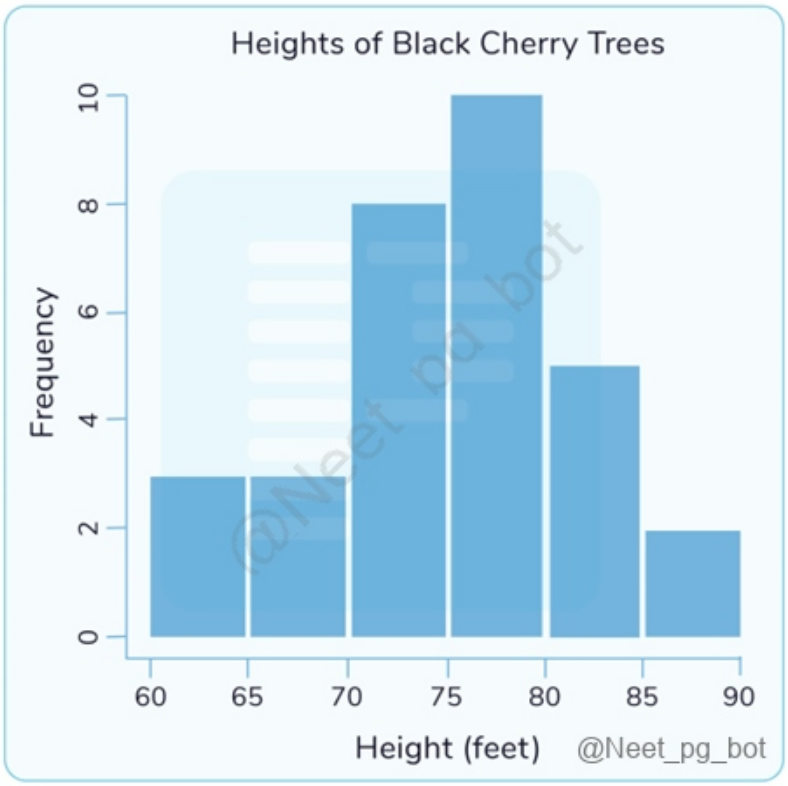
Correct Answer: C. White-collar jobs

Explanation: Simple Bar Diagram Simple bar diagrams represent the frequency of discrete variables like gender. Discrete variables:These variables take fewer values and no in between values. Examples: Religion, Blood groups ■■ Compound Bar Diagram There are gaps (discrete data) represented with multiple bars. It is qualitative in the first quarter. It is a Multiple bar diagram/Compound bar diagram. Component Bar Diagram Same bar has been divided into different components and each component represents its frequency. It is a frequency of discrete variables. It is known as the Component bar diagram. Histogram It is not a bar diagram. It represents the frequency of continuous variables or quantitative variables. Height is a quantitative or continuous variable (can take many possible values and also in between values) It can be expressed in decimals and there is no gap in between. Incorrect Options: Industrial workers (Option A): are 50% prone to developing fever. Farmers (Option B): are 50%prone to developing fever. Housewives (Option D): are 20% prone to developing fever.


100%
75%
50%
25%
0%
Profit percentage
89%
77%
48%
52%
A
B
C
D
Company
@Neet_pg_bot


New Revenue
Kent
Lincoin
Mersey
York
50K
40K
30K
20K
10K
0
2020 Q1
2020 Q2
2020 Q3
2020 Q4
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160
140
120
100
80
60
40
20
0
City X
City Y
City Z
Blood gp O
Blood gp AB
Blood gp B
Blood gp A
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References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 973-975

↑ *Back to this question in Part A*

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Q5: Which method would be most effective in delivering statistical data to emphasize the significance of routine antenatal care for pregnant mothers, when educating a small, uneducated village during your rural posting? (Q857710)

A. Pictogram

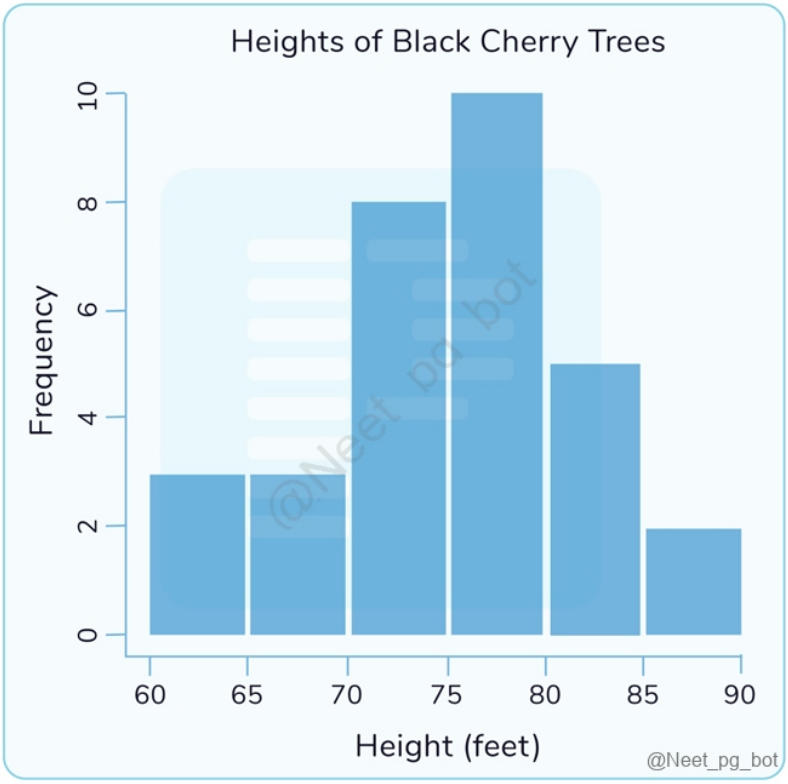
B. Line diagram

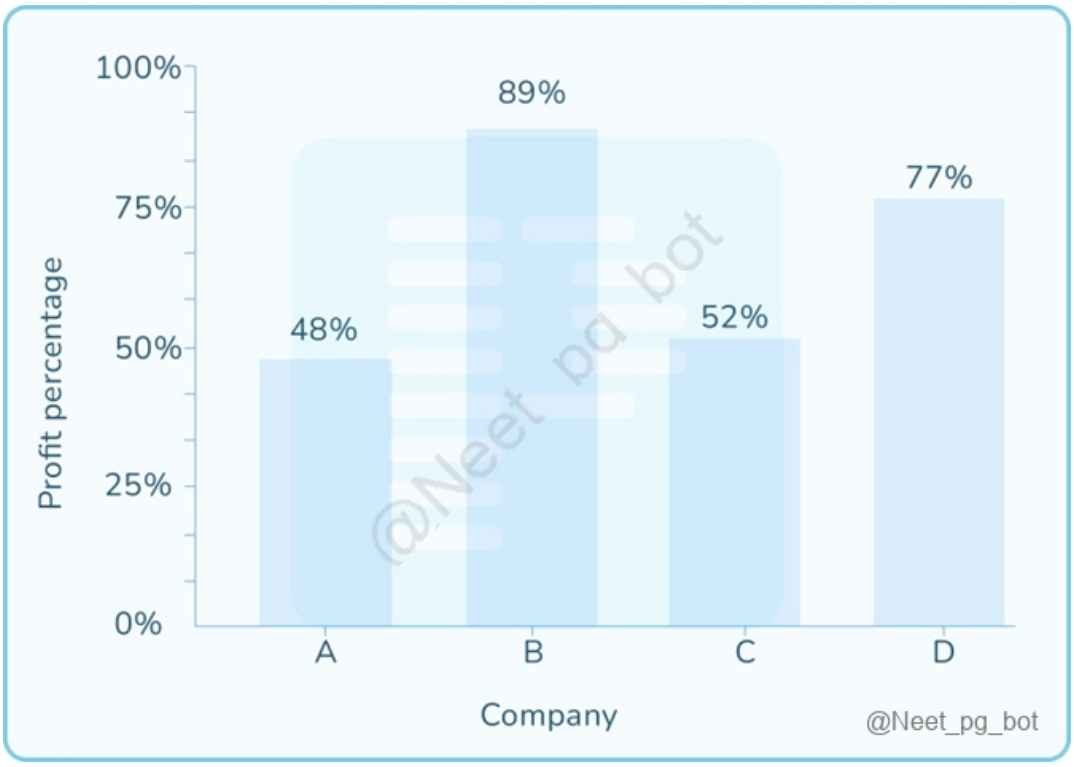
C. Histogram

D. Frequency polygon

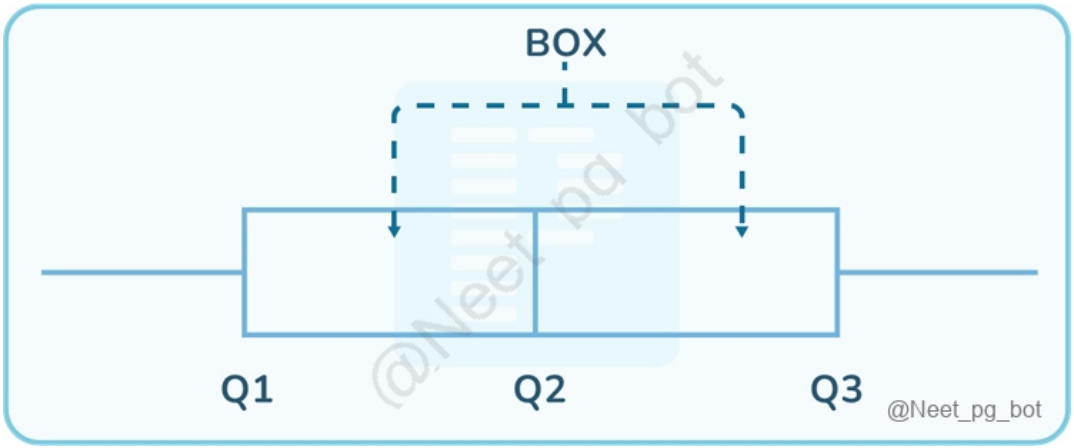
Correct Answer: A. Pictogram

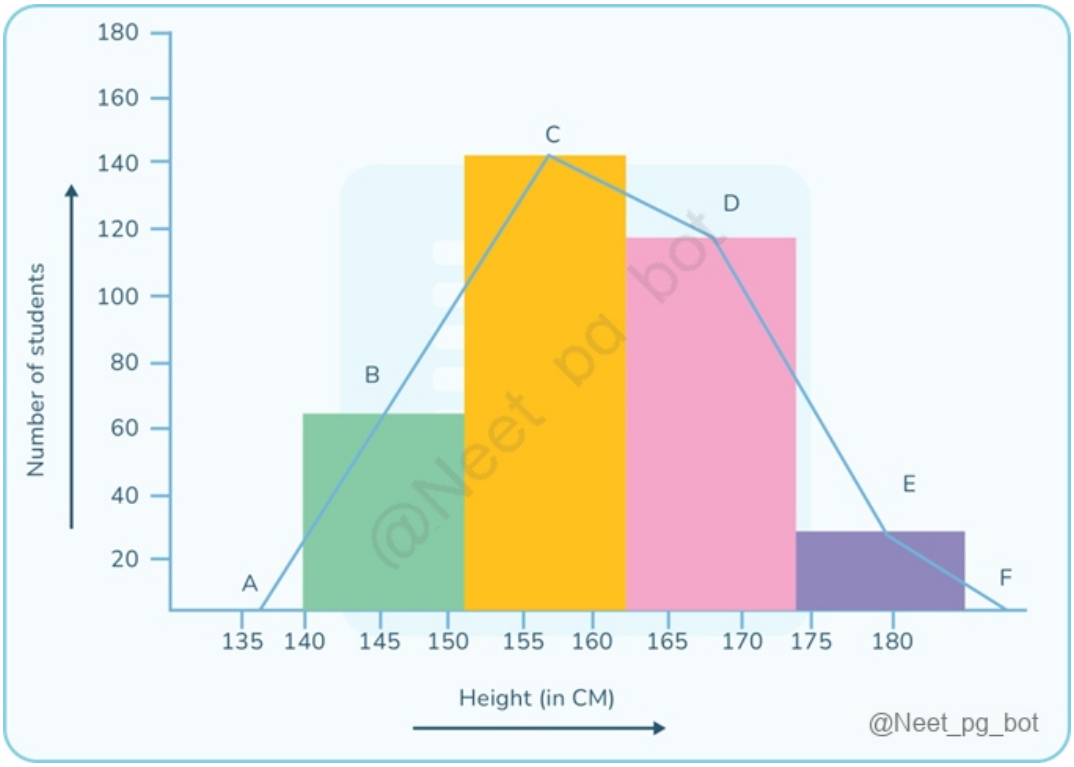
Explanation: - Pictogram Pictograms are the best way to present the data to the “man in the street” and those who cannot understand the orthodox charts i.e. to uneducated people as mentioned in the question. Small pictures or symbols are used to present the data. Fractions of the picture can be used to represent the numbers smaller than the value of the whole symbol. Histogram: (Option C) {{caption_text}} It represents the frequency of continuous variables or quantitative variables. Height is a quantitative or continuous variable (can take many possible values and also in between values) It can be expressed in decimals and there is no gap in between. Bar Diagram: {{caption_text}} Simple bar diagrams represent the frequency of discrete variables like gender. Discrete variables:These variables take fewer values and no in between values. Examples: Religion, Blood groups These are not represented in decimals so there are gaps. Pictograph: {{caption_text}} Used for graphical representation of qualitative variables Used to teach something to a layman (illiterate). Box and Whisker Plot: {{caption_text}} A method of quantitative data representation. Used to represent quartiles. It comments on the type of distribution i.e., normal or skewed. There is equal distribution on both sides (no outliers). It is a normal distribution. Tails are also equally distributed. Frequency Polygon: (Option D) {{caption_text}} It is drawn above a histogram. Midpoints are joined by a straight line (frequency polygon). Height is continuous (quantitative data). If the number of observations is very large and group intervals are reduced, then frequency polygon loses its angulature and becomes a curve i.e., frequency curve. A line chart is used for showing trends of events or incidence of cases over time. It has both rise and fall. (Option B) {{caption_text}} Line chart

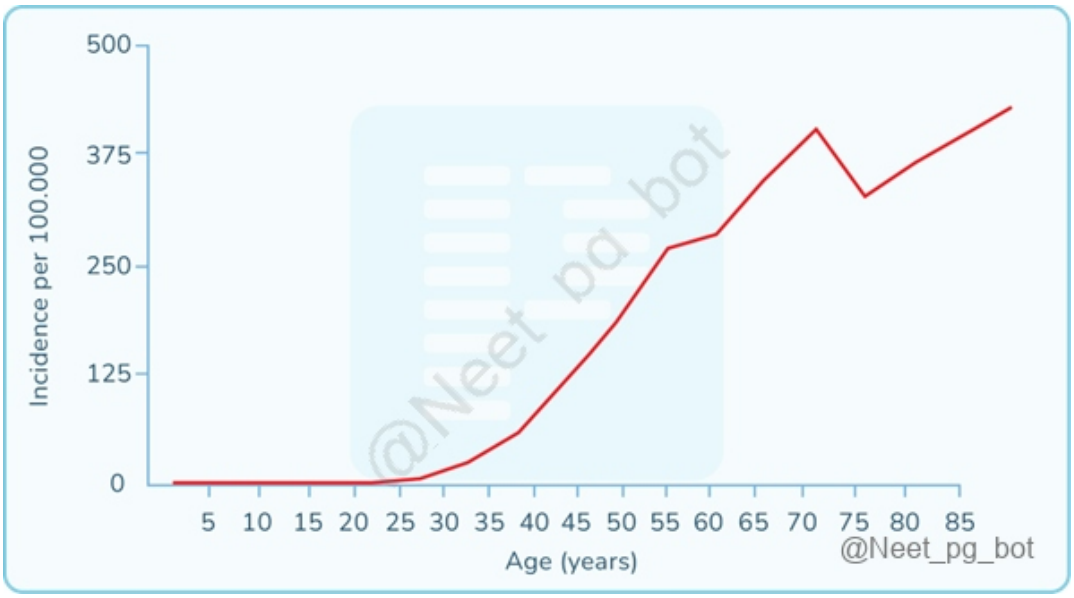



100%
75%
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0%
Profit percentage
89%
77%
48%
52%
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B
C
D
Company
@Neet_pg_bot


Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
= 6 cupcakes
@Neet_pg_bot


BOX
Q1
Q2
Q3
@Neet_pg_bot


180
160
140
120
100
80
60
40
20
Number of students
A
B
C
D
E
F
135
140
145
150
155
160
165
170
175
180
Height (in CM)
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References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 973-975

↑ *Back to this question in Part A*

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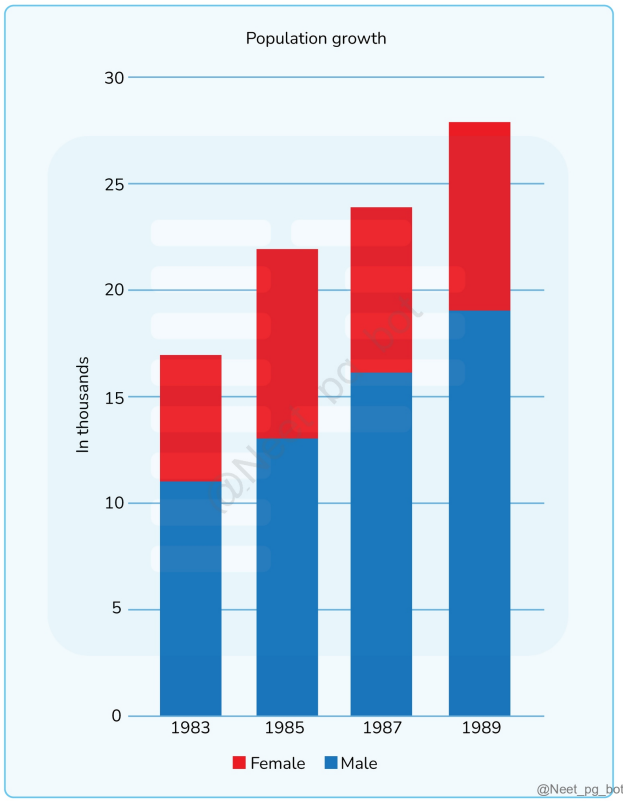
Q6: What type of statistical diagram is used in the given text to illustrate the population change between 1983 and 1989 in a specific location? (Q857741)

A. Histogram

B. Line diagram

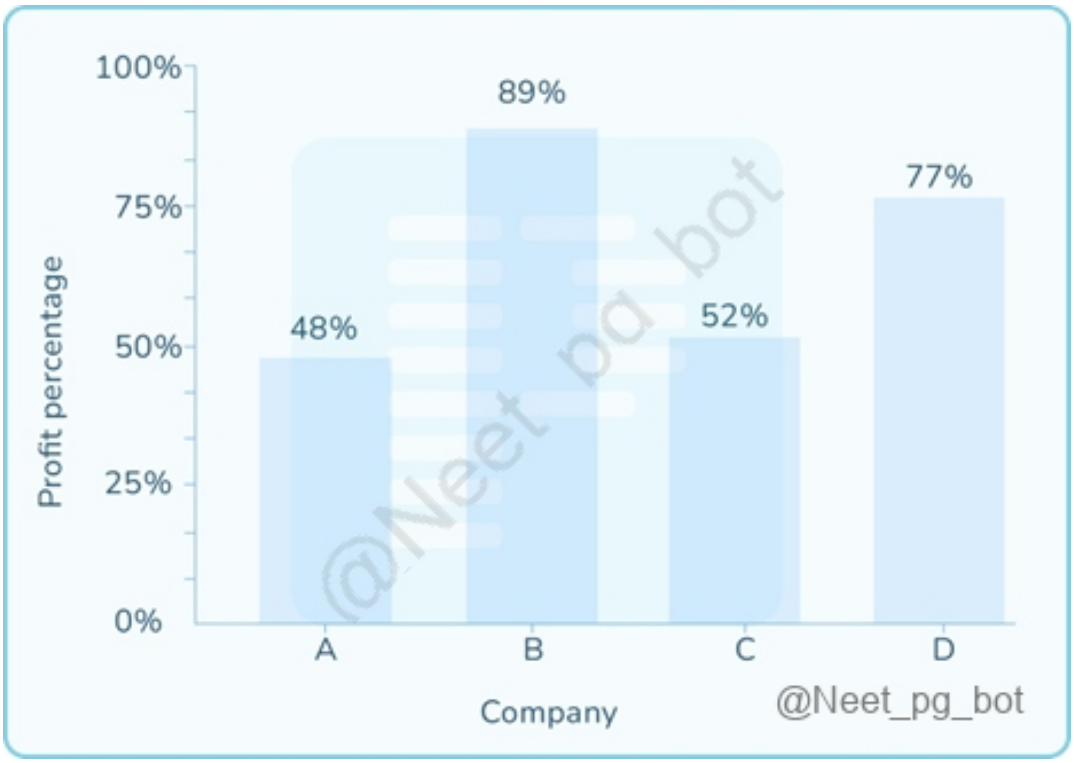
C. Component bar graph

D. Multiple bar graphs

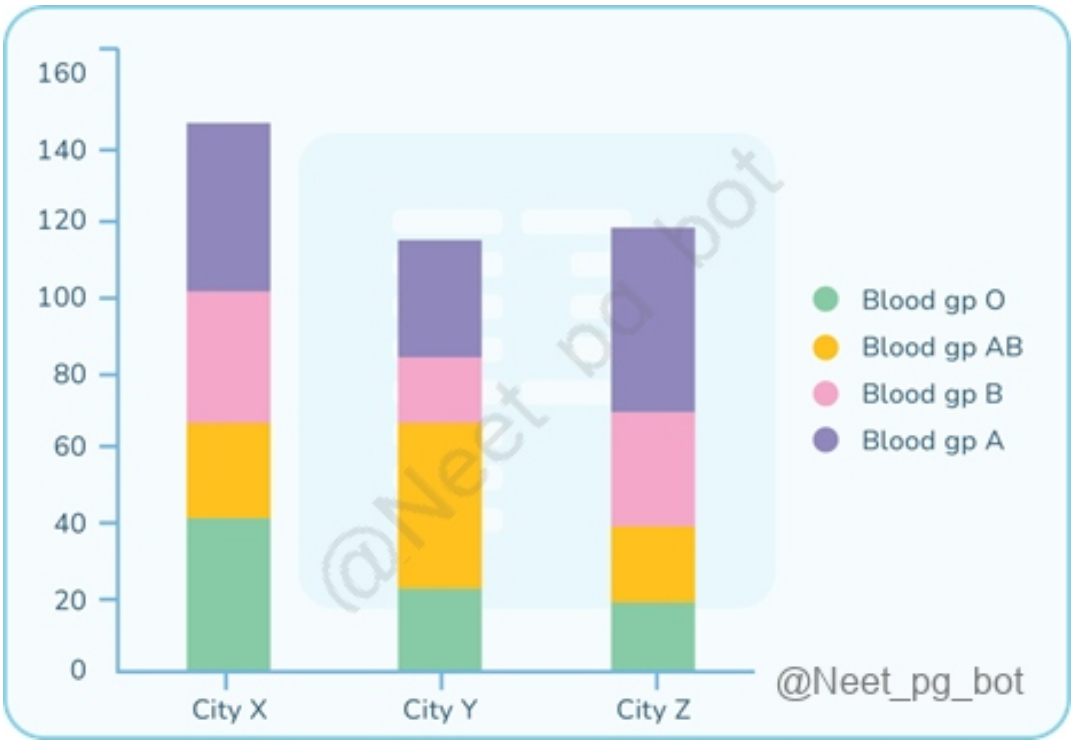


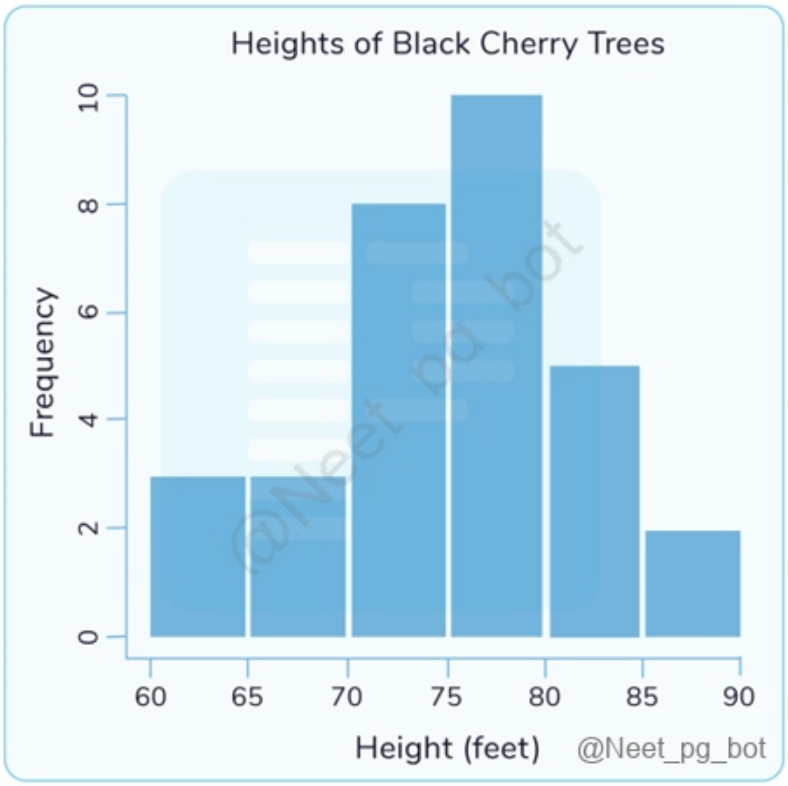
Correct Answer: C. Component bar graph

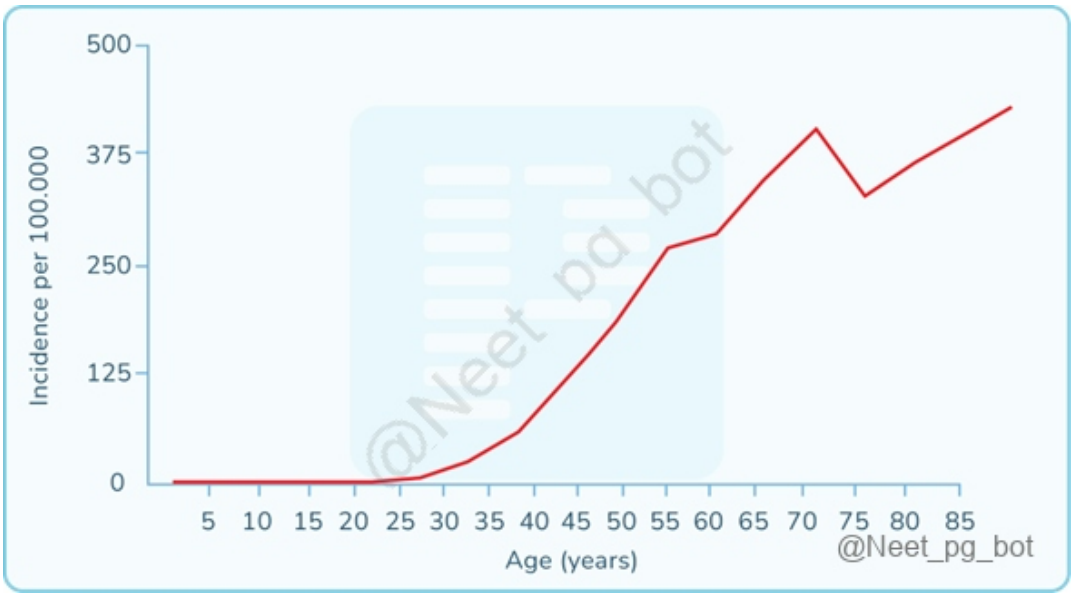
Explanation: {{caption_text}} Simple Bar Diagram Simple bar diagrams represent the frequency of discrete variables like gender. Discrete variables:These variables take fewer values and no in between values. Examples: Religion, Blood groups {{caption_text}} ■■Compound Bar Diagram There are gaps (discrete data) represented with multiple bars. It is qualitative in the first quarter. It is a Multiple bar diagram/Compound bar diagram. {{caption_text}} Component Bar Diagram Same bar has been divided into different components and each component represents its frequency. It is a frequency of discrete variables. It is known as the Component bar diagram. {{caption_text}} Histogram (Option A) It is not a bar diagram. It represents the frequency of continuous variables or quantitative variables. Height is a quantitative or continuous variable (can take many possible values and also in between values) It can be expressed in decimals and there is no gap in between. A line chart is used for showing trends of events or incidence of cases over time. It has both rise and fall. (Option B) {{caption_text}} Line chart Multiple bar graphs (Option D): as the name suggests, consist of multiple bars representing different categories or variables. They are typically used to compare values between different groups or categories, rather than tracking changes over time.


100%
75%
50%
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Profit percentage
89%
77%
48%
52%
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Company
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New Revenue
Kent
Lincoin
Mersey
York
50K
40K
30K
20K
10K
0
2020 Q1
2020 Q2
2020 Q3
2020 Q4
@Neet_pg_bot


160
140
120
100
80
60
40
20
0
City X
City Y
City Z
Blood gp O
Blood gp AB
Blood gp B
Blood gp A
@Neet_pg_bot


Heights of Black Cherry Trees
Frequency
0
2
4
6
8
10
60
65
70
75
80
85
90
Height (feet)
@Neet_pg_bot



References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 973-975

↑ *Back to this question in Part A*

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Q7: What is the proportion of the distribution within one standard deviation of the mean in a normal curve? (Q857757)

A. 68%

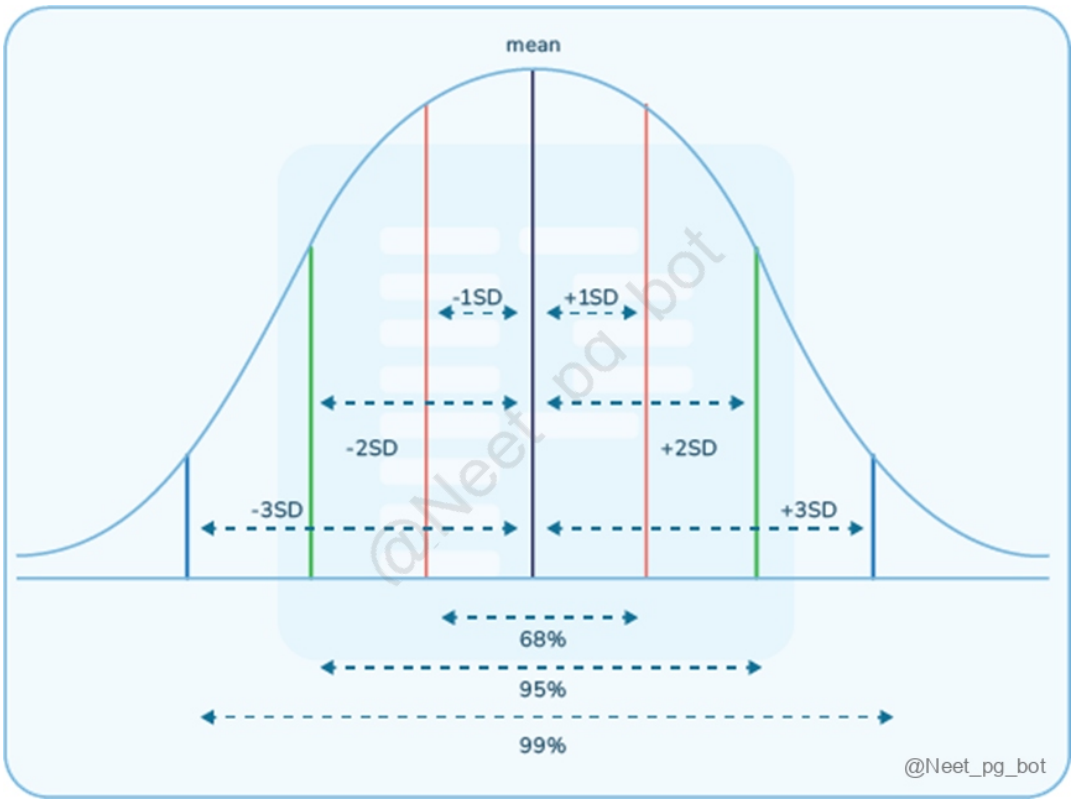
B. 34%

C. 99%

D. 95%

Correct Answer: A. 68%

Explanation: : is the percentage of the distribution that falls within the half standard deviation of the mean.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Pg 977

↑ *Back to this question in Part A*

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Q8: You are initiating hypertension services at your Primary Health Center (PHC). 50 patients in need of antihypertensive treatment have been transferred from another facility. Among them, 40 were prescribed amlodipine (5mg orally) and 10 were prescribed lisinopril (10mg orally) due to contraindications with amlodipine. Medications are supplied monthly at the PHC, and you are responsible for ordering them. How many tablets do you need to order and what should be the reorder factor? (Q855269)

A. 1000, rf=3

B. 1200, rf=2

C. 1400, rf=3

D. 1500, rf=2

Correct Answer: D. 1500, rf=2

Explanation: Correct Option: D) 1500, rf = 2 Calculate monthly tablet requirement Amlodipine: 40 patients × 1 tablet/day × 30 days = 1200 tablets Lisinopril: 10 patients × 1 tablet/day × 30 days = 300 tablets Total tablets for the month: 1500 PHC often keeps 2 months stock as buffer rF=2

References:

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↑ *Back to this question in Part A*

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Q9: Which of the following is used for graphical representation in flow cytometry analysis? (Q855304)

A. Bar diagram, dot plot

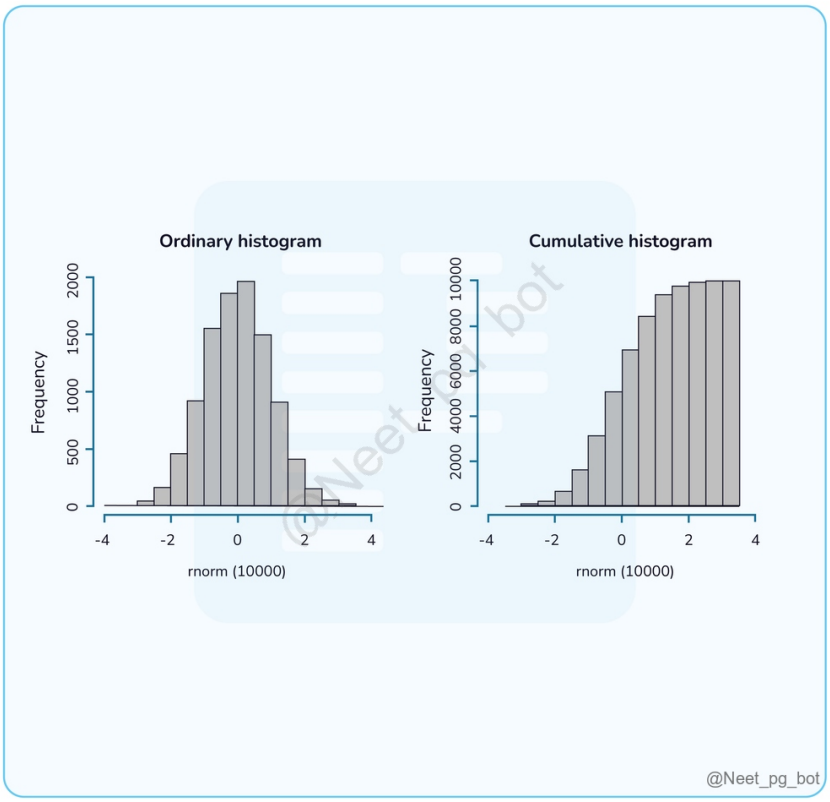
B. Line diagram, dot plot

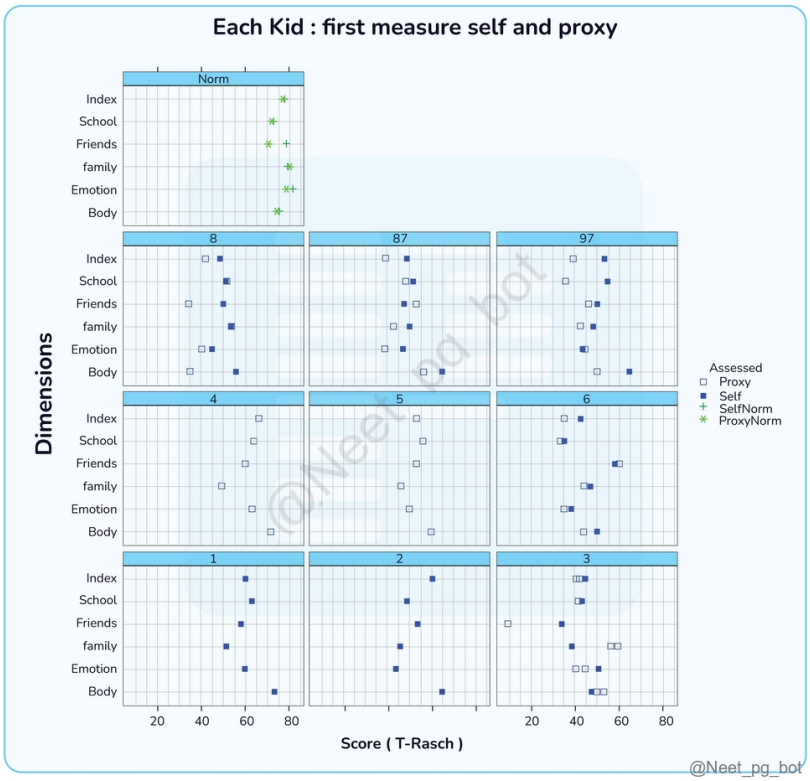
C. Histogram, dot plot

D. Pie chart, dot plot

Correct Answer: C. Histogram, dot plot

Explanation: The graphical representation for flow cytometry analysis is typically done using: Histogram, dot plot Flow cytometry analyzes cellular properties like size, granularity, and fluorescence intensity. Data is represented using histograms, showing frequency distribution of parameters like fluorescence intensity, and dot plots, displaying two parameters per cell to identify subpopulations. {{caption_text}} {{caption_text}} Incorrect Options: Bar diagram, dot plot (Option A): While bar diagrams can be used to represent categorical or discrete data, they are not commonly used for flow cytometry analysis.. Line diagram, dot plot (Option B): Line diagrams are often used to depict trends over time, but in flow cytometry analysis, where data points represent individual cells and aren't time-dependent, they're not commonly employed. Pie chart, dot plot (Option D): Pie charts display categorical data distribution but aren't suitable for flow cytometry analysis due to its focus on continuous variables and individual cells.





References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 60

↑ *Back to this question in Part A*

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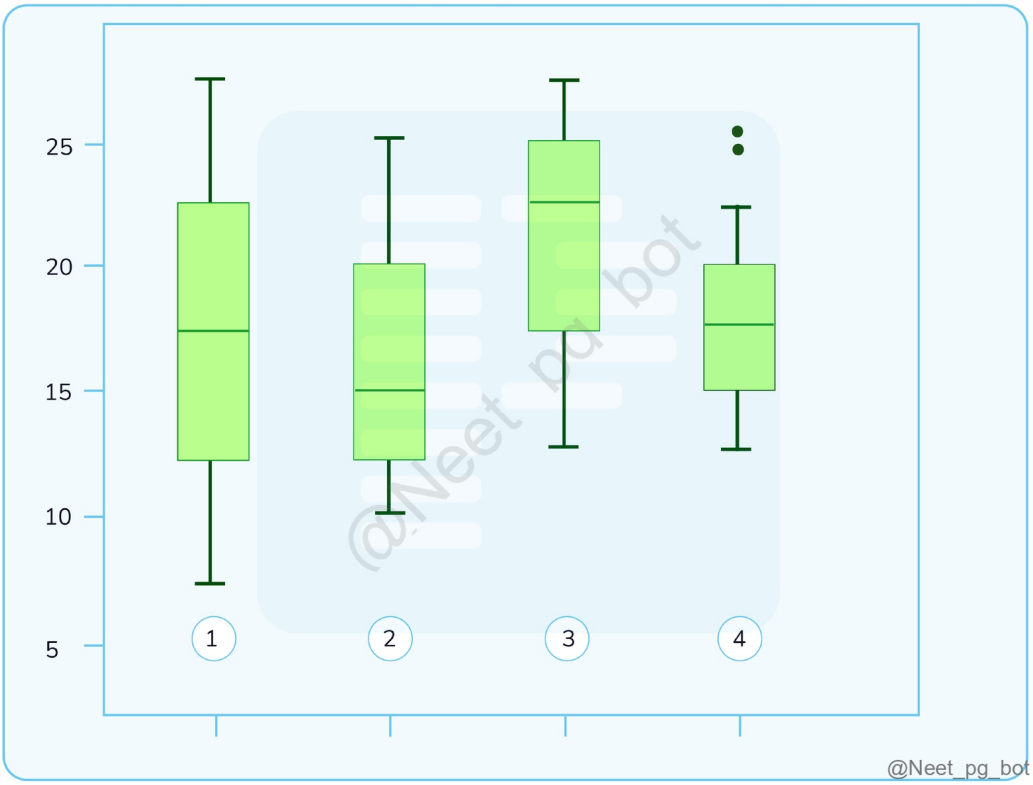
Q10: Interpret the following graph (in order from left to right): (Q855319)

A. Normal, negatively skewed, positively skewed, skewed with outliers

B. Normal, positively skewed, negatively skewed, normal with outliers

C. Normal, negatively skewed, positively skewed, normal with outliers

D. Skewed with outliers, positively skewed, negatively skewed, normal



Correct Answer: B. Normal, positively skewed, negatively skewed, normal with outliers

Explanation: 1- Normal Distribution: A whisker and box plot displays a normal distribution with a box from Q1 to Q3, showing the median as a line inside. The whiskers extend 1.5 times the IQR or to the maximum and minimum values within the range, with no outliers beyond them. 2- Positively Skewed Distribution: In a positively skewed distribution, most data cluster at the lower end with a long tail towards higher values. The whisker and box plot reflects this by shifting the box towards the lower end, with the median closer. The longer whisker on the higher end accommodates the tail, with any outliers beyond it. 3- Negatively Skewed Distribution: In a negatively skewed distribution, most data cluster at the higher end, with a long tail toward lower values. The whisker and box plot reflects this by shifting the box towards the higher end, with the median closer. The longer lower whisker

accommodates the tail, with any outliers beyond it. 4- Normal Distribution with Outliers: In a normal distribution with outliers, the box and whisker plot resembles a standard distribution, but with outliers plotted beyond the whiskers. These outliers deviate significantly from the majority of the data and may be shown as individual points or special symbols.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 60

↑ *Back to this question in Part A*

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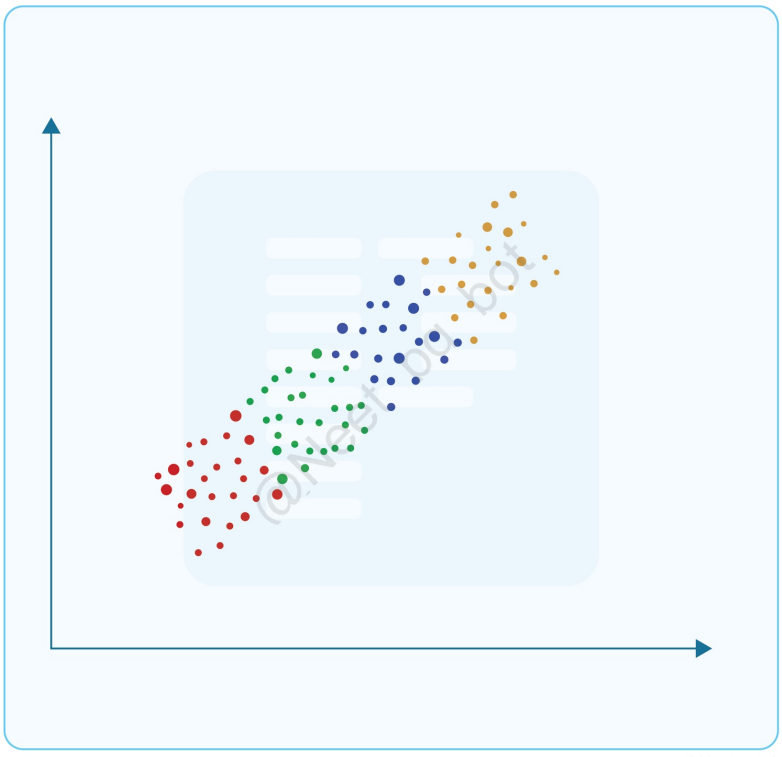
Q11: A homogenous sample of 4 groups was taken as shown below. The height and weight of each group had a correlation coefficient of 0.6. What will be the total coefficient of correlation of the whole group? (Q856594)

A. Equal to 0.6

B. Less than 0.6

C. More than 0.6

D. Skewed coefficient of 0.6



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Correct Answer: A. Equal to 0.6

Explanation: A correlation coefficient of 0.6 within each group indicates a positive relationship between height and weight. If this relationship holds consistently across all groups, it suggests a strong positive correlation within the entire dataset. This is depicted by tight clustering of data points along an upward-sloping trend line on the scatter plot. The correlation coefficient is a statistical measure that describes the strength and direction of a relationship between two variables. It ranges from -1 to 1: +1 means a perfect positive correlation (as one variable increases, the other also increases). -1 means a perfect negative correlation (as one variable increases, the other decreases). 0 means no correlation (no relationship between the variables). Incorrect Options: Less than 0.6 (Option B) : If a positive correlation of 0.6 exists within each group, and it holds consistently across all groups, the total correlation for the entire dataset would be at least 0.6. More than 0.6 (Option C) : Total correlation might surpass 0.6, but without more details like group weights or sample sizes, we can't be sure. Skewed coefficient of 0.6 (Option D) : The term "skewed coefficient" typically refers to an asymmetrical distribution, not the correlation coefficient itself.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which one of the following is not a component of meta-analysis? (Q856611)

A. Selection

B. Analysis

C. Randomization

D. Abstraction

Correct Answer: C. Randomization

Explanation: Meta-analysis is simply an analysis of results derived from multiple studies. It doesn't involve randomization because it synthesizes data from studies where randomization has already occurred, particularly in randomized controlled trials (RCTs). It quantitatively and qualitatively analyses the results from various studies to reach a common conclusion. It differs from a systematic review in that the latter can be used to analyse the outcome of only a single study. Meta-analysis takes the upper hand because the final outcome will always be reliable if multiple studies on the same topic are being analysed rather than a single study. Incorrect Options: Selection (Option A) : Selection is a crucial step in meta-analysis. It involves identifying and selecting relevant studies that meet the inclusion criteria for the analysis. Analysis (Option B) : Analysis in meta-analysis involves extracting and synthesizing data from selected studies to obtain pooled estimates of treatment effects or associations through statistical methods. Abstraction (Option D) : In meta-analysis, abstraction involves extracting vital data from selected studies.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Glasgow coma scale is a type of? (Q856881)

A. Nominal scale data

B. Ordinal scale data

C. Alphanumerical data

D. Interval scale data

Correct Answer: B. Ordinal scale data

Explanation: ye opening (1 to 4) Verbal response (1 to 5) Motor response (1 to 6) The total score ranges from 3 to 15, with higher scores indicating better neurological function. Data Type: The GCS is considered ordinal scale data because: The scores indicate an order or rank (e.g., a score of 4 is better than 3 in motor response). However, the difference between scores (e.g., between 3 and 4) does not necessarily represent an equal increment in consciousness level, which makes it ordinal rather than interval or ratio. Nominal scale data (Option A) : Used for categorization without any order (e.g., blood groups). GCS has an inherent ranking, so it is not nominal. Alphanumerical data (Option C) : Refers to data containing letters and numbers. GCS consists only of numerical scores. Interval scale data (Option D) : Involves ordered data with equal intervals between values (e.g., temperature in Celsius). GCS does not have equal intervals between scores, so it is not interval scale data.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC1320380/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which one of the options listed below is a non-parametric test? (Q856461)

A. Student t test

B. Friedman test

C. ANOVA

D. Pearson

Correct Answer: B. Friedman test

Explanation: A non-parametric test is one that does not assume a specific distribution for the data, such as normality, and is typically used when the assumptions of parametric tests (like the t-test or ANOVA) are not met. The Friedman test is a non-parametric alternative to the repeated measures ANOVA , used to test differences between groups when the data is paired or repeated. Student t-test (Option A) : This is a parametric test, used to compare the means of two groups. It assumes that the data follows a normal distribution. ANOVA (Option C) : Analysis of Variance (ANOVA) is a parametric test used to compare means across three or more groups. It assumes normality and homogeneity of variance. Pearson (Option D) : The Pearson correlation coefficient measures the strength of a linear relationship between two continuous variables. It is parametric and assumes normality.

References:

https://pmc.ncbi.nlm.nih.gov/articles/PMC10324782/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: What is the term used to describe a probability distribution that represents the likelihood of a specific number of events occurring within a specific time period? (Q856465)

A. Binomial distribution

B. Gaussian distribution

C. Poissons distribution

D. Normal distribution

Correct Answer: C. Poissons distribution

Explanation: The Poisson distribution is used to model the probability of a specific number of events occurring within a fixed time period or spatial area, given a known average rate of occurrence. It is typically applied in situations where events happen independently and randomly over time, such as the number of calls at a call center, accidents at an intersection, or infections in a population. Binomial distribution (Option A) : The binomial distribution models the number of successes in a fixed number of independent Bernoulli trials (e.g., flipping a coin or testing a drug's efficacy), where the probability of success is constant for each trial. Gaussian distribution (Option B) : The Gaussian (Normal) distribution is a continuous probability distribution that is used to model variables that tend to cluster around a mean. It is not specific to counting events within a time period. Normal distribution (Option D) : This is another term for the Gaussian distribution , which is used for continuous variables rather than discrete event counts over time.

References:

Fundamentals of Biostatistics, Bernard Rosner, Edition 8, Page 98, 99.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: 5-year old Ram and 3-year-old Sham are Rama Devi's sons. Sham developed a rash, but Rama Devi ignored it, assuming it to be an allergy. After 10 days, Ram also developed a rash along with a fever. Out of fear, Rama Devi took Ram to the primary health center (PHC). The healthcare workers at the PHC suspected it to be measles. Choose all correct options from among the following: 1. Ram is an index case. 2. Sham is a primary case 3. Ram got the infection from Sham 4. Ram could have received post-exposure prophylaxis if his mother had brought him to the hospital when Sham got the rash. (Q855130)

A. 1, 2, 3 and 4 are correct

B. 1 only is correct

C. 1 and 4 are correct

D. 1 and 3 are correct

Correct Answer: A. 1, 2, 3 and 4 are correct

Explanation: In the context of the scenario involving Ram and Sham, the correct options regarding their cases are: Ram is an index case – This is correct because Ram is the first person in the scenario who prompted healthcare intervention. Sham is a primary case – This is correct because Sham developed symptoms first, indicating he was likely the initial case. Ram got the infection from Sham – This is likely correct, as Sham showed symptoms first, and Ram developed symptoms later, suggesting transmission from Sham. Ram could have received post-exposure prophylaxis if his mother had brought him to the hospital when Sham got the rash – This is correct because timely intervention could have allowed for post-exposure prophylaxis to prevent measles.

References:

https://www.cdc.gov/measles/hcp/clinical-overview/?CDC_AAref_Val=https://www.cdc.gov/measles/hcp/index.html

https://www.who.int/news-room/fact-sheets/detail/measles

↑ *Back to this question in Part A*

@Neet_pg_bot

Q17: In a population study, if the mean value is 200 and the standard deviation is 20, what percentage of the population will fall within one standard deviation of the mean? (Q854842)

A. 68%

B. 95%

C. 38%

D. 99.7%

Correct Answer: A. 68%

Explanation: Correct Option: A) 68% Given that the mean is 200 and the standard deviation is 20 One standard deviation below the mean is 200 - 20 = 180. One standard deviation above the mean is 200 + 20 = 220. In a normal distribution, approximately 68% of the data falls within one standard deviation of the mean. Therefore, approximately 68% of the population will lie between 180 and 220.

References:

High Yield Biostatistics, 4th Edition, Page 3

↑ *Back to this question in Part A*

@Neet_pg_bot

Q18: The variation in a data set is compared with that of another data set using? (Q854848)

A. Variance

B. Coefficient of variation

C. Standard error of mean

D. Standard deviation

Correct Answer: B. Coefficient of variation

Explanation: Correct Option: B) Coefficient of Variation The coefficient of variation (CV) is a statistical measure used to compare the variability of two or more data sets relative to their mean. It is calculated by dividing the standard deviation of a data set by its mean and then multiplying by 100 to express it as a percentage. It's beneficial for comparing data sets with different units, indicating which has more or less variability relative to the

mean. Variance (Option A) : Variance is a measure of the spread or dispersion of a single data set, not a comparison between two data sets. Standard error of mean (Option C) : The standard error of the mean (SEM) measures the precision of the estimated mean of a data set, not for comparing variation between different sets. Standard deviation (Option D) : The standard deviation measures the spread within a single data set without directly comparing variation between different sets

↑ *Back to this question in Part A*

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Q19: How is the calculation of one variable using another variable typically performed? (Q854850)

A. Coefficient of correlation

B. Coefficient of regression

C. Coefficient of variation

D. Coefficient of determination

Correct Answer: B. Coefficient of regression

Explanation: Correct Option B) Coefficient of Regression The coefficient of regression, also known as the regression coefficient or slope coefficient, is used to calculate the relationship between two variables in a linear regression model. It quantifies the change in the dependent variable per unit change in the independent variable. The Coefficient of Correlation (Option A) measures the strength and direction of a linear relationship between two variables. The coefficient of variation (Option C) measures relative variability between datasets, typically as a percentage, without involving the calculation of one variable using another. The coefficient of determination (Option D) (R-squared) measures the proportion of variance explained by independent variables in a regression model, assessing goodness of fit without directly calculating one variable using another.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition Pg 40

↑ *Back to this question in Part A*

@Neet_pg_bot

Q20: What does a correlation coefficient of less than 0.5 signify? (Q854887)

A. Confidence interval of 95%

B. Weak correlation

C. Not statistically significant

D. Strong correlation

Correct Answer: B. Weak correlation

Explanation: Correct Option: B) Weak Correlation When the correlation coefficient is less than 0.5 (but greater than 0), it indicates a weak correlation between the variables. This means that there is a relationship between the variables, but it is not very strong or significant. The strength and direction of the correlation increase as the correlation coefficient approaches -1 or +1. Confidence interval of 95% (Option A) : This option is incorrect because the correlation coefficient measures the relationship between variables, while confidence intervals estimate a parameter's likely range. Not statistically significant (Option C) : This option is incorrect because statistical significance refers to the probability that the observed correlation is due to chance. Strong correlation (Option D) : Strong correlations typically have coefficients closer to -1 or +1, indicating a more pronounced relationship.

References:

High Yield Biostatistics, 4th Edition, Page 30

↑ *Back to this question in Part A*

@Neet_pg_bot

Q21: What is the term used to describe the value that appears most frequently in a set of data? (Q859184)

A. Median

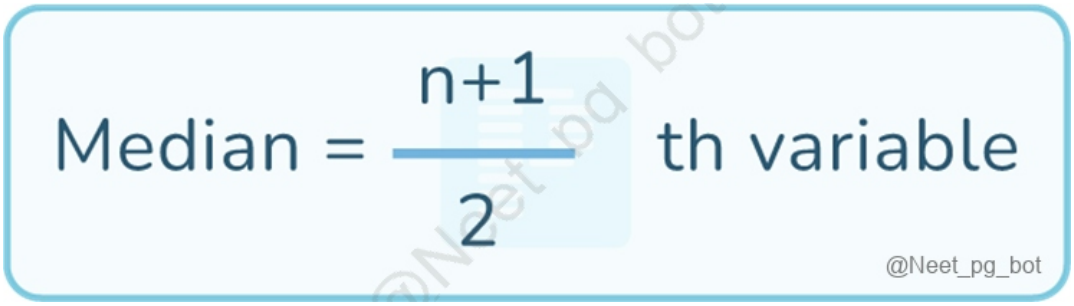
B. Mode

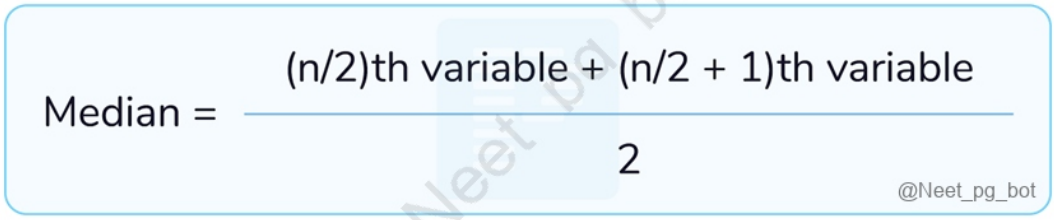
C. Standard deviation

D. Mean

Correct Answer: B. Mode

Explanation: The mode is the value that appears most frequently in a dataset. It represents the value that occurs with the highest frequency. In the dataset [1, 2, 3, 3, 4, 5], the mode is 3 because it appears twice, which is more frequently than any other value. Incorrect Options: Median (Option A): It is calculated by arranging the variables in ascending order and taking up the middle value. This applies when an odd number of variables are given, which is given by {{caption_text}} The median is given for variables in even numbers by averaging the two middle variables. {{caption_text}} Standard deviation (Option C): Measures the variation or dispersion of a set of values around the mean. The formula for calculation is σ = √(∑(x– x■) 2 /n). Mean (Option D): It is calculated by summing all the variables and dividing the same by the total number of variables.





References:

Park’s Textbook of Preventive and Social Medicine 27th edition, Page 975, 976

↑ *Back to this question in Part A*

@Neet_pg_bot

Q22: A study was done to assess nutritional status among young children in rural and urban areas. 40 children in rural and 30 children in urban areas were malnourished. Which of the following tests of significance is the most appropriate in this case? (Q859445)

A. Chi Square test

B. Paired T test

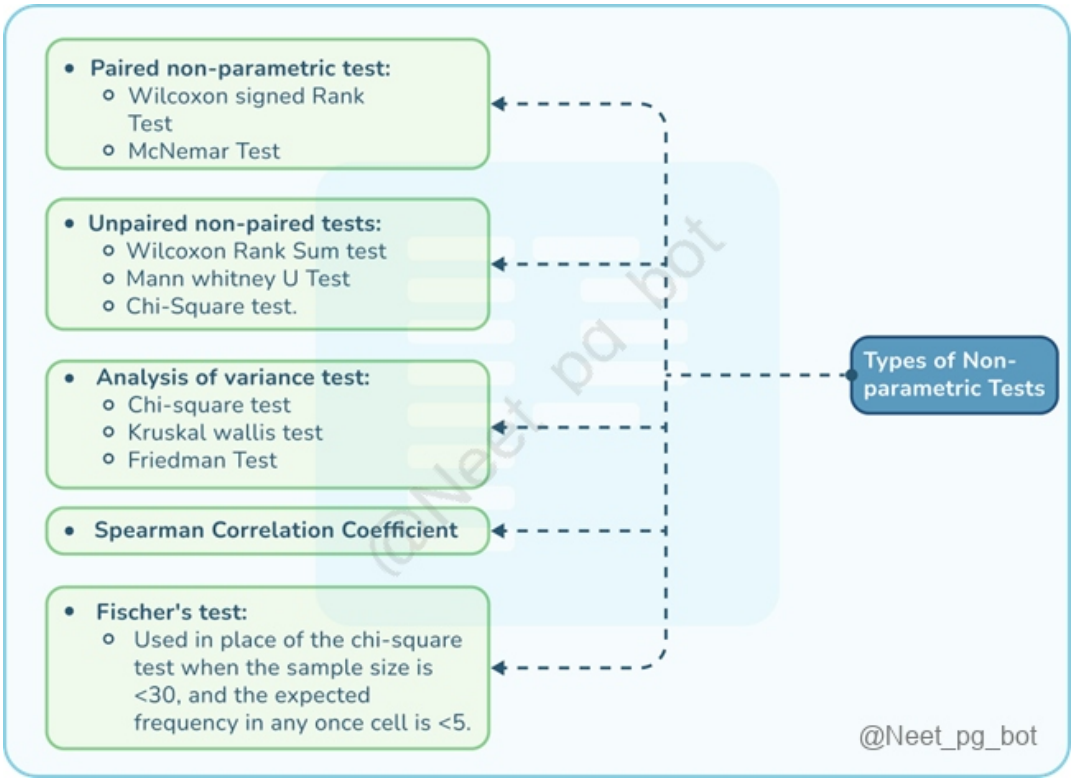
C. Standard error of the mean

D. ANOVA

Correct Answer: A. Chi Square test

Explanation: The Chi-Square test is used to determine whether there is a significant association between two categorical variables. In this case, the variables are "nutritional status" (malnourished or not) and "area of residence" (rural or urban). By comparing the observed frequencies (40 malnourished children in rural areas and 30 malnourished children in urban areas) with the expected frequencies, the Chi-Square test can assess if there is a significant difference in the distribution of malnourished children between rural and urban areas. {{caption_text}} Parametric Test Description Paired Student's t-test (Option B ruled out) Used to compare means (± SD) in paired data from the same group of individuals before and after an intervention. Unpaired Student's t-test Used to

compare means (± SD) in two different groups of individuals. The Z-test is a variant of the unpaired Student's t-test used when the sample size is > 30. ANOVA (Option D ruled out) Used to compare means (± SD) in more than two different groups of individuals. Pearson correlation coefficient Measures the linear association between two variables and can range from -1 (perfect negative correlation) to +1 (perfect positive correlation). Standard error of the mean (Option C): Quantifies the variability of sample means around the true population mean . Standard error of the mean = standard deviation / √ sample size



References:

https://www.wjpmr.com/download/article/120032024/1711972240.pdf

Park's Textbook of Preventive and Social Medicine, 27th edition, pg 978

↑ *Back to this question in Part A*

@Neet_pg_bot

Q23: What is the most effective method for graphically representing the fluctuations in disease occurrence within a specific geographical region? (Q859447)

A. Line graph

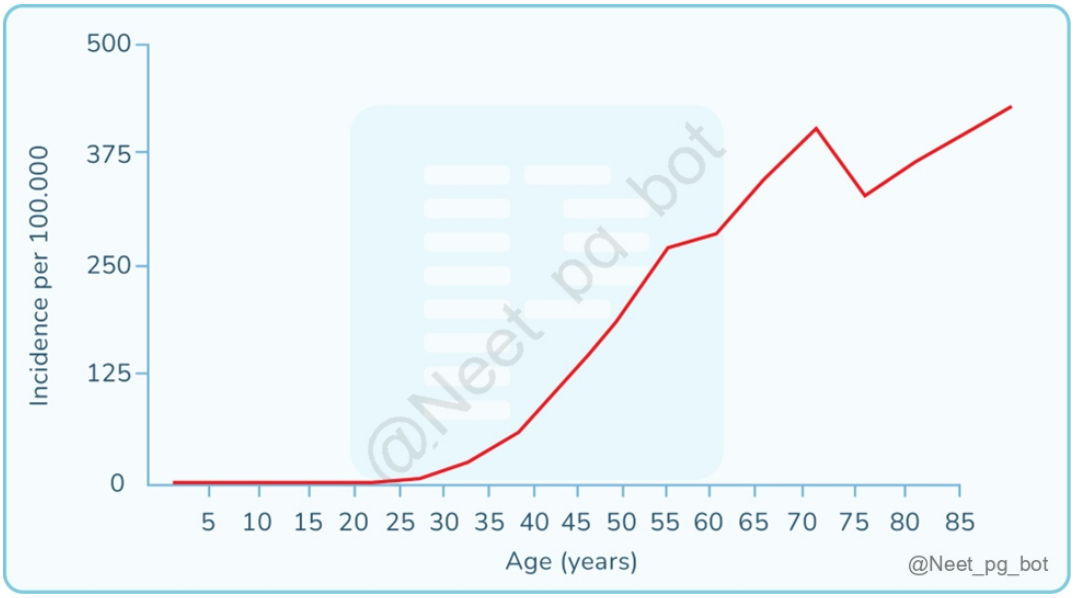
B. Histogram

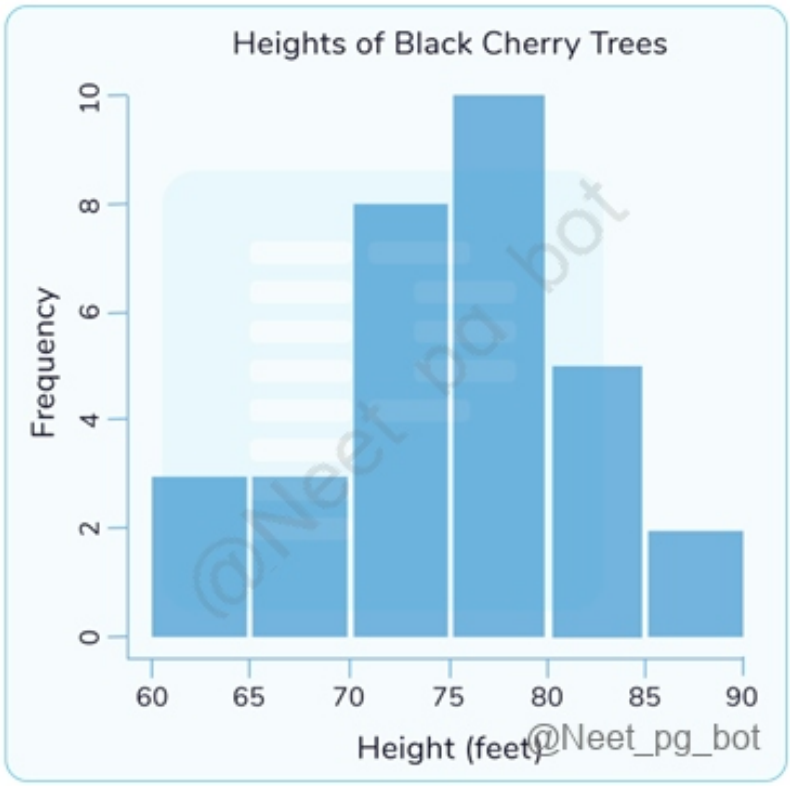
C. Ogive

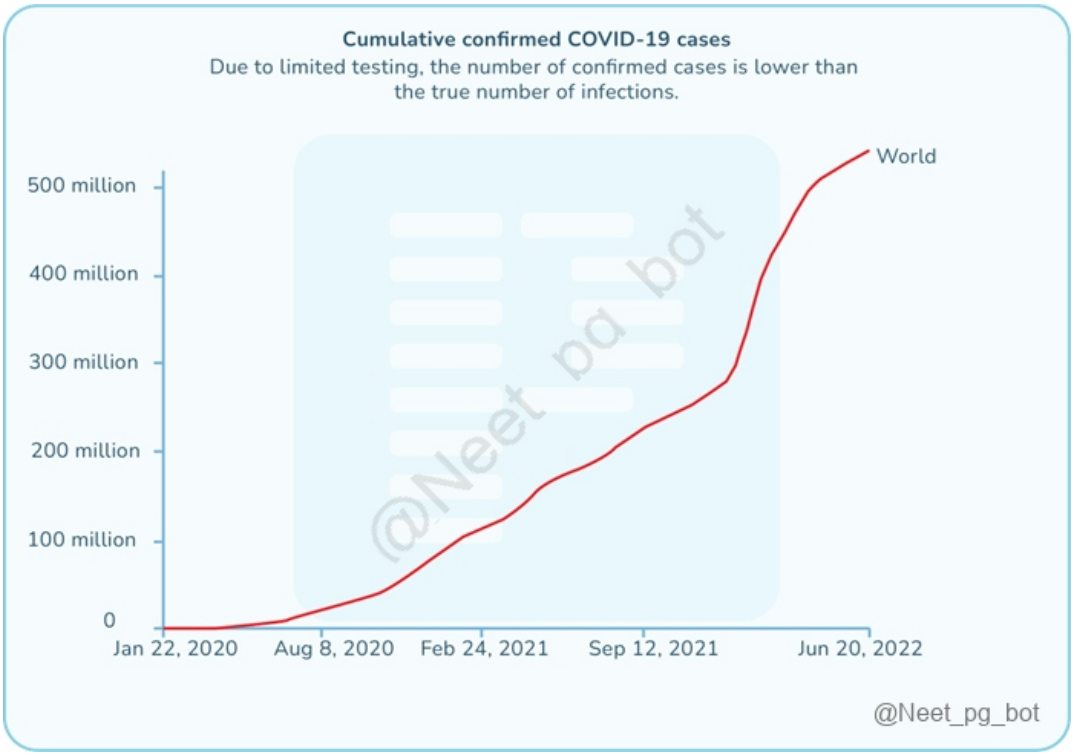
D. Tree diagram

Correct Answer: A. Line graph

Explanation: A line chart is used for showing trends of events or incidence of cases over time. It has both rise and fall. {{caption_text}} Fig. Line chart Histogram: (Option B ruled out) {{caption_text}} It represents the frequency of continuous variables or quantitative variables. Height is a quantitative or continuous variable (can take many possible values and also in between values) It can be expressed in decimals and there is no gap in between. Ogive: (Option C ruled out) Aka cumulative frequency curve is useful for understanding how quantities accumulate over time. By plotting cumulative vaccination completion data on an ogive, the clinic can easily visualize the total number of patients vaccinated up to each month and observe trends in the rate of increase in vaccinations. There is no dip or no fall of the curve. Cases are constantly increasing {{caption_text}} Fig. Ogive Tree diagram (Option D): I t is a visual tool used to represent hierarchical relationships or branching structures. It is commonly used in decision analysis or to display the possible outcomes of a particular event. It is not typically used to plot changes in disease incidence over time. Therefore, the most appropriate option for plotting the changes in the incidence of a disease in a given area is a Line Graph.







References:

K.Park's Textbook of Preventive and Social Medicine, 27th Ed, Pg.973-75

2.2: Histograms, Ogives, and Frequency Polygons - Statistics LibreTexts

↑ *Back to this question in Part A*

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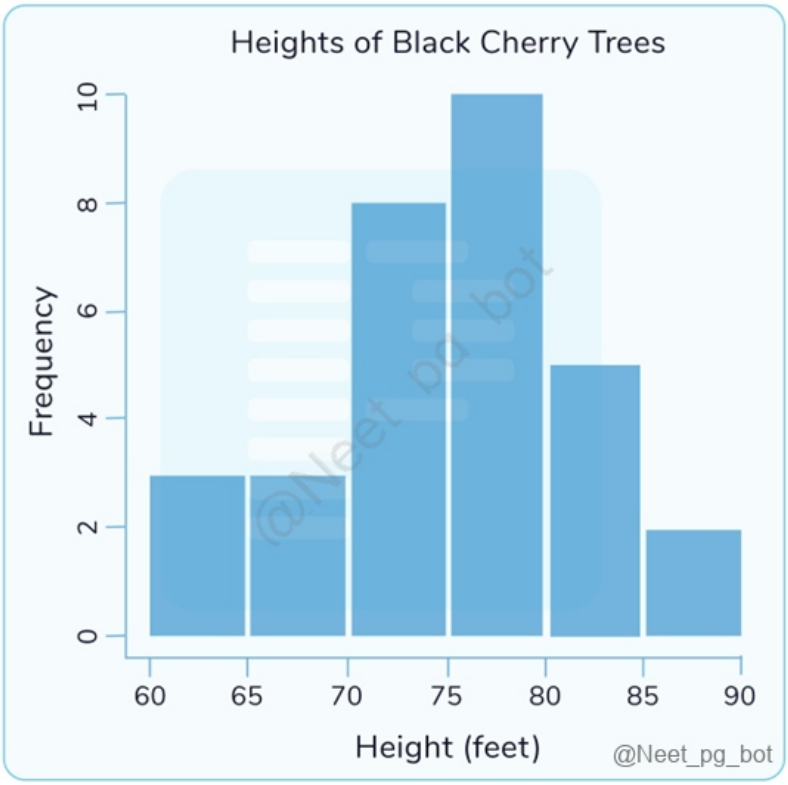
Q24: For which type of variables is the following data representation used? (Q859449)

A. Nominal

B. Discrete

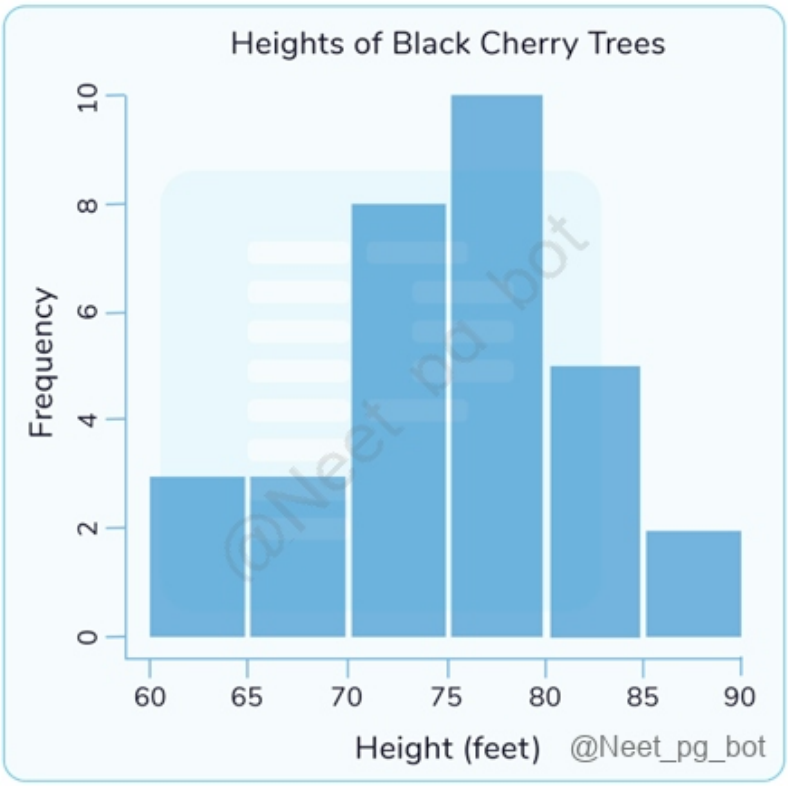
C. Continuous

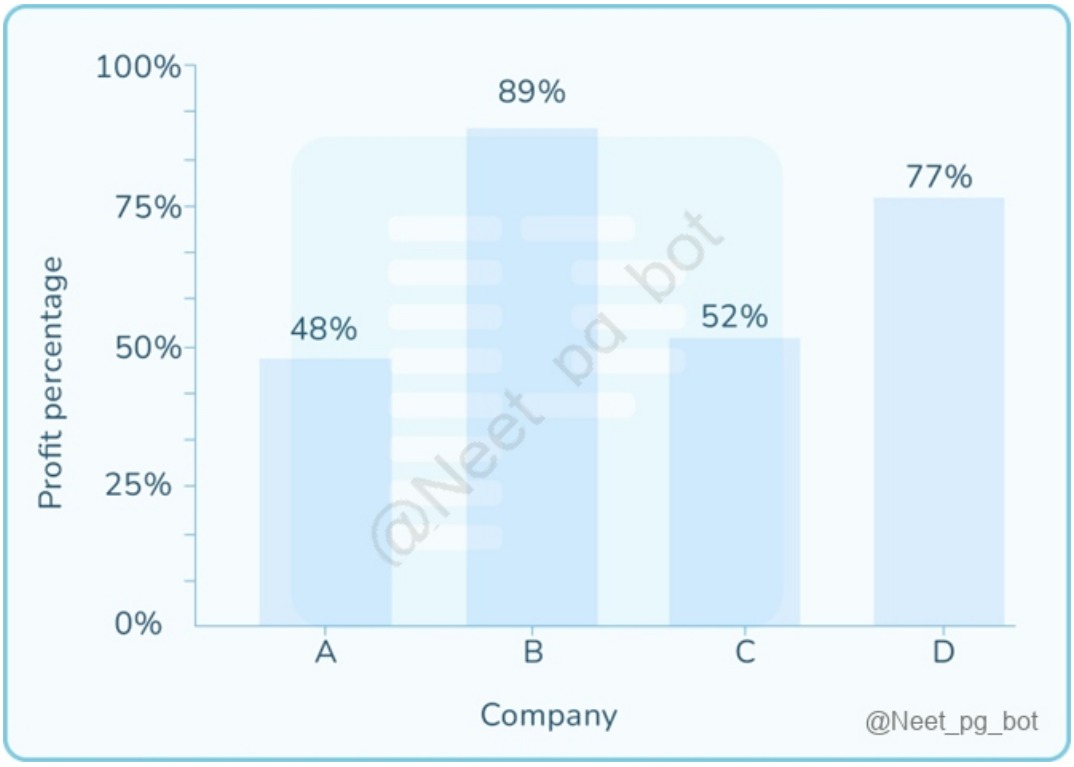
D. All the above



Correct Answer: C. Continuous

Explanation: Histogram: {{caption_text}} It represents the frequency of continuous variables or quantitative variables. Height is a quantitative or continuous variable (can take many possible values and also in between values) It can be expressed in decimals and there is no gap in between. Bar Diagram: {{caption_text}} Simple bar diagrams represent the frequency of discrete variables like gender. (Options A & B ruled out) Discrete variables:These variables take fewer values and no in between values. Examples: Religion, Blood groups These are not represented in decimals so there are gaps





References:

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 973-975

↑ *Back to this question in Part A*

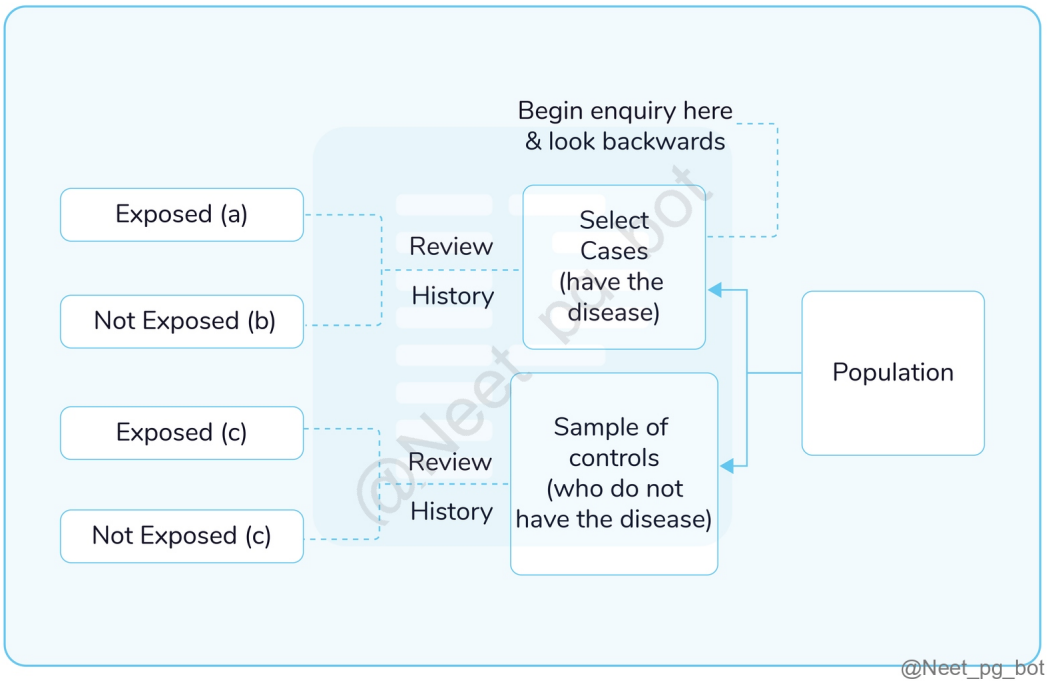
Q25: Please determine the study design based on the following information: (Q859462)

A. Prospective cohort study

B. Retrospective cohort study

C. Case control study

D. Nested case control study



Correct Answer: C. Case control study

Explanation: A case-control study starts by selecting participants based on the outcome (disease or no disease). Cases: individuals who already have the disease/outcome. Controls: individuals without the disease/outcome. The study then looks backward to determine prior exposure to potential risk factors. Since the selection is based on outcome status, and exposure is assessed retrospectively, this fits the definition of a case-control study. Incorrect Options: Prospective cohort study (Option A): Participants are selected based on exposure status and followed forward in time to see who develops the disease. This is incorrect because the selection here is based on outcome, not exposure. Retrospective cohort study (Option B): Participants are again selected based on exposure status, but outcomes are assessed from past records. This is incorrect because there is no exposure-based grouping in this study. Nested case control study (Option D): A case-control study conducted within a pre-existing cohort, where cases and controls are drawn from the same cohort. This is incorrect because there's no mention of an existing cohort.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pages 78-80

↑ *Back to this question in Part A*

@Neet_pg_bot

Q26: A researcher is studying the difference in the incidence of asthma in children who are exposed to second-hand smoke and those who are not. If he wishes to express the additional incidence of asthma in the exposed children as a percentage, which of the following should he use? (Q859468)

A. Attributable risk

B. Relative risk

C. Odds ratio

D. None of the above

Correct Answer: A. Attributable risk

Explanation: Measure Definition Calculation Attributable Risk Proportion of disease incidence attributable to a specific exposure or risk factor Risk in exposed group - Risk in unexposed group Relative Risk Risk of a particular outcome in the exposed group compared to the unexposed group Risk in exposed group/Risk in unexposed group Odds Ratio Strength of association between exposure and outcome in case-control or retrospective studies (Exposure odds in cases/Non-exposure odds in cases) / (Exposure odds in controls/Non- exposure odds in controls)

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pages 81,86

↑ *Back to this question in Part A*

@Neet_pg_bot

Q27: The blood pressure of 200 hypertensive patients is being compared after 3 months. One group of 100 patients received medical advice, while the other group of 100 patients were advised to make lifestyle changes. Which test of significance is used to compare the blood pressure in these two groups? (Q859960)

A. ANOVA

B. Un-paired T test

C. Chi-square test

D. Paired T test

Correct Answer: B. Un-paired T test

Explanation: Type of data: Blood pressure → continuous variable Groups → two independent groups Unpaired T-test: Used to compare means of a continuous variable between two independent groups. Assumes approximately normal distribution of data. Incorrect options: ANOVA: Compares means across three or more groups, not two. Chi-square test: Compares categorical variables, not continuous data. Paired T test: Used when the same subjects are measured before and after an intervention (dependent samples), not for independent groups.

References:

https://www.wjpmr.com/download/article/120032024/1711972240.pdf

Park's Textbook of Preventive and Social Medicine 27th Edition Pg: 980

↑ *Back to this question in Part A*

@Neet_pg_bot

Q28: A study conducted on 46 mothers who delivered deformed babies showed that 41 were found to have thalidomide during their early pregnancy; what kind of study is being done here? (Q860017)

A. Prospective cohort study

B. Retrospective cohort study

C. Case-control study

D. Descriptive study

Correct Answer: C. Case-control study

Explanation: In a case-control study, researchers compare individuals with the outcome of interest (cases) to those without the outcome (controls) to assess the association between exposure and outcome. The study starts with an outcome — mothers who delivered deformed babies (cases). Then, it looks backward to check for an exposure — use of thalidomide during early pregnancy. Observational studies Analytical studies Case-control/case reference. (Option C) Ecological/correlational. Cross-sectional/prevalence. Cohort/follow-up. (Options A & B ruled out) Descriptive studies (Option D ruled out) Experimental/observational studies Community trials/community intervention trials. Field trials. Non-randomised trials Uncontrolled trials. Natural experiments. Before and after

comparison studies. Randomised controlled trials Trial of aetiological agents. Risk factor trials. Clinical trials. Preventive trials. Cessation experiments. Evaluation of health services.

References:

Park's Textbook of Preventive and Social Medicine26th edition, page 93

↑ *Back to this question in Part A*

@Neet_pg_bot

Q29: In a study, the p-value obtained was 0.03. What does this imply? (Q879030)

A. There is a 3% probability that the result occurred due to chance.

B. There is 97% confidence that the null hypothesis is true.

C. The observed difference is not statistically significant.

D. The null hypothesis is rejected as the probability of chance is less than 2%.

Correct Answer: A. There is a 3% probability that the result occurred due to chance.

Explanation: A p-value represents the probability of obtaining the observed result, or one more extreme, if the null hypothesis were true . A p-value of 0.03 means there is a 3% chance that the observed difference occurred due to random variation. Since 0.03 is less than the standard significance level ($\alpha = 0.05$), the result is statistically significant , and the null hypothesis is rejected . Incorrect Options There is 97% confidence that the null hypothesis is true (Option B): p-value does not indicate the probability that the null hypothesis is true. The observed difference is not statistically significant (Option C): $p < 0.05$ indicates statistical significance. The null hypothesis is rejected as the probability of chance is less than 2% (Option D): $p = 0.03$ (3%), not below 2%.

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Pages 979, 980.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q30: A group of 80 people was studied to assess the effect of diet modification on mean cholesterol levels before and after the intervention. Which statistical test is most appropriate to compare the mean cholesterol levels before and after the diet modification? (Q844049)

A. Paired t-test

B. McNemar test

C. Chi-square test

D. Wilcoxon signed-rank test

Correct Answer: A. Paired t-test

Explanation: Correct Option A - Paired t-test: The paired t-test is the most appropriate test for comparing the mean cholesterol levels before and after diet modification in the same group of individuals. This test accounts for the fact that the data are paired (pre- and post-diet modification) and assesses whether the mean difference is statistically significant. Incorrect Options: Option B - McNemar test: This test is used for paired nominal data, specifically to analyze the difference in proportions for matched pairs, such as yes/no responses before and after an intervention. It is not appropriate for comparing means. Option C - Chi-square test: The chi-square test is used to analyze categorical data to determine if there is a significant association between variables. It is not suitable for comparing means, especially when dealing with continuous data like cholesterol levels. Option D - Wilcoxon signed-rank test: This is a non-parametric test used to compare two related samples or repeated measurements on a single sample when the data does not follow a normal distribution. It is an alternative to the paired t-test when the data is not normally distributed.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q31: In a group, the mean blood glucose level is 105 mg/dL with a standard deviation of 10 mg/dL. Assuming a normal distribution, what is the expected range of blood glucose values for approximately 95% of the population? (Q866773)

A. 85 – 125 mg/dL

B. 101 – 110 mg/dL

C. 90 – 125 mg/dL

D. 95 – 115 mg/dL

Correct Answer: A. 85 – 125 mg/dL

Explanation: In a normal distribution, approximately 95% of the population's values lie within ±2 standard deviations (SD) from the mean. Mean = 105 mg/dL SD = 10 mg/dL Range for 95% = Mean ± (2 × SD) = 105 ± 20 = 85 to 125 mg/dL. For normally distributed data, proportions within SD multiples are standard: ~68% within ±1 SD, ~95% within ±1.96 (≈±2) SD, ~99.7% within ±3 SD (empirical rule). 101 – 110 mg/dL (Option B): This is a much narrower range (±0.5 SD), covering far less than 95% of the population. 90 – 125 mg/dL (Option C): The lower limit is off; this is Mean – 1.5 SD to Mean + 2 SD, not a standard 95% range. 95 – 115 mg/dL (Option D):

This is only Mean ± 1 SD, covering about 68% of the population.

↑ *Back to this question in Part A*

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Q32: In a study, an investigator compared the mean blood pressure and standard deviation between two independent groups. Which of the following is the most appropriate statistical test to assess the significance of the difference between the two means? (Q866878)

A. Paired t-test

B. Unpaired t-test

C. Chi-square test

D. ANOVA

Correct Answer: B. Unpaired t-test

Explanation: The question describes two independent groups where the investigator is comparing mean blood pressure values. The correct statistical test for comparing the means of two independent samples is the unpaired (independent samples) t-test. Unpaired t-test: A parametric test used to compare the means of two independent groups to determine if the difference is statistically significant. Assumptions: The two groups are independent. The data is continuous and approximately normally distributed. The variances of the two groups are equal (homogeneity of variance). Advantages: Simple to apply when assumptions are met. Limitations: Not suitable for non-normal or categorical data; use non-parametric alternatives like Mann–Whitney U test if assumptions fail. No. of Groups Relatedness of Samples Test Used 2 Independent Unpaired t-test 2 Paired/Matched Paired t-test >2 Independent ANOVA Paired t-test (Option A): Used for matched pairs or before–after measurements in the same group; not for independent groups. Chi-square test (Option C): Used for association between categorical variables; not for comparing means of continuous data. ANOVA (Option D): Used for comparing means among more than two independent groups.

↑ *Back to this question in Part A*

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Q33: At a PHC, a medical officer provides treatment and counselling to diabetic patients. Their body weights are recorded before the intervention and again 6 months later, using the health register. Which of the following statistical tests is most appropriate to analyze the change in weight in this group? (Q865268)

A. Chi-square test

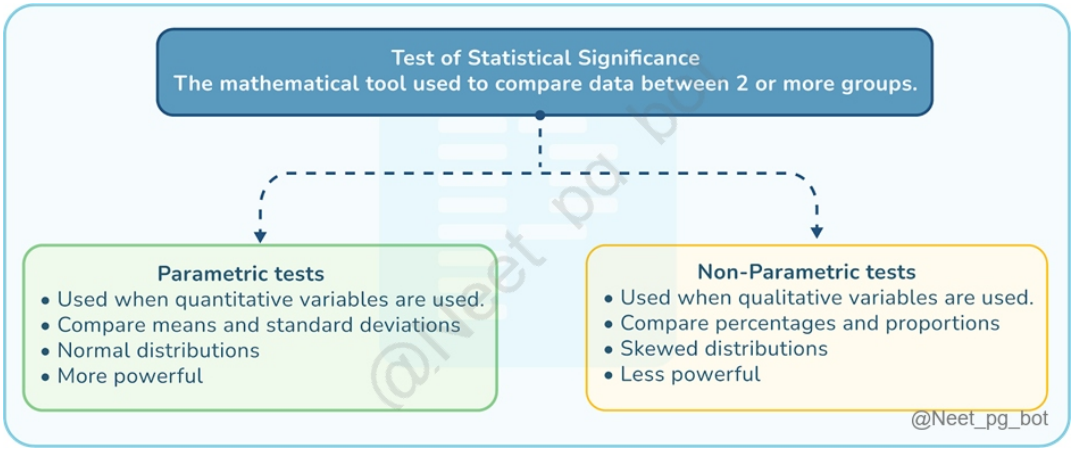
B. Paired t-test

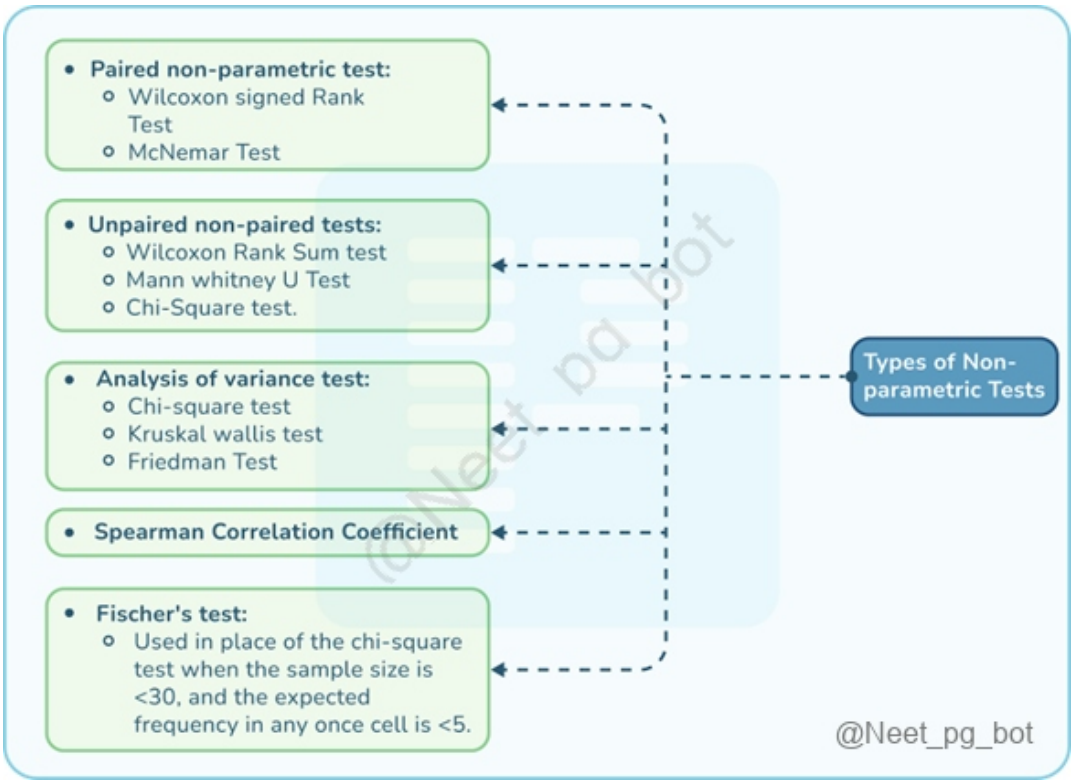
C. ANOVA test

D. Independent t-test

Correct Answer: B. Paired t-test

Explanation: The most appropriate statistical test to analyze the change in weight in the same group of diabetic patients before and after the intervention is the paired t-test , which compares the means of two related measurements from the same individuals. Types of Parametric tests: Parametric Test Description Paired Student's t-test Used to compare means (± SD) in paired data from the same group of individuals before and after an intervention. (Option B) Unpaired Student's t-test Used to compare means (± SD) in two different groups of individuals. The Z-test is a variant of the unpaired Student's t-test used when the sample size is > 30. ANOVA Used to compare means (± SD) in more than two different groups of individuals. (Option C ruled out) Pearson correlation coefficient Measures the linear association between two variables and can range from -1 (perfect negative correlation) to +1 (perfect positive correlation). Types of Non-parametric tests Chi-square test (Option A) is used to assess the association between two categorical variables. Since body weight is a continuous variable and we are comparing means, this test is not appropriate. Independent t-test (Option D) is used to compare the means of two separate, unrelated groups. In this case, the same individuals are being measured at two different points in time, so the groups are not independent.





References:

REVIEW ARTICLE ON PARAMETRIC AND NONPARAMETRIC TEST

↑ *Back to this question in Part A*

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Q34: Which of the following pairs is incorrectly matched concerning basic statistical concepts? (Q865271)

A. Standard error - Variability

B. Correlation coefficient - Relationship

C. Mean and median - Dispersion

D. Moments - Skewness

Correct Answer: C. Mean and median - Dispersion

Explanation: Mean and median are Measures of Central Tendency , not dispersion Most affected by outliers: Mean The best measure of central tendency in skewed observations: Median The least affected measure: Mode Measures of Dispersion Measures Definition Calculation Standard deviation Measures the variation or dispersion of a set of

values around the mean. σ = √(∑(x– x■) 2 /n) Range The difference between the highest and lowest values in a dataset. Range = Maximum value - Minimum value Mean deviation Measures the average absolute deviation of data points from the mean. Mean deviation = ∑ X - x■ / n Variance Measures the average of the squared differences from the mean. Variance = σ 2 Standard error (Option A) provides a measure of the precision of sample estimates. A smaller SE indicates less variability in sample means, suggesting more precise estimates. Standard error of the mean Standard error of proportion Quantifies the variability of sample means around the true population mean. Measures how much sample proportions vary around the population proportion SE mean = σ/√N SE proportion = √(pq/N) The ■■■■■■■ Correlation Coefficient (Option B) measures the strength and direction of a linear relationship between two variables. Moments (Option D) (especially the third moment) are used to measure skewness , which indicates the asymmetry of a distribution

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 975, 978.

↑ *Back to this question in Part A*

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Q35: In a hospital, patients are classified into three groups based on disease severity: mild, moderate, and severe. One patient is randomly selected from each group for a study. What type of sampling method is this? (Q865349)

A. Simple random sampling

B. Systemic sampling

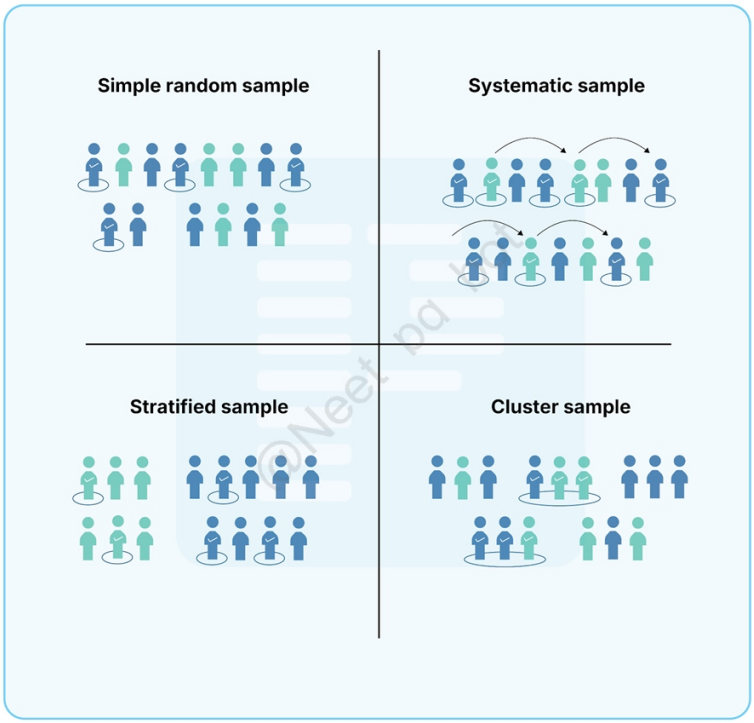
C. Stratified random sampling

D. Cluster sampling

Correct Answer: C. Stratified random sampling

Explanation: This study employs Stratified Random Sampling by dividing patients into mild, moderate, and severe disease groups and randomly selecting individuals from each, ensuring adequate representation of all subgroups. Random Probability Sampling Methods Sampling Method Description Example Simple Random Sampling (Option A ruled out) Selecting units purely by chance, ensuring each unit has an equal probability of being chosen. Drawing names using random number generators or drawing lots. Systematic Random Sampling (Option B ruled out) Selecting every nth unit from the population after a random starting point. From a list of 1000 people and need a sample of 100, select every 10th person on the list after choosing a random starting point between 1 and 10. Stratified Random Sampling (Option C) Dividing the population into subgroups (strata) and randomly sampling from each subgroup. Dividing a population into age groups (e.g., 18-29, 30-49, 50+) and randomly sampling individuals from each age group Cluster Random Sampling (Option D ruled out) Dividing the population into clusters and randomly selecting entire clusters to be included. Dividing a city into neighborhoods (clusters) and randomly selecting a few neighborhoods. All residents in the selected neighborhoods are then included in the sample. Multi-Stage Sampling Combining several sampling methods in stages. First, randomly select districts

(simple random sampling), then within selected districts, randomly select schools (second stage), and finally, within selected schools, randomly select students (third stage)



References:

Park's Textbook of Preventive Medicine 27th Edition Pg 978

IAPSM Textbook of Community Medicine 2nd Edition Pg. 174

↑ *Back to this question in Part A*

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Q36: In statistics, what do centiles and quartiles primarily represent? (Q865356)

A. Measures of central tendency

B. Measures of dispersion

C. Measures of position

D. Measures of correlation

Correct Answer: C. Measures of position

Explanation: Centiles and quartiles represent Measures of Position. These are statistical tools used to describe the relative location of a data point within a dataset. They help determine where a specific value lies about the rest of the data. It includes: (Option C) Percentiles (Centiles): Divide data into 100 equal parts. For example, the 70th percentile means 70% of the data fall below that value. Quartiles: Divide data into four equal parts Measures of Central Tendency (Option A) : . Most affected by outliers: Mean The best measure of central tendency in skewed observations: Median The least affected measure: Mode Measures of Dispersion (Option B) : Measures Definition Calculation Standard deviation Measures the variation or dispersion of a set of values around the mean. $\sigma = \sqrt{(\sum(x - x\blacksquare)\ 2\ /n)}$ Range The difference between the highest and lowest values in a dataset. Range = Maximum value - Minimum value Mean deviation Measures the average absolute deviation of data points from the mean. Mean deviation = $\sum$ X - x■ / n Variance Measures the average of the squared differences from the mean. Variance = σ 2 Measures of correlation (Option D) show how two variables relate, indicating the strength and direction of their association. Pearson's coefficient (r) ranges from -1 to +1, with values near 0 showing no linear relationship. Unlike position measures, correlation doesn't indicate individual data ranks and doesn't imply causation.

References:

PSM-12-Biostatistics

↑ *Back to this question in Part A*

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Q37: Which of the following is the correct sequence of steps in a Randomized Controlled Trial (RCT)? (Q866431)

A. Follow-up → Manipulation → Assessment → Randomisation

B. Randomisation → Manipulation → Follow-up → Assessment

C. Assessment → Randomisation → Follow-up → Manipulation

D. Manipulation → Assessment → Follow-up → Randomisation

Correct Answer: B. Randomisation → Manipulation → Follow-up → Assessment

Explanation: A Randomized Controlled Trial is considered the gold standard in clinical research because it minimizes bias and ensures comparability between study groups. Randomisation : Participants are assigned to intervention or control groups using random methods, ensuring equal distribution of confounding factors. Manipulation (Intervention) : The experimental treatment or procedure is applied to the intervention group. Follow-up : Participants are monitored over time to observe effects and detect adverse events. Assessment : Outcomes are measured and analyzed to determine the effect of the intervention. Other sequences (Options A, C, D) wrongly order randomisation, intervention, or assessment steps, compromising study validity.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q38: A study is conducted to compare the mean hemoglobin (Hb) levels between two independent groups. Which statistical test is most appropriate? (Q866434)

A. Paired t-test

B. Unpaired t-test

C. Chi-square test

D. ANOVA

Correct Answer: B. Unpaired t-test

Explanation: An unpaired t-test (also called an independent samples t-test) is used when: The outcome variable is continuous (e.g., hemoglobin levels). There are two separate, independent groups being compared. The data is approximately normally distributed in both groups, and variances are equal (or adjustments are made if not). This test determines whether the observed difference in means is statistically significant, beyond what might occur due to random variation. Incorrect Options: Option A - Paired t-test : Used for matched or related samples — such as pre- and post-treatment measurements in the same subjects, or matched pairs. Not suitable for unrelated groups. Option C - Chi-square test : Compares categorical data frequencies, not continuous numerical means. Option D - ANOVA : Compares means for three or more independent groups; not needed when only two groups are being compared.

↑ *Back to this question in Part A*

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Q39: Which of the following is used to measure the degree of objective and target achievement, and assess the quality of results obtained in a health program? (Q866461)

A. Planning

B. Surveillance

C. Monitoring

D. Evaluation

Correct Answer: D. Evaluation

Explanation: Evaluation systematically assesses the design, implementation, and outcomes of a program to determine effectiveness and inform decisions. It focuses on measuring achievements versus objectives. Incorrect Options: Option A: Planning involves program design. Option B : Surveillance is ongoing data collection. Option

C: Monitoring is continuous tracking of activities but less comprehensive than evaluation.

↑ *Back to this question in Part A*

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Q40: A new community intervention is initiated to reduce prenatal sepsis. Researchers allocate 20 Primary Health Centres (PHCs) to receive standard care and 20 PHCs to receive a community-based intervention. What type of study design is this? (Q866465)

A. Cross-sectional study

B. Case-control study

C. Quasi-experimental study

D. Cluster-randomized control trial

Correct Answer: D. Cluster-randomized control trial

Explanation: A cluster-randomized control trial randomizes groups (here PHCs) rather than individuals, evaluating intervention impact on communities or clusters, suitable for public health interventions. Incorrect Options: Option A - Cross-sectional is observational at one time point. Option B - Case-control is retrospective and individual-based. Option C - Quasi-experimental lacks randomization, whereas this design includes it.

↑ *Back to this question in Part A*

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Q41: In a district-level survey, the introduction of breast cancer screening showed an increased 5-year survival rate, but autopsy data revealed no change in mortality. What type of bias does this represent? (Q866473)

A. Survival bias

B. Lead time bias

C. Berksonian bias

D. Detection bias

Correct Answer: B. Lead time bias

Explanation: Lead time bias occurs when earlier detection of disease (through screening) increases measured survival time without affecting the actual time of death, giving a false impression of benefit. Incorrect Options: Survival bias (Option A) relates to selection of survivors. Berksonian bias (Option C) is related to hospital-based selection bias. Detection bias (Option D) refers to differences in ascertainment or diagnosis rates between groups.

↑ *Back to this question in Part A*

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Q42: Which of the following is the best study design as per hierarchy of evidence? (Q852837)

A. Meta analysis

B. Case control study

C. Cohort Study

D. Large RCT

Correct Answer: A. Meta analysis

Explanation: Hierarchy of Evidence: Meta-analysis ranks at the top of the evidence hierarchy as it synthesizes data from multiple high-quality studies. Combines Results: It pools results from randomized controlled trials (RCTs) or observational studies , increasing statistical power and reliability. Best for Decision-Making: Used in evidence-based medicine (EBM) to guide clinical practice by summarizing large amounts of data. Higher Level than RCTs: While RCTs provide strong evidence, a meta-analysis of multiple high-quality RCTs offers even stronger conclusions. Hierarchy of Evidence in Clinical Research In evidence-based medicine , study designs are ranked based on their reliability in guiding clinical decision-making. Level Study Design Strength of Evidence 1a Meta-analysis of RCTs Highest - Combines data from multiple studies for stronger conclusions. 1b Large RCT (Randomized Controlled Trial) Strong - Best for causality, but single studies may have limitations. 2a Cohort Study Moderate - Observational, used for prognosis and risk factor assessment. 2b Case-Control Study Weaker - Retrospective, useful for rare diseases. 3 Cross-sectional & Case Series Weak - Descriptive, no causal inference. 4 Expert Opinion & Case Reports Weakest - No statistical comparison, potential bias. Case control study (Option B): Incorrect because case-control studies are retrospective and prone to bias, ranking lower in the hierarchy. Cohort study (Option C): Incorrect because while prospective cohort studies provide stronger evidence than case-control studies , they are inferior to RCTs and meta-analyses . Large RCT (Option D): Incorrect because while RCTs are the gold standard for individual studies , a meta-analysis of multiple RCTs provides even higher-quality evidence.

References:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3099299/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3024725/

↑ *Back to this question in Part A*

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Q43: Calculate the median of the following data set: 2, 3, 4, 4, 5, 6, 7, 8. (Q843994)

A. 4

B. 4.5

C. 4.8

D. 5

Correct Answer: B. 4.5

Explanation: Correct Option B - 4.5: The median is the middle value of an ordered data set. Since there are 8 numbers, the median is the average of the 4th and 5th numbers (4 and 5). Thus, the median is (4 + 5) / 2 = 4.5. Incorrect Options: Options A, C and D are incorrect as given above.

↑ *Back to this question in Part A*

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Q44: On January 1, 2024, an area with a population of 10,000 had 100 TB cases. During the year, 30 patients were cured and 10 died. Twenty new TB cases were reported, and 5 of them were cured before December 31, 2024. What is the incidence and prevalence of TB cases? (Q866757)

A. 0.2 and 0.75%

B. 1.2 % and 1%

C. 1.2 % and 2 %

D. 2 % and 0.75%

Correct Answer: A. 0.2 and 0.75%

Explanation: Incidence (new cases during the year) and prevalence (total cases at a specific point in time, here end of year): Incidence: Population at risk = Total population – existing cases on Jan 1 = 10,000 – 100 = 9,900 New TB cases during 2024 = 20 Incidence per 1,000 = (20 ÷ 9,900) × 1,000 = 2 per 1,000 = 0.2% Prevalence (Dec 31, 2024): Remaining old cases = 100 – (30 cured + 10 died) = 60 Remaining new cases = 20 – 5 cured = 15 Total existing cases on Dec 31 = 60 + 15 = 75 Prevalence = 75 per 1,000 = 0.75% Term Definition Formula Incidence New cases during a defined period among at-risk population (New cases ÷ Population at risk) × Multiplier

Prevalence All existing cases (old + new) at a point in time (All cases ÷ Total population) × Multiplier Incidence → measures risk of developing disease. Prevalence → measures burden of disease.

References:

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↑ *Back to this question in Part A*

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Q45: A statistician wants to study the effects of medicine in three groups: humans, animals, and plants. He selects randomly out of these three groups. Which type of sampling is performed here? (Q844062)

A. Simple Random Sampling

B. Systematic Sampling

C. Stratified Random Sampling

D. Cluster Sampling

Correct Answer: C. Stratified Random Sampling

Explanation: Correct Option C - Stratified Random Sampling: In the given scenario, the statistician is performing stratified random sampling. This approach involves dividing the population into distinct strata (humans, animals, and plants) and then selecting randomly from each stratum. This method ensures that each subgroup is represented in the study, allowing for a more detailed analysis of the effects of medicine across different types of organisms. Incorrect Options: Option A - Simple Random Sampling: This method involves selecting individuals randomly from the entire population without considering any subgroups. In this scenario, simple random sampling would mean choosing any individual from the combined groups of humans, animals, and plants without distinguishing between them. Option B - Systematic Sampling: This method involves selecting samples based on a fixed, periodic interval (e.g., every 10th individual). Systematic sampling is not described in this scenario since the selection process does not involve intervals or systematic patterns. Option D - Cluster Sampling: This method involves dividing the population into clusters (groups) and then randomly selecting entire clusters for the study. The focus here is on the whole clusters rather than individual strata within those clusters.

↑ *Back to this question in Part A*

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Q46: A study was undertaken to establish consumption of vegetarian and non-vegetarian diet with disease. Which statistical test should be done? (Q844109)

A. Paired t-test

B. McNemar test

C. Chi-square test

D. Wilcoxon signed-rank test

Correct Answer: C. Chi-square test

Explanation: Correct Option C - Chi-Square Test: The Chi-Square test is used to determine if there is a significant association between two categorical variables. It compares the observed frequencies with the expected frequencies to see if there is a significant difference. This is appropriate for analyzing the relationship between diet type (categorical) and disease status (categorical). It helps to determine if the distribution of disease is independent of the type of diet. Incorrect Options: Option A - Paired t-test : This test is used to compare the means of two related groups. For example, it could be used to compare pre- and post-treatment measurements in the same subjects. This is not suitable for comparing categorical data (diet type) with disease status. It is more appropriate for continuous variables. Option B - McNemar's Test : McNemar's test is used for paired nominal data to determine if there are differences in proportions. It is often used in studies with a matched case-control design or in before-and-after studies where the same subjects are measured twice. This test is not suitable for comparing two independent groups (vegetarian vs. non-vegetarian) in relation to disease status. It is used for paired data rather than independent groups. Option D - Wilcoxon Rank-Sum Test : This test, also known as the Mann-Whitney U test, is used to compare differences between two independent groups on a continuous or ordinal outcome when the data does not assume normal distribution. This is not suitable for categorical variables like diet type and disease status. It is used for comparing continuous or ordinal variables.

↑ *Back to this question in Part A*

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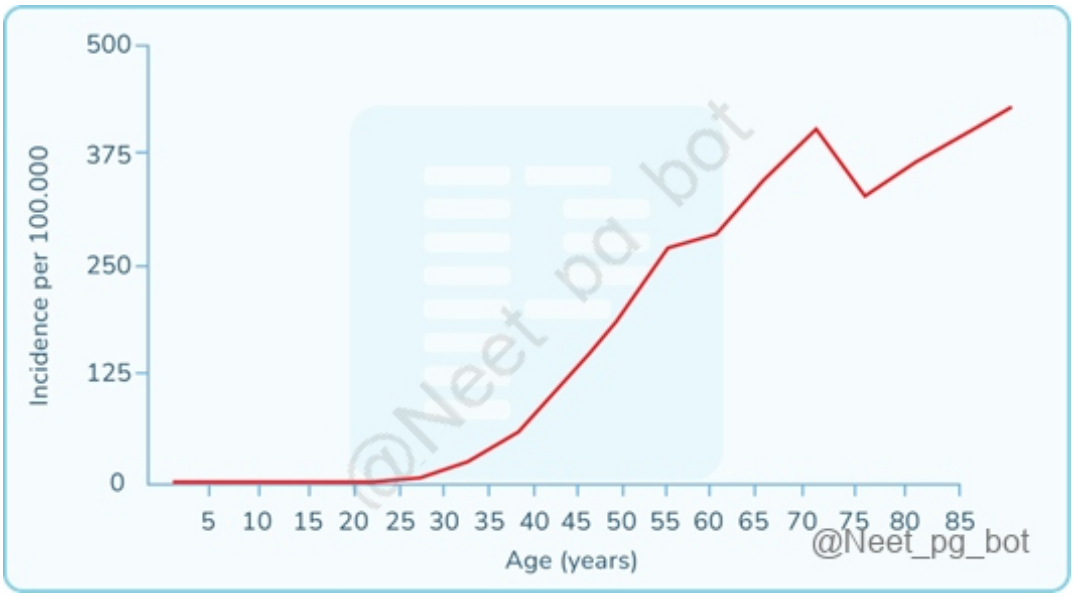
Q47: Identify the image? (Q860598)

A. Line diagram

B. Histogram

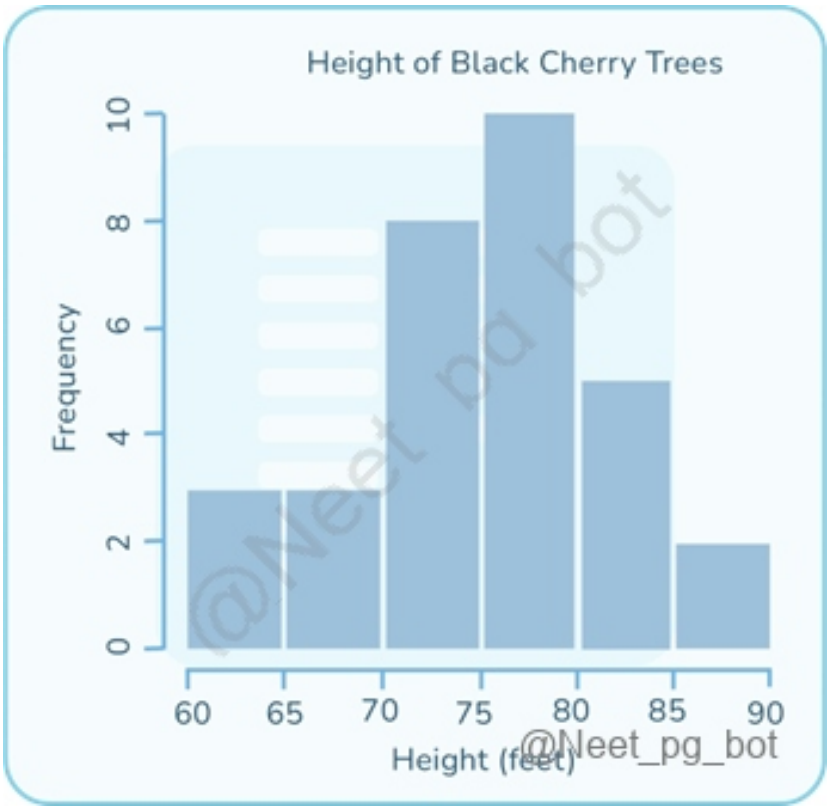
C. Scattered diagram

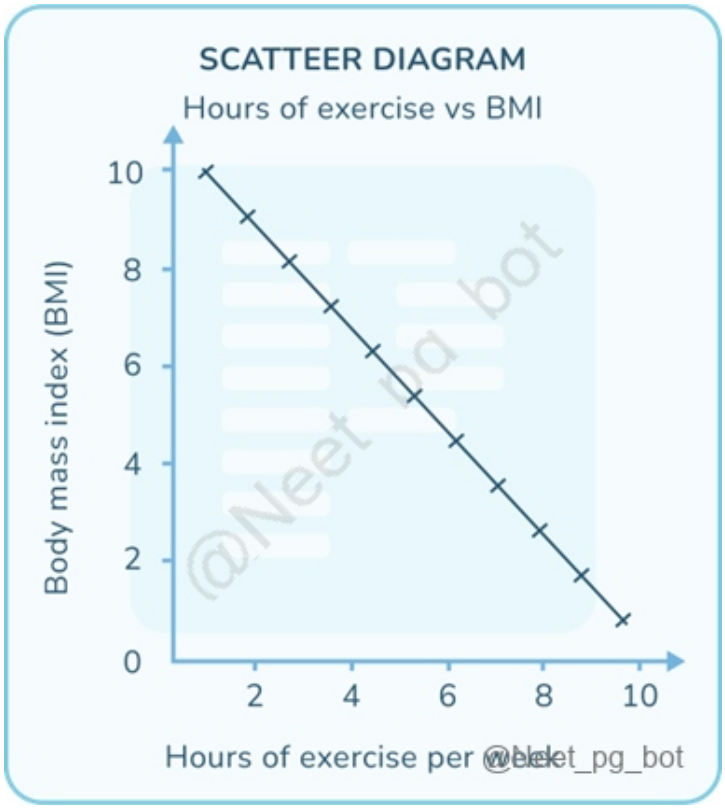
D. Frequency polygon

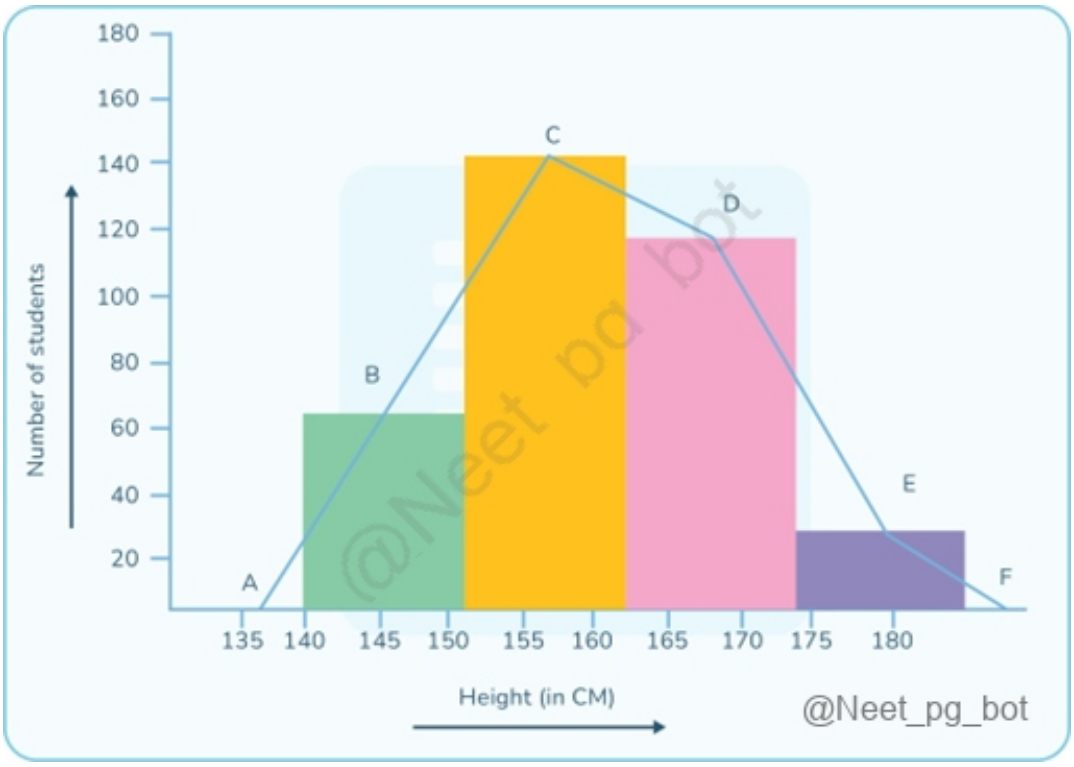


Correct Answer: A. Line diagram

Explanation: The above-given graph is a line diagram/line chart. It depicts the trends of events or incidence of cases over time, showing both rises and falls. Incorrect Options: Histogram (Option B): A histogram represents the frequency of continuous variables or quantitative variables. It consists of a series of adjacent rectangles or bars, where the area of each bar corresponds to the frequency or relative frequency of the data within a specific interval or category. Scattered diagram (Option C): The scattered diagram represents a correlation between two continuous variables It consists of a collection of points, each representing the value of one variable plotted against the value of another variable. Frequency polygon (Option D): The frequency polygon is obtained by joining the mid-points of the histogram blocks.


Height of Black Cherry Trees
Frequency
0
2
4
6
8
10
60
65
70
75
80
85
90
Height (feet)
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SCATTEER DIAGRAM
Hours of exercise vs BMI
Body mass index (BMI)
0
2
4
6
8
10
2
4
6
8
10
Hours of exercise per week
@Neet_pg_bot



↑ *Back to this question in Part A*

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Q48: What percentage of data falls within one standard deviation of the mean in a normal distribution? (Q860004)

A. 68%

B. 95%

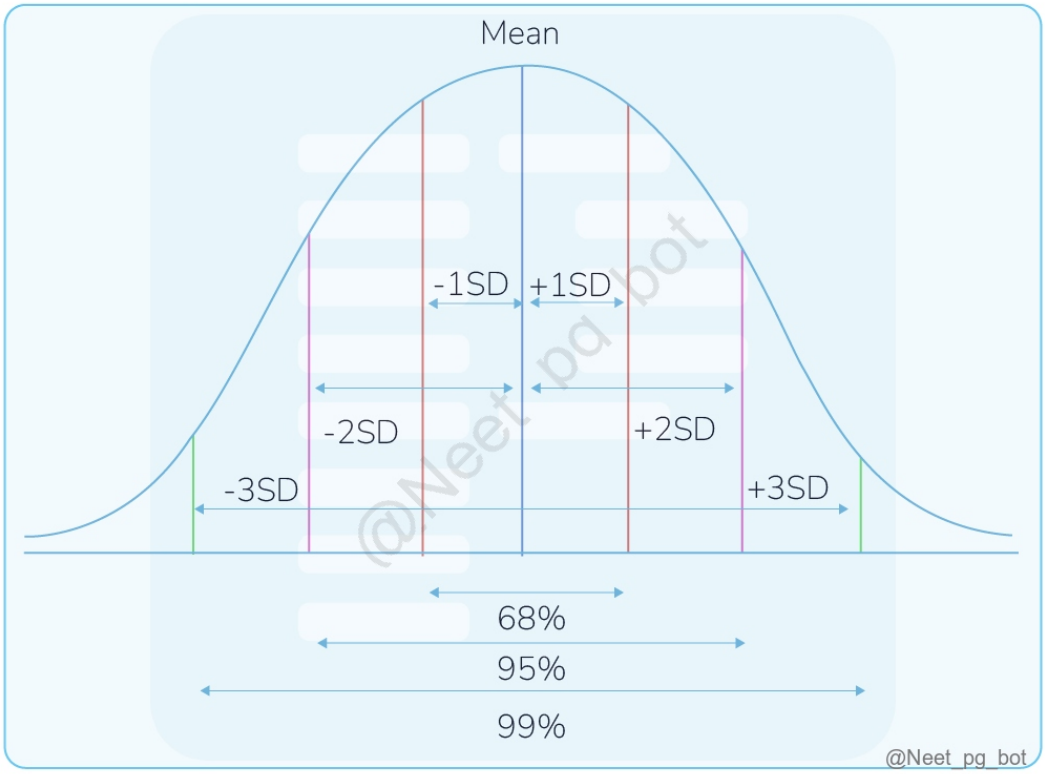
C. 98%

D. 99%

Correct Answer: A. 68%

Explanation: In a normal distribution, about 68% of the data falls within one standard deviation of the mean. A Gaussian/bell-shaped curve showing normal distribution forms when the point of coincidence is equal to mean = median = mode ~ Normal distribution In a standard normal distribution Mean = Median = mode = 0 Standard deviation = 1 Total area under the curve = 1 If we draw the following line Redline cuts the base at the distance of 1 standard deviation. Pink line at +/- 2 standard deviation. Green line at +/- 3 standard deviation. The tail of the curve never touches the baseline. Area under the curve Observation covered Mean +/- 1 SD 68.3% ~ 68% of observation Mean +/- 2 SD 95.4% ~ 95% of observation (Option B ruled out) Mean +/- 3 SD 99.7% ~ 99% of

observation (Option D ruled out) Mean +/- ∞SD 100% of observation 98% (Option C): 98% of the data in a normal distribution falls within 2 and 3 SD (~2.33 SD) of the mean.



References:

Parks Textbook of Preventive and Social Medicine, 27th Edition, Page no: 60

↑ *Back to this question in Part A*

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Q49: In biostatistics, formula given below stands for? (σ) =√ [Σ(x - μ²/N] (Q854752)

A. Standard Deviation

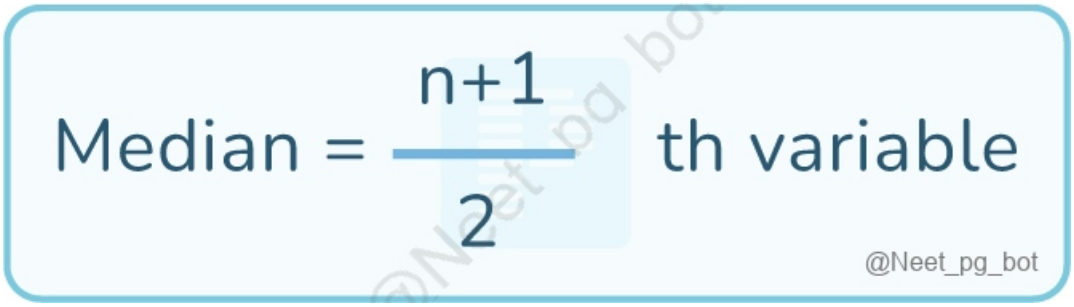
B. Sample Variance

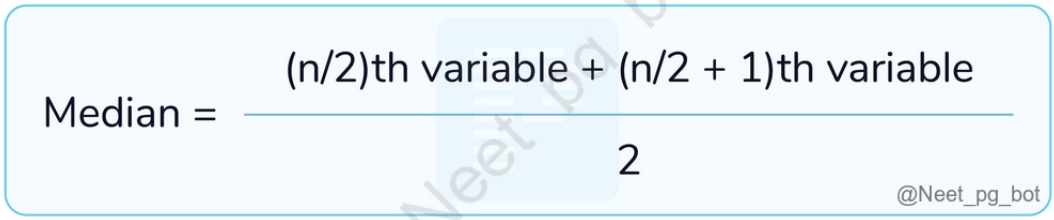
C. Sample Mean

D. Median

Correct Answer: A. Standard Deviation

Explanation: The standard deviation is a measure of the dispersion or variability of a set of values. It quantifies how much the values deviate from the mean. The formula for calculating the standard deviation involves taking the square root of the average of the squared differences between each value and the mean. Standard deviation is considered the most comprehensive and widely used measure of dispersion in statistical analysis. Measures of dispersion Definition Calculation Standard deviation (Option A) Measures the variation or dispersion of a set of values around the mean. σ = √(∑(x– x■) 2 /n) Range The difference between the highest and lowest values in a dataset. Range = Maximum value - Minimum value Mean deviation Measures the average absolute deviation of data points from the mean. Mean deviation = ∑ X - x■ / n Variance (Option B ruled out) Measures the average of the squared differences from the mean. Variance = σ 2 Sample Mean (Option C): The sample mean is the average value of a set of observations or data points. It is calculated by summing all the values in the sample and dividing the total by the number of observations. The sample mean is often used as an estimate of the population mean. Median (Option D): It is calculated by arranging the variables in ascending order and taking up the middle value. This applies when an odd number of variables are given, which is given by The median is given for variables in even numbers by averaging the two middle variables.





References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, pg 975, 976

↑ *Back to this question in Part A*

@Neet_pg_bot

Q50: 2 doctors were asked to report 100 X-rays and a Kappa value of 0.71; what is interpretation? (Q854774)

A. Good

B. Poor

C. Perfect Disagreement

D. Perfect Agreement

Correct Answer: A. Good

Explanation: Interpretation of a Kappa value of 0.71 between two doctors reporting 100 X-rays is considered Good, indicating a reliable level of agreement between the observers. The Kappa statistic is a measure of inter-rater agreement or reliability between two observers. It ranges from -1 to 1, where: 1 indicates perfect agreement O indicates agreement expected by chance -1 indicates perfect disagreement. Kappa value Inference >0.75 Excellent (beyond chance) 0.4-0.75 Intermediate to Good <0.4 Poor

References:

Interrater reliability: the kappa statistic - PMC

↑ *Back to this question in Part A*

@Neet_pg_bot

Q51: In order to investigate the dietary habits of the diverse population residing in the urban region of Delhi, a research study is being conducted. Which of the following methods can be utilized to acquire a representative sample for the study? (Q858071)

A. Cluster random sampling

B. Stratified random sampling

C. Simple random sampling

D. Systematic random sampling

Correct Answer: B. Stratified random sampling

Explanation: In a diverse population, such as the one in urban Delhi, stratified random sampling is an effective method to ensure that different subgroups (or strata) of the population are represented in the sample. In this case, the population can be divided into subgroups based on factors like socioeconomic status, age, dietary preferences, or geographic location within the urban region. After dividing the population into strata, random samples are then taken from each group, ensuring that the sample is representative of the entire population. Cluster random sampling (Option A): is incorrect because cluster sampling is used when the population is divided into clusters, often geographically, and entire clusters are randomly selected. While this can be used in large-scale studies, it doesn't specifically ensure representation of the diverse subgroups within the population as well as stratified sampling. Simple random sampling (Option C): is incorrect because simple random sampling involves selecting individuals from the entire population randomly without considering any subgroups. While it may still give a sample, it may not adequately represent the diverse dietary habits of the population in urban Delhi. Systematic random sampling (Option D): is incorrect because systematic random sampling involves selecting every nth

individual from a list or a sequence of individuals. While it's easier to implement, it doesn't ensure that different groups within the population are represented as effectively as stratified sampling.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 26, Page 946

↑ *Back to this question in Part A*

@Neet_pg_bot

Q52: In a patient, if a point-of-care diagnostic test with a sensitivity of 98% yields a negative test result, what does this indicate? (Q855265)

A. The patient would need another point–of–care diagnostic test for the same clinical condition

B. The prevalence of the disease is 2%.

C. The patient is less likely to have the disease

D. The patient has been wrongly ruled out due to false negatives

Correct Answer: C. The patient is less likely to have the disease

Explanation: A high sensitivity test with a negative result indicates the patient is less likely to have the disease due to the low probability of a false-negative result. The patient would need another point–of–care diagnostic test for the same clinical condition (Option A): A highly sensitive test that gives a negative result already provides strong evidence to rule out the disease, and further testing is generally unnecessary. The prevalence of the disease is 2% (Option B): Sensitivity does not directly relate to disease prevalence; prevalence is the proportion of individuals in a population who have the disease. The patient has been wrongly ruled out due to false negatives (Option D): With a sensitivity of 98%, the chance of a false-negative result is very low (only 2%).

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, Page.155

IAPSM textbook of Community medicine, 2nd edition, Page.134

↑ *Back to this question in Part A*

@Neet_pg_bot

Q53: What is the branch of statistics dealing with method of data collection and counting? (Q855291)

A. Theoretical statistics

B. Descriptive statistics

C. Analytical statistics

D. Inferential statistics

Correct Answer: B. Descriptive statistics

Explanation: Descriptive statistics involves the methods for collecting, organizing, summarizing, and presenting data in an informative way. This includes techniques such as counting, calculating averages, and representing data in charts, tables, or graphs. It focuses on presenting the data collected, such as through counts or frequency distributions. Theoretical statistics (Option A) deals with the development of statistical models and methods, but it doesn't primarily focus on data collection or counting. It is more concerned with the mathematical foundations of statistical theory. Analytical statistics (Option C) involves the process of using statistical methods to analyze and interpret data, especially through hypothesis testing, correlation, regression, etc. It goes beyond the initial counting and organization of data. Inferential statistics (Option D) involves using sample data to make generalizations or predictions about a larger population. It includes methods like hypothesis testing, confidence intervals, and regression, but it doesn't focus on data collection and counting.

References:

Park’s Textbook of Preventive and Social Medicine, 25th Edition, Page 78

High Yield Biostatistics, 4th Edition, Page 1

↑ *Back to this question in Part A*

@Neet_pg_bot

Q54: Which of the following indicators can help determine whether the health system is important to identifying leprosy in the community? (Q855315)

A. Treatment completion rate

B. Annual new case detection rate per lac

C. Treatment initiation rate

D. Proportion of newly diagnosed patients with grade 2 disability

Correct Answer: B. Annual new case detection rate per lac

Explanation: This is the most relevant indicator for identifying leprosy in the community. It reflects the number of new cases detected per 100,000 people. A high rate of new case detection suggests an active effort to identify and diagnose cases early, which is crucial for effective control of leprosy in the community. Thus, it is an important

indicator for evaluating how well the health system is identifying new cases. Treatment completion rate (Option A) : While this indicator is essential for assessing the success of leprosy treatment, it does not directly help in determining how well the health system is identifying new cases in the community. It is more about patient adherence to treatment after diagnosis. Treatment initiation rate (Option C) : This is important for assessing how quickly patients are started on treatment after diagnosis. However, it doesn't directly indicate the system's effectiveness in identifying new cases in the first place. Proportion of newly diagnosed patients with grade 2 disability (Option D) : This is more about the severity of the disease at diagnosis rather than how effectively the health system is identifying new cases. A higher proportion of patients with grade 2 disability indicates delayed diagnosis, which is a problem, but it doesn't directly measure case identification.

References:

https://cltri.gov.in/AboutLeprosy/NLEP_indicators.pdf

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 362

↑ *Back to this question in Part A*

@Neet_pg_bot

Q55: Which of the following statements accurately reflects the findings of the multivariate analysis presented in the table below, regarding the correlation between the risk of blindness and variables such as age, literacy rate, residence, and gender? Variables Odds ratio p-value Age <50y 1.1 <0.001 50-59y 1.2 <0.001 60-69y 1.5 <0.001 70-79y 1.6 <0.001 >80y 2.1 <0.001 Male 1.2 0.2 Female 0.3 <0.001 Rural 2.4 0.1 Urban 1 <0.001 Literate 0.4 <0.01 Illiterate 1.2 <0.01 1. The female population is at greater risk of developing blindness. 2. People dwelling in rural areas are at increased risk of developing blindness 3. The risk of developing blindness increases with age 4. Illiteracy leads to an increased risk of developing blindness (Q855321)

A. 2 and 3

B. 1 and 3

C. 1 and 2

D. 3 and 4

Correct Answer: D. 3 and 4

Explanation: The risk of developing blindness increases with age (3) : This is true . The odds ratios for each age group (>50 years) consistently increase, and all p-values are <0.001 , indicating a strong and statistically significant association between age and the risk of blindness. Illiteracy leads to an increased risk of developing blindness (4) : This is true . The odds ratio for illiterate individuals is 1.2, and the p-value is <0.01 , indicating a

statistically significant association between illiteracy and a higher risk of blindness. The female population is at greater risk of developing blindness (1) : This is false . The odds ratio for females is 0.3, which indicates a lower risk compared to males, as a value less than 1 indicates a protective effect for females. The p-value is significant (<0.001), further supporting this finding. People dwelling in rural areas are at increased risk of developing blindness (2) : This is partially true , but the p-value of 0.1 for rural residence suggests that the result is not statistically significant , despite the odds ratio of 2.4 indicating a higher risk. Since the p-value is not below 0.05, this association is not conclusive .

References:

Park's Textbook of Preventive and Social Medicine, 27th Edition, Page 86

↑ *Back to this question in Part A*

@Neet_pg_bot

Q56: What is the most appropriate measure of central tendency when there is a diverse range of values within a community? (Q793625)

A. Mean

B. Mode

C. Median

D. Standard deviation

Correct Answer: C. Median

Explanation: Correct Options C - Median: The median serves as the most accurate indicator of central tendency in groups where values span a wide spectrum. A data set's median is the value in the middle, with half of the values being greater than the median and the other half being less than the median. Extreme values or outliers, which have a significant impact on the mean, have no effect on the median. Incorrect Options Option A : Extreme values or outliers in the data set have an impact on the mean because they can significantly deviate the mean value from the majority of the data. Option B: Another way to measure central tendency is by using the mode, but this method is not appropriate for continuous data or data with a wide range of values. Option D : The standard deviation is not a measure of central tendency; rather, it is a measure of variability or spread in the data.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q57: What is the best way to use a graphical representation to illustrate patterns and changes in the occurrence of diarrheal disease within a specific region? (Q793749)

A. Line graph

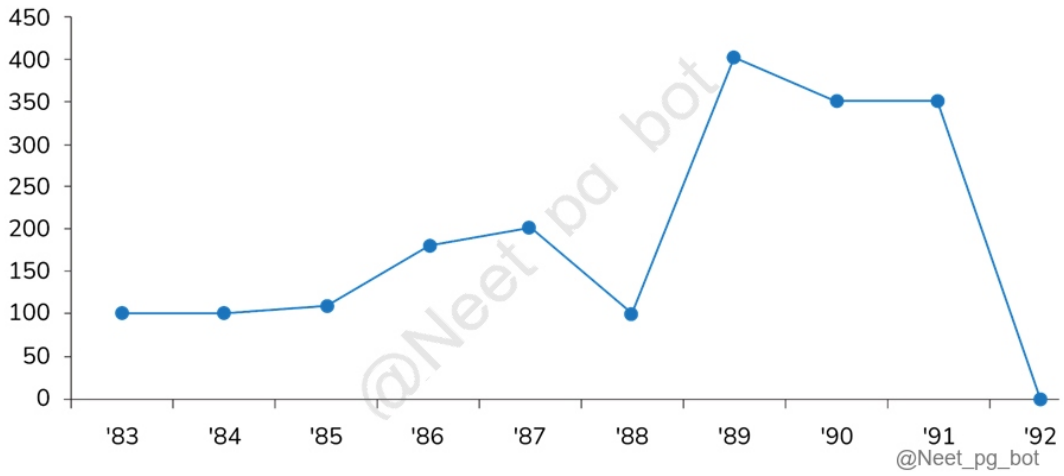
B. Histogram

C. Ogive

D. Tree diagram

Correct Answer: A. Line graph

Explanation: Correct Option A: Line graph A line graph is the best way to plot trends in the incidence of diarrheal disease in a given area. A line graph effectively displays trends in diarrheal disease incidence over time. It utilizes an X-axis for time (e.g., years) and a Y-axis for incidence rate (e.g., cases per 100,000). By connecting data points with lines, it provides a clear visualization of changing trends and patterns in disease incidence Incorrect Options: Option B: Histogram Histograms are useful for analyzing large datasets and identifying patterns or trends. Option C: Ogive An ogive, or cumulative frequency curve visually illustrates how cumulative frequency increases with rising variable values.. Option D: Tree diagram A tree diagram visually represents potential outcomes of a choice or process.



References:

Ref: Park’s textbook of preventive medicine, edition: 25

↑ *Back to this question in Part A*

@Neet_pg_bot

• [19_Miscellaneous] 064 Previous Year Questions

« Back to Folder Directory

[19_Miscellaneous] 064 Previous Year Questions — Quick Jump

Q1 (p. 1931) *Q2 (p. 1932)* *Q3 (p. 1933)* *Q4 (p. 1933)* *Q5 (p. 1934)* *Q6 (p. 1935)*
Q7 (p. 1937) *Q8 (p. 1937)* *Q9 (p. 1939)*

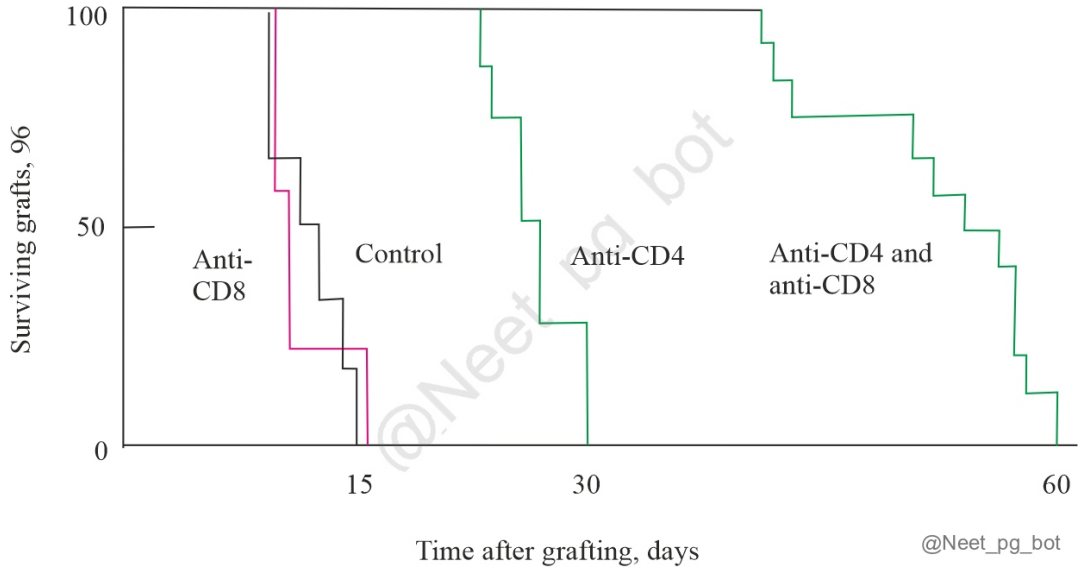
Q1: Choose the correct statement regarding graft survival: (Q839897)

A. Both CD4 and CD8 T cells play a role in graft rejection

B. Only CD8 T cells play a role in graft rejection

C. Only CD4 T cells play a role in graft rejection

D. Neither CD4 nor CD8 T cells play a role in graft rejection



Correct Answer: A. Both CD4 and CD8 T cells play a role in graft rejection

Explanation: Correct Option A - Both CD4 and CD8 T cells play a role in graft rejection: The given image shows a Kaplan Meier survival graph. On administrating both Anti-CD4 and Anti-CD8, the survival of the graft increases from 15 days to 60 days. This signifies that both CD4 and CD8 T cells are involved in graft rejection. Incorrect Options: Options B, C, and D- These statements are incorrect, as explained above.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: In a train accident, there were 74 dead, 64 were severely injured, 20 moderately injured and 12 mildly injured. Colour coding in triage, from highest to lowest priority is: (Q859434)

A. Green-Yellow- Red-Black

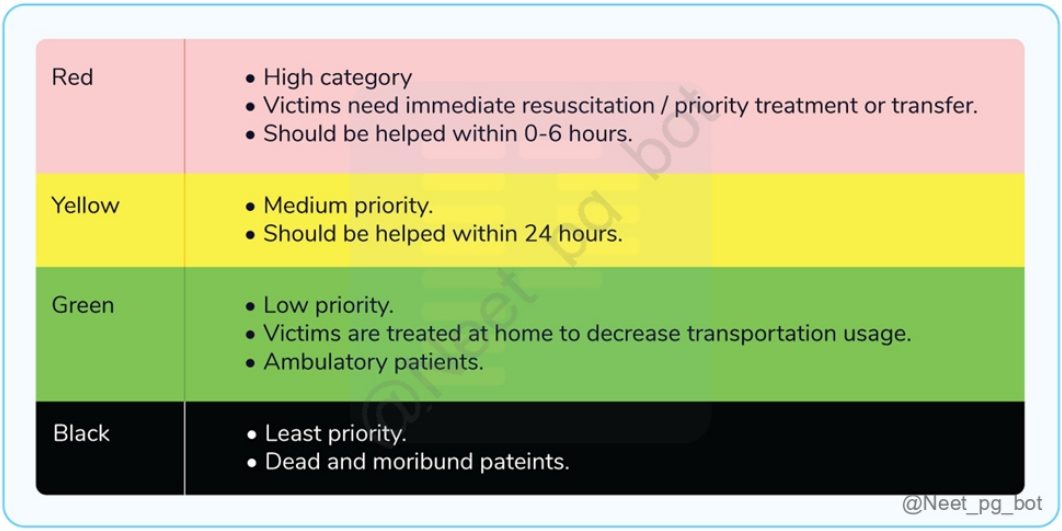
B. Yellow- Red-Green-Black

C. Black-Red-Yellow- Green

D. Red-Yellow-Green-Black

Correct Answer: D. Red-Yellow-Green-Black

Explanation: Triage: During a disaster, the quantity and severity of injuries overwhelm the operative capacity of the health facilities. Triage involves rapidly organizing the injured individuals based on the severity of their injuries and survival with prompt interventions. During triage, tagging should be done to each individual, including: Name Age Place of origin Triage category Diagnosis and Initial treatment. Color coding in triage: {{caption_text}} Types of triage: Reverse triage: Used in surges (bed scarcity) and during wars. Priority: Green → Yellow → Red. Simple Triage and Rapid Treatment (START): Done in remote or inaccessible areas. Laymen can start doing triage before rescue teams reach.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 923

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7472824/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: What is the likely cause of hepatocellular carcinoma in a factory worker employed in a groundnut factory who does not consume alcohol and has had a prolonged duration of employment? (Q859470)

A. Beta oxalyl amino alanine

B. Smoke from factory

C. Sanguinarine

D. Aflatoxins

Correct Answer: D. Aflatoxins

Explanation: Aflatoxicosis: Clinical features Features of hepatotoxicity (jaundice, hepatomegaly) Hepatocellular carcinoma Causative agent Infestation of Aspergillus flavus and Aspergillus parasiticus over stored rice, wheat, and corn Produce mycotoxins: aflatoxin B1 & G1 (both are hepatotoxic & carcinogenic) Risk factors Storage temperature of 11 to 37 degree Celsius Moisture content >16% Prevention Educating people Moisture content <10% during storage Incorrect Options Beta oxalyl amino alanine (Option A): Beta oxalyl amino alanine, also known as BMAA, is a neurotoxic amino acid that has been associated with the development of lathyrism, neurodegenerative diseases such as amyotrophic lateral sclerosis (ALS) and Parkinson's disease. It is not directly linked to hepatocellular carcinoma. Smoke from factory (Option B): While exposure to certain industrial pollutants and chemicals can contribute to the development of various cancers, including liver cancer, the given scenario specifically mentions the worker being non-alcoholic and working in a groundnut factory. Therefore, smoke from the factory is not the most probable cause in this case. Sanguinarine (Option C): It is a toxic alkaloid present in argemone oil. It causes epidemic dropsy. This option is incorrect.

References:

Park’s Textbook of Preventive and Social Medicine 27th edition, page 759, 771,772

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: What is the most common cause of jaundice in this newborn presenting with conjugated hyperbilirubinemia, intrahepatic cholestasis, high alkaline phosphatase, and the presence of eosinophilic, PAS-positive cytoplasmic granules in liver biopsy

specimens, suggestive of Alpha 1 AT deficiency? (Q859486)

A. Hypoplasia of the biliary tract

B. Neonatal hepatitis

C. Choledochal cyst

D. Physiological

Correct Answer: B. Neonatal hepatitis

Explanation: Neonatal hepatitis : Neonatal hepatitis is inflammation of the liver that occurs in newborn infants. It can be caused by various factors, including viral infections (such as hepatitis viruses), metabolic disorders, genetic conditions, and drug-induced liver injury. In the given scenario, the presentation indicative of neonatal hepatitis includes: Conjugated hyperbilirubinemia Intrahepatic cholestasis High alkaline phosphatase, Presence of eosinophilic PAS-positive cytoplasmic granules on liver biopsy Hypoplasia of biliary tract (Option A): Hypoplasia of the biliary tract refers to underdevelopment or incomplete formation of the bile ducts. It presents with pale stools and bile duct proliferation on biopsy, and can lead to impaired bile flow and subsequent cholestasis. However, it is not the most common cause of jaundice in the neonates. Choledochal cyst (Option C) : A choledochal cyst is a congenital anomaly characterized by dilatation of the bile ducts. It can cause bile flow obstruction and subsequently leads to conjugated hyperbilirubinemia, jaundice and an abdominal mass due to bile duct dilation. Unlike A1AT deficiency, it shows extrahepatic obstruction on imaging and lacks PAS-positive inclusions. Physiological (Option D): Physiological jaundice, is a normal and temporary condition that occurs in many newborns due to the immature liver's ability to process bilirubin efficiently. It presents with unconjugated bilirubinemia, not conjugated.

References:

Nelson Textbook of Pediatrics, 21st Edition, Page 2093-2094

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4100675/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: In a triage system, the patients with the highest priority and those who are deceased are identified by color coding. (Q859917)

A. Black and red

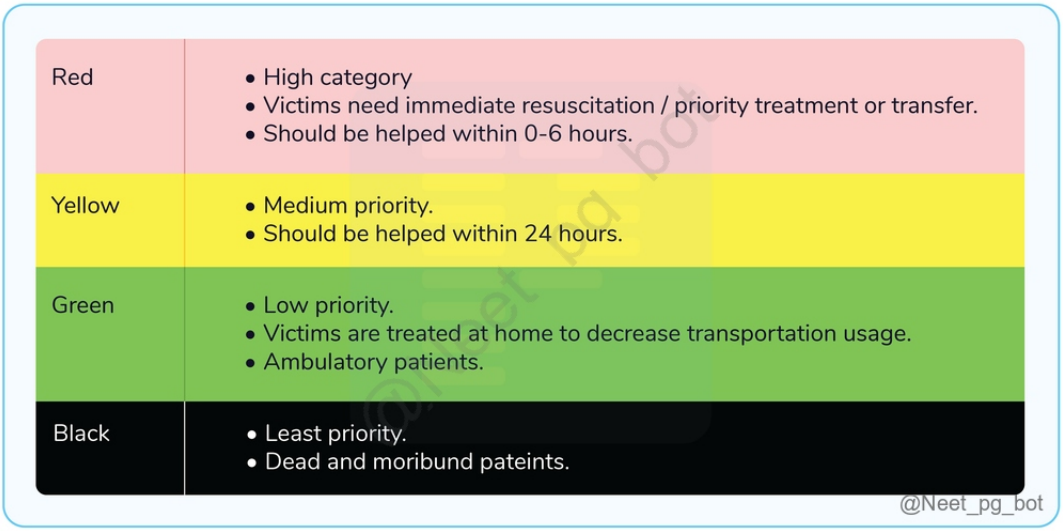
B. Both black

C. Red and black

D. Both red

Correct Answer: C. Red and black

Explanation: Triage: During a disaster, the quantity and severity of injuries overwhelm the operative capacity of the health facilities. Triage involves rapidly organizing the injured individuals based on the severity of their injuries and survival with prompt interventions. During triage, tagging should be done to each individual, including: Name Age Place of origin Triage category Diagnosis and Initial treatment. Color coding in triage: Types of triage: Reverse triage: Used in surges (bed scarcity) and during wars. Priority: Green→Yellow→Red. Simple Triage and Rapid Treatment (START): Done in remote or inaccessible areas. Laymen can start doing triage before rescue teams reach.



References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 923

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7472824/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: In a boarding school where students share the same canteen, one student experienced abdominal pain, jaundice, and fever. Subsequently, other students began showing similar symptoms. Which investigations should the local medical officer consider in order to arrive at a diagnosis? (Q859955)

A. IgA for hepatitis A

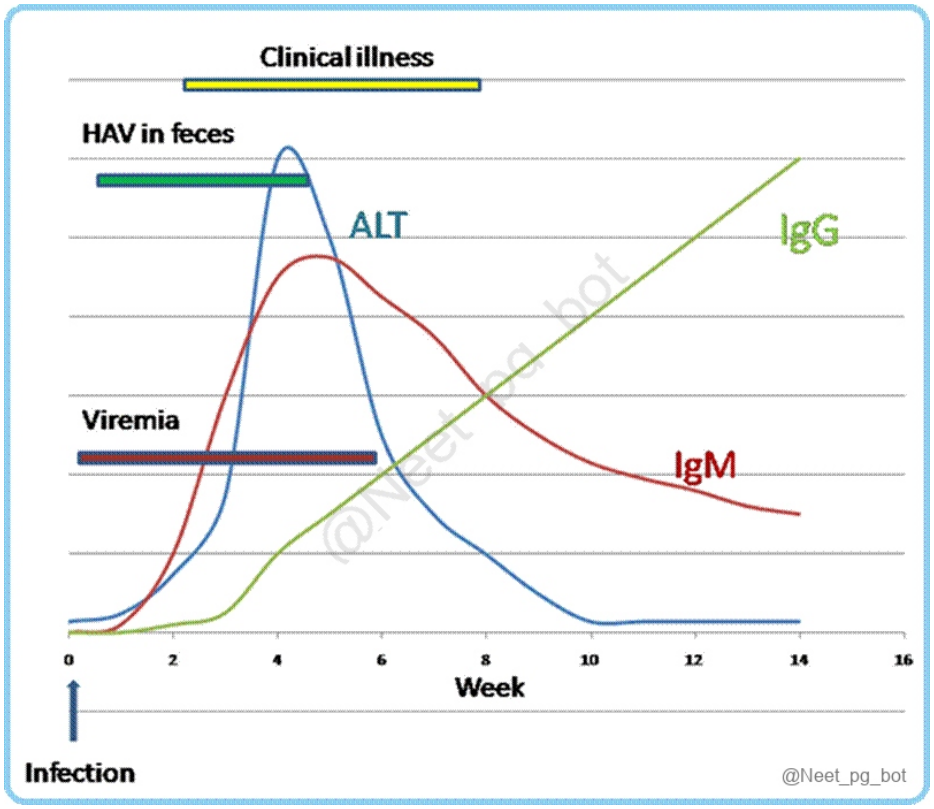
B. IgM for hepatitis A

C. IgM for hepatitis B

D. IgG for hepatitis B

Correct Answer: B. IgM for hepatitis A

Explanation: Hepatitis A is transmitted by the faecal-oral route. Hence the students can be suspected of acquiring Hepatitis A from the contaminated food. The diagnostic tests for Hepatitis A are a Stool sample, and an Anti HAV IgM antibody performed after 2 weeks of increase in the liver enzyme. Hepatitis A Virus (HAV) Most Common Cause of viral hepatitis in Children Most Common Cause of Acute Relapsing viral hepatitis Virus characteristics: HAV is a 27-nm, nonenveloped, single-stranded, positive-sense RNA virus, resistant to heat, acid, and ether. Mode of Transmission: Fecal-oral route. Incubation period: ~3–4 weeks. Pathogenesis: Replication is limited to the liver but found in the liver, bile, stools, and blood during the late incubation and pre-icteric phases. Faecal shedding, viremia, and infectivity decrease rapidly once jaundice appears. Clinical presentation: Asymptomatic cases Jaundice Cholestatic hepatitis Fulminant hepatitis - Acute liver failure especially in older adults or those with preexisting liver conditions. Does not lead to chronic liver disease. Diagnosis: Acute illness - anti-HAV IgM antibodies. (Option B) HAV RNA can persist in stools, liver, and serum for months after acute illness but is not correlated with persistent infectivity. Previous infection: IgG anti-HAV LFT: Elevated bilirubin, serum aminotransferases, and alkaline phosphatase (ALP). {{caption_text}} Treatment: Most cases are self-limiting No specific antiviral treatment Symptomatic management (10 % Dextrose) Prevention: Inactivated vaccination: Single antigen or in combination with hepatitis B Good sanitary conditions and measures IgA for hepatitis A (Option A): IgA is not specific to Hepatitis A and does not give accurate results. IgM for hepatitis B (Option C) and IgG for hepatitis B (Option D): Hepatitis A is transmitted by the faecal-oral route. Whereas hepatitis B is transmitted through blood or body fluids.



References:

Harrison’s Principle of Internal Medicine, 21st Edition, Page 2562, 2563, 2569, 2570, 2571

https://www.ncbi.nlm.nih.gov/books/NBK459290/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: What type of learning is demonstrated when a doctor instructs an intern on proper technique for performing the knee reflex, emphasizing its significance in clinical practice? (Q859970)

A. Cognitive learning

B. Psychomotor learning

C. Affective learning

D. Repeated learning

Correct Answer: B. Psychomotor learning

Explanation: Psychomotor learning refers to the acquisition of motor skills or physical movements through practice and repetition. In this scenario, the doctor is teaching the intern how to perform the knee reflex test, which involves a physical examination technique. The intern is expected to learn and develop the necessary motor skills to perform the knee reflex accurately. Cognitive learning (Option A): Cognitive learning refers to the acquisition of knowledge, understanding, or mental skills. Affective learning (Option C): Affective learning pertains to the acquisition of attitudes, values, or emotional responses. Repeated learning (Option D): Repeated learning is a generic term that doesn't specify the type of learning involved.

References:

Park's Textbook of Preventive and Social Medicine, 27th edition, page 982

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A 32-year-old man presents with multiple, symmetrical, hypopigmented skin lesions over his face, trunk, and limbs. The lesions are shiny with loss of sensation. He also has diffuse skin infiltration, giving a "leonine facies" appearance. Examination shows generalized thickening of peripheral nerves and numerous acid-fast bacilli arranged in globi on slit-skin smear. What is the most likely diagnosis? (Q859988)

A. Tuberculoid leprosy

B. Leishmaniasis

C. Borderline tuberculoid leprosy

D. Lepromatous leprosy



Correct Answer: D. Lepromatous leprosy

Explanation: The given image is Lepromatous Leprosy. It is one of the types of Leprosy and is characterized by widespread, poorly defined, shiny-surfaced, hypopigmented, and erythematous macules with normal sensation. Typical leonine features include a thickened forehead, lost brow hairs, and eyelashes (madarosis), a distorted nose, and thickened earlobes. Transmission of Mycobacterium leprae Source of Infection: Leprosy is solely a human disease. Infected individuals are the only source. Transmission Route: The precise route is unclear. Significant shedding of bacilli through nasal secretions. Possible transmission through the respiratory tract or skin . Classification of Leprosy Madrid Classification: Type Characteristics Lepromatous Leprosy Low host resistance, abundant bacilli in lesions, widespread lesions, higher transmission likelihood (Option D) . Tuberculoid Leprosy High resistance, limited well-defined skin lesions, minimal bacilli in the lesions (Option A ruled out). Dimorphous (Borderline) Characteristics of both lepromatous and tuberculoid forms, potential to shift between the two (Option C ruled out). Indeterminate Leprosy Early, unstable stage, may resolve spontaneously or progress to other forms. Leishmaniasis (Option B): The clinical features seen in the image given is not indicative of leishmaniasis.

References:

Brock Biology of Microorganisms 15th Edition, Page 895,

Textbook of Microbiology, Ananthanarayan & Paniker, 10th Edition, Page 372. 373.

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Installation and usage of sanitary latrines by general public constitutes which level of prevention: (Q860014)

A. Health promotion

B. Specific protection

C. Early diagnosis and treatment

D. Disability limitation and rehabilitation

Correct Answer: A. Health promotion

Explanation: Health promotion encourages healthy behaviors and environments. Installing sanitary latrines promotes hygiene and prevents diseases. Primary prevention includes: Health promotion: (Option A) Health education camps on exercise and lifestyle diseases. Mental health promotion and counselling in schools and colleges. Implementing strict laws against drinking and driving to prevent road traffic accidents due to impaired driving Specific protection: (Option B ruled out) Administration of MR vaccination to children prevents measles and rubella infection via active immunisation, as the risk of infection is high during childhood Iodisation of salt helps prevent endemic goitre, especially in the Himalayan region, as they lack iodine in their diet Level of Prevention Goals Examples Primordial To prevent the establishment of risk factors Lifestyle modification Health promotion Primary Interventions to prevent the onset of disease Vaccinations Health education Family planning Use of mosquito nets Pre-placement examinatio Secondary Early detection and prompt treatment of disease to prevent complications (Option C ruled out) Screening tests (e.g., mammograms, PAP smears) Self-examinations Health camps with screening DOTS for TB; ART for HIV; MDT for leprosy. Tertiary Interventions to manage and reduce complications of existing disease to prevent disability or death (Option D ruled out) Rehabilitation Physical therapy Chronic disease management programs Reconstructive surgery

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, Pg 48, 49

↑ *Back to this question in Part A*

@Neet_pg_bot

• [20_Biomedical Waste Management] 065 Biomedical Waste Management And Genetics And Health

« Back to Folder Directory

[20_Biomedical Waste Management] 065 Biomedical Waste Management And Genetics And Health — Quick Jump

Q1 (p. 1940)	*Q2 (p. 1942)*	*Q3 (p. 1943)*	*Q4 (p. 1944)*	*Q5 (p. 1945)*	*Q6 (p. 1946)*
Q7 (p. 1947)	*Q8 (p. 1948)*	*Q9 (p. 1949)*	*Q10 (p. 1949)*	*Q11 (p. 1950)*	*Q12 (p. 1951)*
Q13 (p. 1952)	*Q14 (p. 1953)*	*Q15 (p. 1954)*	*Q16 (p. 1955)*		

Q1: What is the following logo used to indicate in biomedical waste management? (Q841085)

A. Biohazard

B. Radiation Hazard

C. Recycling

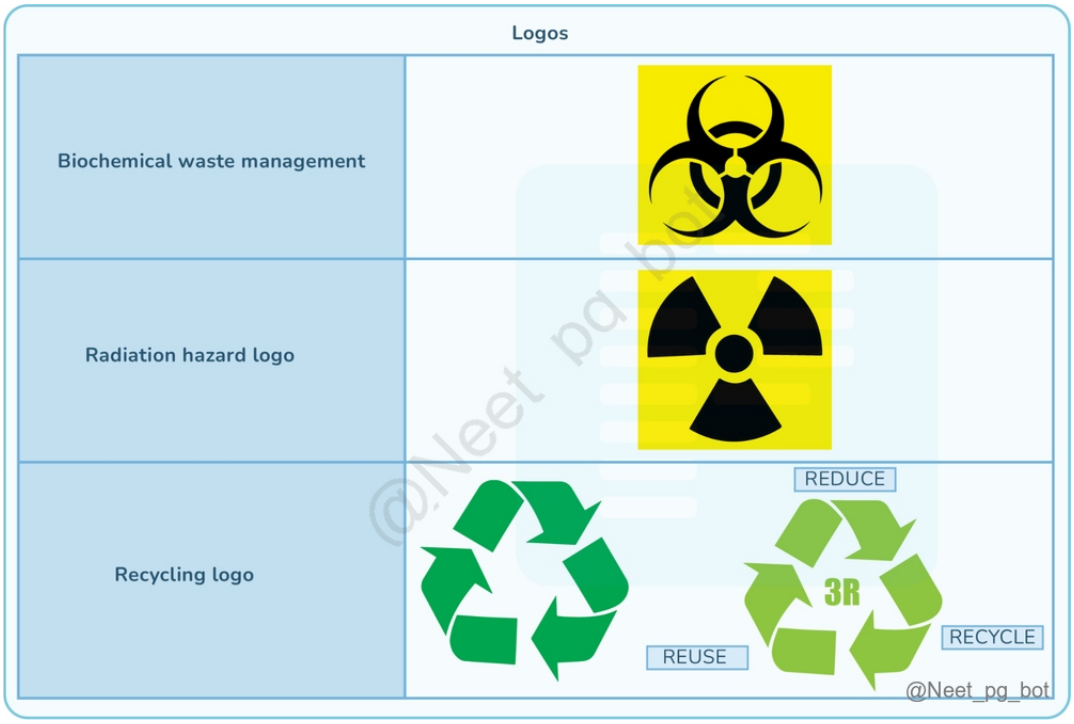
D. Toxic Hazard



Correct Answer: B. Radiation Hazard

- *Listen (English)*
- *Listen (Hindi)*

Explanation: Radiation Hazard: Involves materials emitting ionising radiation that can cause health issues like cancer and tissue damage. Biohazard or Biomedical waste or Biochemical waste includes chemicals used in labs, pathogens, viruses, bacteria, and other microorganisms that pose health risks. Recycling: Refers to the process of converting waste materials into reusable resources to reduce environmental impact. Toxic Hazard: Involves substances that can cause harmful effects, such as poisoning or chemical burns, through exposure or ingestion. Toxic hazard -





References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 920

Radiation hazard Logo-https://www.iaea.org/newscenter/news/how-are-universal-ionizing-radiation-symbols-used-around-the-world

Guidelines for Management of Healthcare Waste as per Biomedical Waste Management Rules, by Directorate General of Health Services Ministry of Health & Family Welfare

Guidelines for Management of Healthcare Waste as per Biomedical Waste Management Rules, 2016

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which color-coded container is used for disposing of infectious biomedical waste, such as contaminated dressings or swabs? (Q841089)

A. Yellow

B. Red

C. Blue

D. Black

Correct Answer: A. Yellow

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: As contaminated dressings or swabs are infectious, they fall into the yellow category. Colour Waste Type Type of bag or container to be used Method of disposal Yellow All infectious waste. Human anatomical waste. Animal anatomical waste Soiled waste (contaminated with blood, body fluids, dressings and swabs, blood bags). Expired or discarded medicines Chemical waste. Microbiological and other clinical laboratory waste. Yellow coloured non chlorinated plastic bags. Incineration Plasma pyrolysis Deep burial Red Contaminated waste (recyclable) : Tubing, bottles, intravenous tubes and sets, catheters, urine bags , syringes (without needles), vacutainers and gloves. Red coloured non chlorinated plastic bags. Autoclaving or microwaving/hydroclaving, and then sent for recycling (not to landfill). Blue Glassware: Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic waste. Metallic body implants . Cardboard boxes with blue coloured markings. Disinfection or autoclaving/microwaving, hydroclaving and then sent to recycling.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 918 - 920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: Which color plastic bag would expired medications be discarded in according to the biomedical waste management guidelines? (Q841092)

A. Red

B. Blue

C. Yellow

D. White

Correct Answer: C. Yellow

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Color Type of waste Example of waste Treatment and disposal Yellow (Option C) Human anatomical waste. Animal anatomical waste. Soiled waste. Discarded or expired medicine. Microbiology, biotechnology, and other clinical laboratory waste. Chemical waste. Chemical liquid waste. Placenta. Post-operative body parts. Plaster of Paris (POP). Pathological waste. Cotton waste. Dressing materials. Beddings.

Body fluid contaminated paper and cloth. Face mask, cap, shoe cover, and head cover. Cytotoxic, expired, and discarded medicines. Microbiology and biotechnology lab waste. Blood bag Vacutainers with blood Incineration (high-temperature dry oxidation method) Plasma pyrolysis. Deep burial. Red (Option A) Contaminated (recyclable) medical waste RPT → Rubber, plastics, and tubes Syringes without needles Fixed needle syringes with their needle cut I.V. Set Catheters Gloves: soiled, unsoiled Urine bag Dialysis kit IV bottles Tubing Bottles Vacutainers with needle cut Vacutainers without blood ELISA plates and vials not containing blood samples Autoclaving or Microwaving/Hydroclaving followed by shredding or mutilation and waste sent to registered recyclers or for energy recovery/road making. Plastic waste should not be sent to landfill sites White (Option D) Waste sharps Needles Syringes with fixed needles Blades Scalpel Trocar cannula Insulin pen needle Autoclaving or Dry Heat Sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete. Blue (Option B) Glassware Metallic Body Implants Glass: Broken glass Ampoules Lab slides Metals: Nails Metallic body implants Scissors Includes broken or discarded and contaminated But discarded vaccine vial with vaccine → yellow container Disinfection Methods: Cleaning with detergent + Sodium Hypochlorite soaking Autoclaving / Microwaving / Hydroclaving · After disinfection, send for recycling

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg: 918-920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Personal Protective Equipment (PPE) like Face shields, goggles, gloves and hazmat suits are disposed of in which colour bin? (Q841093)

A. Blue

B. Yellow

C. Red

D. White

Correct Answer: C. Red

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Most personal protective equipment (PPE), like shoe covers, head covers, disposable linen gowns, and masks, is disposed of in a yellow bag, whereas face shields, goggles, gloves, and hazmat suits are disposed in a red bag as they are considered infected plastic waste. Category Type of BMW Nature of Treatment Yellow Used masks, headcovers/caps, shoe covers, disposable linen gowns Waste contaminated with body/body fluids of COVID-19 patients. Incineration/plasma pyrolysis or deep burial. Red PPE such as goggles, face shields, splash proof aprons, plastic coveralls, Hazmat suits, nitrile gloves. Autoclaving or microwaving/hydroclaving, and then sent for recycling (not to landfill). White White sharps, including metals. Auto or dry heat sterilization followed by shredding and mutilation or encapsulation. Blue Glassware, metallic body implants. Disinfection or

autoclaving/microwaving, hydroclaving and then sent to recycling.

References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg:918-920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: How should vacutainers with blood be disposed in a healthcare facility? (Q841094)

A. Yellow bag

B. Red bag

C. Blue bag

D. Black bag

Correct Answer: A. Yellow bag

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Red Bag Yellow Bag Syringe without needles. Fixed needle syringes with their needle cut. IV set. Catheters. Gloves (soiled or unsoiled). IV bottles. Tubing's. Vacutainers with needle cut. Vacutainers without blood ELISA plate and vials not containing blood samples. Post-operative body parts. Plaster of Paris (POP). Pathological waste. Cotton waste. Dressing materials. Beddings. Body fluid contaminated paper and cloth. Face mask, cap, shoe cover and head cover. Cytotoxic, expired and discarded medicines. Blood bag Vacutainers with blood





References:

Park’s Textbook of Preventive and Social Medicine 27th Edition Pg:918-919

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Which of the following chemical agents is used in the management of a mercury spill? (Q841096)

A. Sodium hypochlorite

B. Sodium thiosulphate

C. Sodium sulphate

D. Sodium nitrate

Correct Answer: B. Sodium thiosulphate

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Sodium thiosulphate reacts with mercury ions to form a complex that is less toxic and less soluble and hence used in the management of mercury spill Management of mercury spill: Switch off fans Remove anything metallic from one's body Wear PPE Never broom Use 2 X-ray films or 2 plastic boards to collect the mercury Dispose of decontaminated material in leak-proof, sealable plastic bags and dispose as mercury waste Clean floor with sodium thiosulphate

References:

https://pubmed.ncbi.nlm.nih.gov/25086412/

https://cdn.who.int/media/docs/default-source/wash-documents/wash-in-hcf/training-modules-in-health-care-waste-management/module-20

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: A rural clinic generates biomedical waste daily with no nearest biomedical waste treatment facility nearby. What is the most appropriate method for disposing of biomedical waste in this situation? (Q841106)

A. Landfills

B. Deep burial

C. Use of disinfectants and dispose with municipal waste

D. None of the above

Correct Answer: B. Deep burial

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Deep Burial: Indication: No common biomedical waste treatment facility (CBWTF) is available nearby. Standards for a Deep Burial Pit: It must be dug roughly 2 meters deep . It should be located away from any water body or drinking water source to prevent leaching. Each layer of waste should be covered with a layer of lime and then soil to facilitate decomposition and discourage scavengers. The pit should be secured with a wire fence or a concrete cover. Common practice in PHCs. Landfills (Option A): Standard municipal landfills are not designed to handle infectious biohazards. Disposing of medical waste (like used syringes or blood-soaked gauze) in a regular landfill risks contaminating groundwater and exposes "rag-pickers" or animals to needle-stick injuries and pathogens. Risk: Spread of diseases like Hepatitis B, C, and HIV into the community. Use of disinfectants and dispose with municipal waste (Option C) does not ensure proper treatment of biomedical waste and may lead to contamination of municipal waste streams, posing risks to waste handlers and the public.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Page 919

↑ *Back to this question in Part A*

@Neet_pg_bot

Q8: A patient involved in an accident has sustained multiple injuries and a large amount of blood spills onto the floor. Which of the following is used for managing body spills? (Q841109)

A. 0.1% sodium hypochlorite solution used

B. 1% sodium thiosulphate solution used

C. 10% sodium hypochlorite solution used

D. 10% sodium thiosulphate solution used

Correct Answer: C. 10% sodium hypochlorite solution used

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Body spill refers to bodily fluids being accidentally spilled or released onto a surface, common in healthcare settings. Sodium hypochlorite is highly effective as a disinfectant against a broad spectrum of pathogens, including bacteria, viruses, and fungi. Body spill management: 0.1% sodium hypochlorite solution used. 10% sodium hypochlorite solution used for larger spills.

References:

https://pubmed.ncbi.nlm.nih.gov/15292898/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q9: Match the following parameters with their correct values for standard autoclaving procedures. Temperature Pressure Time a. Not less than 121°C i. 52 pounds/square inch 1. 60mins b. Not less than 135°C ii. 15 pounds/square inch 2. 30 mins c. Not less than 149°C iii. 31 pounds/square inch 3. 45 mins (Q841118)

A. a-ii-2

B. b-iii-1

C. c-i-3

D. c-i-2

Correct Answer: D. c-i-2

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Different Autoclaving parameters: Temperature (°C) Pressure (psi) Time (minutes) Not less than 121°C 15 pounds/square inch 60 minutes Not less than 135°C 31 pounds/square inch 45 minutes Not less than 149°C 52 pounds/square inch 30 minutes

References:

https://cpcb.nic.in/uploads/Projects/Bio-Medical-Waste/Guidelines_healthcare_June_2018.pdf

https://mpcb.mizoram.gov.in/uploads/attachments/f99c2afbe16ee2e6a874f8ea96329697/pages-32-bmw-standards.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q10: Which of the following statements is false ? (Q841122)

A. The best way to dispose of sputum is incineration

B. Inertization includes mixing waste with cement and other substances before disposal

C. Contents of red bag should be incinerated

D. Screw Feed Technique is contraindicated for radiological waste

Correct Answer: C. Contents of red bag should be incinerated

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The contents of red bags should not be incinerated as they contain cadmium which is explosive. Inertization: Mainly used for Pharmaceutical waste. Mixing waste with cement and other substances before disposal. (Option B) Mixture includes: 65% pharmaceutical work. 15% lime. 15% cement. 5% water. Screw feed technique: Biomedical waste + Auger + Heat + Rotate. Weight reduced by 20-25%. Volume reduced by 80%. Used for infectious waste and sharp waste. Contraindicated for radiological waste, cytological waste and pathological waste . (Option D) Incineration: High-temperature, dry oxidation process that reduces organic and combustible waste to inorganic, incombustible matter. Reduction of waste volume (85 - 95%) and weight (30%). The best way to dispose of sputum is incineration as it falls under infectious bodily waste. (Option A) Incineration is not suitable for Pressurized gas containers. Reactive chemicals Halogenated plastics (PVC). Waste with high mercury (eg thermometer) Sealed ampoules containing heavy metals and sharps. Contents of the red bag, as they contain cadmium which is explosive. (Option C)

References:

Park’s Textbook of Preventive and Social Medicine, 27th Edition, Pages 916-918

↑ *Back to this question in Part A*

@Neet_pg_bot

Q11: In a home quarantine setting for a COVID-19 patient, which coloured bags should be used for disposing of biomedical waste according to the specified protocol? (Q841124)

A. Red bag for used masks and tissues, yellow bag for rapid COVID-19 antigen test kits

B. Yellow bag for used masks and tissues, black bag for general waste

C. Black bag for used masks and tissues, yellow bag for rapid COVID-19 antigen test kits

D. Red bag for used masks and tissues, black bag for general waste

Correct Answer: B. Yellow bag for used masks and tissues, black bag for general waste

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: COVID-19 patients quarantined at home should use yellow bags for biomedical waste including used masks, tissues, and other items contaminated with body fluids; Black bag for general waste like food wrappers, paper. Segregation of Biomedical Waste COVID-19 waste disposal: Category 1 (Yellow Bags): Used masks,

gloves, caps, goggles, shoe covers, disposable linen (bed sheets, pillow covers), etc., from isolation wards and quarantine areas. Category 2 (Red Bags): Used COVID-19 test kits, contaminated PPE, disposable medical devices, sharps, etc. Category 3 (Black Bags): General waste like food wrappers, paper, and other non-infectious items from quarantine areas. Segregation of COVID-19 waste at Point of Generation: Biomedical waste and general solid waste should be segregated immediately where it is generated, such as in wards or isolation rooms. Segregation of COVID-19 waste in Home Quarantine: COVID-19 patients quarantined at home should use two colored bags: Black Bag: For general waste like food wrappers, paper. Yellow Bag: For biomedical waste including used masks, tissues, and other items contaminated with body fluids.

References:

cpcb.nic.in/uploads/Projects/Bio-Medical-Waste/BMW-GUIDELINES-COVID_1.pdf

↑ *Back to this question in Part A*

@Neet_pg_bot

Q12: Which term refers to the study and practice of improving the genetic quality of the human population through genetic manipulation? (Q841329)

A. Euthenics

B. Eugenics

C. Epigenetics

D. Ethnology

Correct Answer: B. Eugenics

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Eugenics is a field that seeks to improve the genetic composition of a human population by encouraging the reproduction of people with desirable traits (positive eugenics) and discouraging or preventing the reproduction of people with undesirable traits (negative eugenics). Positive Eugenics The goal is to increase the prevalence of desirable traits in the population over generations. This can be encouraged through various means such as: Financial and political stimuli Targeted demographic analyses In vitro fertilisation Egg transplants Gene cloning Negative Eugenics The objective is to reduce the frequency of hereditary disease and disability in the community. This could involve measures such as: Abortions Sterilizations Other methods of family planning Euthenics (Option A) focuses on improving human health and well-being by enhancing environmental and living conditions rather than altering genetic traits. Epigenetics (Option C) : Study of changes in gene expression caused by mechanisms other than changes in the underlying DNA sequence. Ethnology (Option D) : Scientific study of the origins and cultures of different races and ethnicities.

References:

Park’s Textbook of Preventive and Social Medicine, 27th Ed. Pg. 954

↑ *Back to this question in Part A*

@Neet_pg_bot

Q13: Which statement does not align with the Hardy-Weinberg Principle? (Q841330)

A. Frequency remains constant through generations

B. Gene pool remains stable

C. Allele frequencies vary within a species

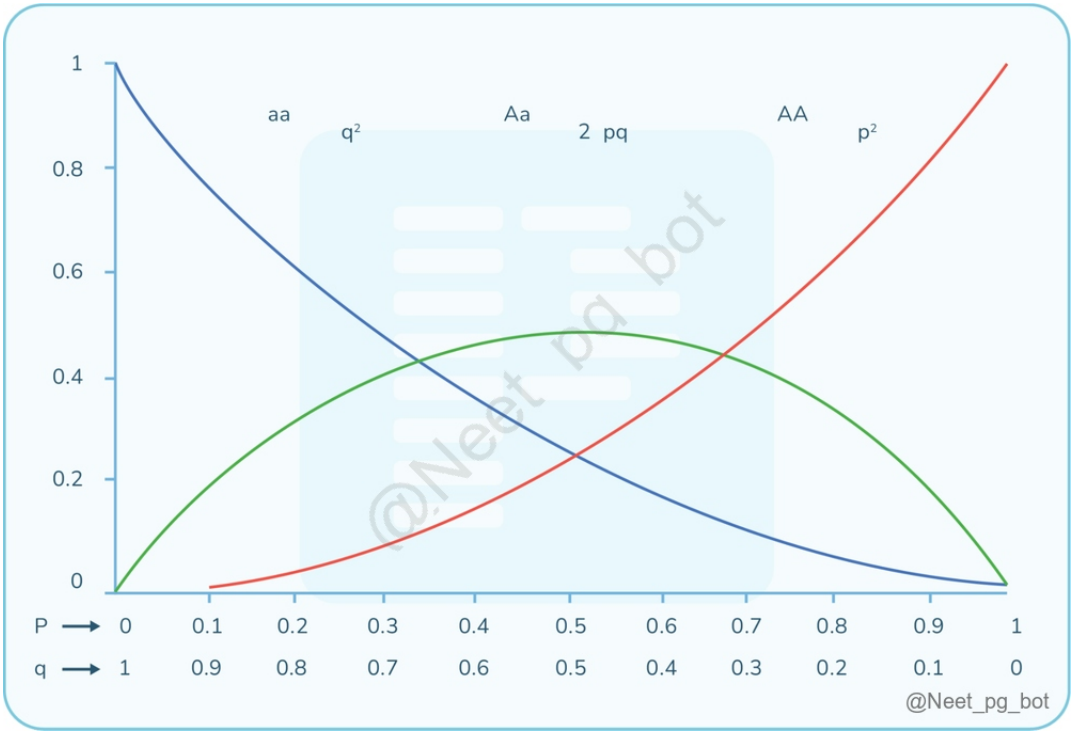
D. Presence of random mating and a large population size

Correct Answer: C. Allele frequencies vary within a species

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Hardy-Weinberg law states that the genotype and allele frequencies remain constant in a population from generation to generation in the absence of evolutionary forces. It assumes that the population is stable and large, random mating occurs, no mutations affect the gene pool, no migration occurs, and natural selection does not act on the alleles. Hardy-Weinberg Principle: provides a quantitative framework for predicting genotype frequencies based on allele frequencies in a non-evolving population. The formula is expressed as: p 2 +2pq+q 2 = 1, where p and q represent the frequencies of two alleles (denoted as dominant and recessive), and p 2, 2pq,and q 2 represent the frequencies of the three possible genotypes. Frequency of homozygous dominant genotype + frequency of homozygous recessive genotype + frequency of heterozygous genotype = 1



References:

www.ncbi.nlm.nih.gov/pmc/articles/PMC2475721/

www.nature.com/scitable/knowledge/library/the-hardy-weinberg-principle-13235724/

↑ *Back to this question in Part A*

@Neet_pg_bot

Q14: Which of the following factors can lead to deviations from the Hardy-Weinberg equilibrium? (Q841331)

A. Genetic drift

B. Natural selection

C. Mutation

D. All of the above

Correct Answer: D. All of the above

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: The Hardy-Weinberg equilibrium describes an idealised situation where population and gene pool remain constant over generations in the absence of evolutionary influences. Deviations from this equilibrium can occur due to various factors: Non-random mating (assortative mating) New mutations - Introducing new alleles into the gene pool Genetic drift - Random changes in allele frequencies due to chance events Gene flow - Natural selection - mortality selection, fecundity selection Small population Migration Dynamic populations

References:

K.Park's Textbook of Preventive and Social Medicine, 27th Ed, Pg.954

↑ *Back to this question in Part A*

@Neet_pg_bot

Q15: Which of the following best describes prospective genetic counselling? (Q841332)

A. Identifying heterozygous individuals for a specific defect through screening

B. Seeking genetic advice after a hereditary disorder has already occurred in the family

C. Discussing options such as contraception and termination of pregnancy based on genetic information

D. Counselling individuals with congenital anomalies, mental retardation, or inborn errors of metabolism

Correct Answer: A. Identifying heterozygous individuals for a specific defect through screening

■ *Listen (English)*

■ *Listen (Hindi)*

Explanation: Prospective genetic counselling involves identifying individuals who are carriers (heterozygous) through screening processes for a genetic defect before any disorder occurs. Genetic counselling is a process that involves evaluating family history and genetic information to provide individuals and families with information about their genetic health and risks. It can be prospective or retrospective. Prospective Genetic Counselling Retrospective Genetic Counselling Seeking genetic advice before the occurrence of a hereditary disorder Seeking genetic advice after a hereditary disorder has occurred (Option B) Identify heterozygous individuals and explain the risk of having affected children if they marry another carrier, Prevention and risk assessment. Methods suggested: Contraception (Option C) Pregnancy termination (Option C) Sterilisation Applications: Sickle cell anaemia, thalassemia Applications: Counselling about Congenital abnormalities, Mental retardation, inborn errors of metabolism, psychiatric illnesses. (Option D) Prevention and risk assessment Provide guidance and management after the disorder has manifested

References:

K.Park's Textbook of Preventive and Social Medicine, 27th Ed, Pg.955

↑ *Back to this question in Part A*

@Neet_pg_bot

Q16: Which of the following waste types is not suitable for disposal by incineration? (Q845081)

A. Pathological waste

B. Cytotoxic waste

C. Pressurized gas containers

D. Sharp waste

Correct Answer: C. Pressurized gas containers

Explanation: Incineration is a high temperature dry oxidation method that converts organic and combustible matter into inorganic, incombustible matter, significantly reducing both its volume and weight. This process is typically chosen for waste that cannot be recycled, reused, or disposed of in a landfill site. Incineration is not suitable for: Pressurized gas containers Large amount of reactive chemical wastes Silver salts and photographic or radiographic wastes Halogenated wastes such as PVC Wastes with high mercury or cadmium content, such as broken thermometers, used batteries Sealed ampoules or ampoules containing heavy metals

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 916

↑ *Back to this question in Part A*

@Neet_pg_bot

• [20_Biomedical Waste Management] 066 Previous Year Questions

« Back to Folder Directory

[20_Biomedical Waste Management] 066 Previous Year Questions — Quick Jump

Q1 (p. 1956) *Q2 (p. 1957)* *Q3 (p. 1957)* *Q4 (p. 1958)* *Q5 (p. 1959)* *Q6 (p. 1960)* *Q7 (p. 1961)*

Q1: In which of the following should a cotton swab with pus be discarded? (Q866761)

A. Yellow chlorination bag

B. Yellow non-chlorination bag

C. Red chlorination bag

D. Red non-chlorination bag

Correct Answer: B. Yellow non-chlorination bag

Explanation: Cotton swab with pus = soiled waste (items contaminated with blood, body fluids, pus, etc.). Soiled waste → Yellow category (non-chlorinated plastic bags). Chlorination is avoided for biodegradable waste like cotton, gauze, bandages, etc., as these are incinerated. Biomedical Waste Management Summary Fetus, organ, tissue, soiled cotton, gauze, dressing, bandages, casts, plasters, IUD, expired/discarded medicine, cytotoxic waste, body secretions e.g. sputum, pus, feces, X-ray developer fluids, disinfectants, linens, beddings, mattress, gowns, culture plates, blood bags, blood transfusion sets, live vaccine vial, blood products, masks, shoe cover, head cover: Yellow bag for incineration, plasma pyrolysis, and deep burial. Recyclable plastics, tubes, vacutainers without blood, syringes without needles, urobags, catheters, Ryle's tubes, IV drip sets, face shields, goggles: Red bag. Sharps and other metals: White bag. Orthopaedic implants, glassware, artificial pacemaker: Blue bag. Yellow chlorination bag (Option A): Not used; yellow category waste is incinerated, so chlorination is unnecessary. Red chlorination bag (Option C): The red category is for contaminated recyclable waste (e.g., tubing, catheters), not soiled waste. Red non-chlorination bag (Option D): Still incorrect category for pus-soaked cotton.

Color	Waste type	Method of disposal
Yellow	• Infectious. • May or may not be pretreated.	Incineration/plasma pyrolysis/deep burying
Red	• Infectious. • Rubber, plastic, tube. • No pretreatment. (subject to autoclave/hydro clave)	Recycling or reuse (road making)
Blue	• Glass and metallic implants. • No pretreatment.	Recycling or reuse.
White	• Sharps. • No pretreatment.	Recycling or reuse after shredding.

@Neet_pg_bot

↑ *Back to this question in Part A*

@Neet_pg_bot

Q2: Which among the following logos will be seen in a contaminated biomedical waste management plant? (Q866772)

Correct Answer: Unknown

Explanation: A contaminated biomedical waste management plant handles infectious and hazardous materials → marked with the biohazard logo This symbol is internationally recognized for infectious agents and materials that pose a threat to humans or the environment. Universal recycling symbol (Option B): Used for recyclable materials, not related to infectious waste. Radiation hazard symbol (Option C): Indicates radioactive materials High voltage symbol (Option D): Warns of electrical hazards, not used for waste categorization.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q3: During a field visit to monitor training given to an ANM (Auxiliary Nurse Midwife) on safe immunization practices, you observe that she has used a syringe with a needle, a vaccine vial, and a cotton swab. After completing the immunization, which of the following statements about biomedical waste disposal is correct? (Q866798)

A. The syringe with the needle should be disposed of in a black translucent container

B. The used vaccine vial should be discarded in a blue bag

C. A used cotton swab should be discarded in a red bag

D. The needle should be bent and thrown in a red bag

Correct Answer: B. The used vaccine vial should be discarded in a blue bag

Explanation: Used or expired vaccine vials are considered glass waste and are disposed of in puncture-proof blue containers or blue bags for recycling or proper treatment. Exception: Contaminated with cytotoxic waste - yellow Syringes with needles go into white translucent puncture-proof containers without removing the needle, cotton swabs with blood/body fluids go in yellow bags, and needles should never be bent or broken before disposal, as it

increases the risk of needle-stick injury. Item Waste Category Disposal Container/Bag Notes Syringe with needle Sharps White translucent container (puncture-proof) Needle not removed, container disinfected before disposal Used vaccine vial (glass) Glass waste Blue puncture-proof box/bag After ensuring vial is empty/expired Cotton swab (contaminated) Infectious waste Yellow bag If with blood/body fluids Plastic syringe without needle Contaminated recyclable Red bag For autoclaving/microwaving before recycling Biomedical Waste Management Summary Fetus, organ, tissue, soiled cotton, gauze, dressings, bandages, casts, plasters, IUD, expired/discarded medicines, cytotoxic waste, body secretions e.g. sputum, pus, feces, X-ray developer fluids, disinfectants, linens, beddings, mattress, gowns, culture plates, blood bags, blood transfusion sets, live vaccine vial, blood products, masks, shoe cover, head cover: Yellow bag for incineration, plasma pyrolysis, and deep burial. Recyclable plastics, tubes, vacutainers without blood, syringes without needles, urobags, catheters, Ryle's tubes, IV drip sets, face shields, goggles: Red bag. Sharps and other metals: White bag. Orthopaedic implants, glassware, artificial pacemaker: Blue bag. The syringe with the needle should be disposed of in a black translucent container (Option A): Incorrect; sharps go into white translucent puncture-proof containers, not black. Black is for discarded medicines, cytotoxic drugs, or general waste in older systems, but not for sharps under current BMWM rules. A used cotton swab should be discarded in a red bag (Option C): Incorrect; contaminated cotton swabs go in yellow bags, not red. Red is for contaminated recyclable plastic items. The needle should be bent and thrown in a red bag (Option D) : Incorrect and unsafe; bending needles increases needle-stick risk and sharps never go into red bags.

Color	Waste type	Method of disposal
Yellow	• Infectious. • May or may not be pretreated.	Incineration/plasma pyrolysis/deep burying
Red	• Infectious. • Rubber, plastic, tube. • No pretreatment. (subject to autoclave/hydro clave)	Recycling or reuse (road making)
Blue	• Glass and metallic implants. • No pretreatment.	Recycling or reuse.
White	• Sharps. • No pretreatment.	Recycling or reuse after shredding.

@Neet_pg_bot

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q4: Which of the following combination of biomedical waste management is correct regarding the disposal of an Expired tablet? (Q820557)

A. Red bag - hydroclaving

B. Blue bag - incineration

C. Yellow bag- incineration

D. Yellow bag - burial

Correct Answer: C. Yellow bag- incineration

Explanation: Biomedical waste, including expired tablets and pharmaceuticals, needs to be disposed of properly to prevent environmental contamination and health hazards. The correct method for the disposal of expired tablets is incineration, which ensures complete destruction of the pharmaceutical substances. Yellow bag - incineration: Yellow bags or containers are used for the collection of biomedical waste that requires incineration. This waste includes pharmaceuticals, chemicals, and other hazardous materials. Incineration is a high-temperature process that destroys the drugs, reducing the chance of environmental contamination. Incorrect Options: Option A. Red bag - hydroclaving: Red bags typically signify medical waste that is potentially infectious. Hydroclaving is a method that uses high-pressure steam to sterilize infectious waste, but it may not be the ideal method for pharmaceutical disposal, especially for large quantities like expired tablets. Option B. Blue bag - incineration: Blue bags are often used for recyclable materials. Incineration is the correct method for pharmaceutical disposal, but blue bags are not typically associated with biomedical waste disposal. Option D. Yellow bag - burial: Burial of pharmaceuticals or biomedical waste is not a recommended or acceptable method of disposal due to the risk of groundwater contamination and environmental pollution.

References:

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↑ *Back to this question in Part A*

@Neet_pg_bot

Q5: As per biomedical waste management guidelines, in which colored bag should pacemakers be discarded? (Q856458)

A. Yellow

B. White

C. Black

D. Blue

Correct Answer: D. Blue

Explanation: According to the Biomedical Waste Management Guidelines , pacemakers should be disposed of in the blue colored bag, which is designated for non-infectious, recyclable, and discarded electronics . The blue bag is typically used for items like discarded electronics , including pacemakers, that are not considered hazardous or infectious but need to be disposed of safely due to their electronic and metal components. Yellow (Optio A) : Yellow bags are used for infectious waste such as human tissues, body fluids, and soiled items. White (Option B) : White bags are typically used for puncture-proof items (sharps like needles) in transparent containers , not for pacemakers. Black (Option C) : Black bags are used for general waste that is non-hazardous, but pacemakers are classified under non-infectious medical waste that needs special handling.

References:

Park’s Textbook of Preventive and Social Medicine, Edition 27, Page 919

↑ *Back to this question in Part A*

@Neet_pg_bot

Q6: Cytotoxic drug is disposed in: (Q859179)

A. Yellow bag

B. Red bag

C. Blue bag

D. Black bag

Correct Answer: A. Yellow bag

Explanation: Cytotoxic drugs, also known as antineoplastic or chemotherapy drugs, are disposed of in a specialized yellow bag. These drugs are considered hazardous substances due to their toxic properties. The yellow bag is designed specifically for collecting and disposing hazardous or cytotoxic waste, including unused or expired drugs, empty drug vials, IV tubing, and other items contaminated with cytotoxic drugs. Color Type of waste Example of waste Treatment and disposal Yellow (Option A) Human anatomical waste. Animal anatomical waste. Soiled waste. Discarded or expired medicine. Microbiology, biotechnology and other clinical laboratory waste. Chemical waste. Chemical liquid waste. Placenta. Post-operative body parts. Plaster of Paris (POP). Pathological waste. Cotton waste. Dressing materials. Beddings. Body fluid contaminated paper and cloth. Face mask, cap, shoe cover and head cover. Cytotoxic, expired and discarded medicines. Microbiology and biotechnology lab waste. Blood bag Vacutainers with blood Incineration. Plasma pyrolysis. Deep burial. Red (Option B ruled out) Contaminated waste that is recyclable. Syringe without needles. Fixed needle syringes with their needle cut. IV set. Catheters. Gloves (soiled or unsoiled). Urine bag. Dialysis kit. IV bottles. Tubing's. Bottles. Vacutainers with needle cuts. Vacutainers without blood. ELISA plates and vials not containing blood samples. Autoclaving or microwaving/ hydroclaving followed by shredding or mutilation and waste set to registered recyclers or for energy recovery/road making. Plastic waste should not be sent to landfill sites. White Waste Sharps Needles Syringes with fixed needles Blades Scalpers Trocar cannula Insulin pen needle Puncture proof , Leak proof, Tamper proof containers Autoclaving or dry heat sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete Or sent for final disposal to iron foundries or sanitary landfills or designated concrete waste sharp pit Blue (Option C ruled out) Glassware or metallic body implants. Includes broken or discarded glass and metallic objects that are contaminated. Glass: Broken glass. Ampoules. Lab slide Metals: Nails. Metallic body implants. Scissors. Artificial pacemakers. Cardboard boxes with blue colored markings or blue coloured puncture-proof and tamper-proof containers. Disinfection (cleaning with detergent and soaking in sodium hypochlorite) or autoclaving or microwaving or hydroclaving and then sent for recycling. Black bag (Option D): Black bags are commonly used for general waste or municipal solid waste that does not require specialized handling or disposal. Similar to blue bags, black bags are not appropriate for the disposal of cytotoxic drugs due to their hazardous nature.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 918 - 920

↑ *Back to this question in Part A*

@Neet_pg_bot

Q7: Which of the options below could have been discarded in the white bag by the compounder as biomedical waste? (Q859802)

A. Anatomical waste

B. Sharp waste

C. Glassware

D. Plastic waste

Correct Answer: B. Sharp waste

Explanation: Biomedical wastes disposed of in white bags contain sharps. They are not pretreated and they are recycled or reused after shredding. Colour Waste Type Type of bag or container to be used Method of disposal Yellow All infectious waste. Human anatomical waste. (Option A ruled out) Animal anatomical waste Soiled waste (contaminated with blood, body fluids, dressings and swabs, blood bags). Expired or discarded medicines Chemical waste. Microbiological and other clinical laboratory waste. Yellow coloured non chlorinated plastic bags. Incineration Plasma pyrolysis Deep burial Red Contaminated waste (recyclable) : Tubing, bottles, intravenous tubes and sets, catheters, urine bags , syringes (without needles), vacutainers and gloves. (Option D ruled out) Red coloured non chlorinated plastic bags. Autoclaving or microwaving/hydroclaving, and then sent for recycling (not to landfill). Blue Glassware: Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic waste. (Option C ruled out) Metallic body implants . Cardboard boxes with blue coloured markings. Disinfection or autoclaving/microwaving, hydroclaving and then sent to recycling. White Waste sharps including metals: Needles, syringes with fixed needles, scalpels or any other sharp object that may cause puncture and cuts. (Option B) Puncture proof and leak proof containers. Auto or dry heat sterilization followed by shredding and mutilation or encapsulation.

References:

Park’s Textbook of Preventive and Social Medicine, 27th edition, page 918 - 920

↑ *Back to this question in Part A*

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