



JAMMU AND KASHMIR PUBLIC SERVICE COMMISSION

RESHAM GHAR COLONY, BAKSHI NAGAR, JAMMU - 180016

Website: <http://jkpsc.nic.in>

Jammu: 0191-2566533

Subject: Written Examination for filling up of Gazetted Vacancies in various Govt. Medical Colleges in Health and Medical Education Department, 2025- Provisional Answer Key(s).

**Notification No. PSC/Exam/S/2025/41
Dated: 08.10.2025**

In pursuance of Rule 10 (c) of the Jammu & Kashmir Public Service Commission (Conduct of Examination) Rules, 2022, as amended upto date, the Provisional Answer Key(s) of Question Papers pertaining to the Written Examination for post(s) of **Rural Training Health Centre/Medical Officer Health Cum Lecturer/AP-RTHC** and **Urban Training Health Centre/ Urban Training Health Centre (Medical Officer Health Cum Lecturer)** in Health and Medical Education Department, held on 08.10.2025, are hereby notified for seeking objections from candidates.

Provisional Answer Key

Rural Training Health Centre/Medical Officer Health Cum Lecturer/ AP-RTHC

Test Booklet Question No. (Series A)	
Q1	B
Q2	D
Q3	B
Q4	C
Q5	A
Q6	B
Q7	C
Q8	C
Q9	B
Q10	B
Q11	B

Test Booklet Question No. (Series A)	
Q12	B
Q13	B
Q14	B
Q15	B
Q16	B
Q17	B
Q18	B
Q19	B
Q20	B
Q21	C
Q22	C

Test Booklet Question No. (Series A)	
Q23	B
Q24	C
Q25	C
Q26	C
Q27	B
Q28	B
Q29	B
Q30	A
Q31	B
Q32	D
Q33	B

Test Booklet Question No. (Series A)	
Q34	C
Q35	C
Q36	C
Q37	C
Q38	C
Q39	B
Q40	C
Q41	B
Q42	A
Q43	B
Q44	C
Q45	C
Q46	B
Q47	B
Q48	B
Q49	C
Q50	B
Q51	B
Q52	B
Q53	B
Q54	B
Q55	B
Q56	B

Test Booklet Question No. (Series A)	
Q57	C
Q58	B
Q59	B
Q60	B
Q61	B
Q62	B
Q63	B
Q64	B
Q65	B
Q66	C
Q67	B
Q68	B
Q69	B
Q70	B
Q71	C
Q72	B
Q73	B
Q74	B
Q75	B
Q76	B
Q77	B
Q78	B
Q79	B

Test Booklet Question No. (Series A)	
Q80	B
Q81	B
Q82	B
Q83	A
Q84	B
Q85	B
Q86	B
Q87	C
Q88	C
Q89	C
Q90	C
Q91	B
Q92	B
Q93	D
Q94	B
Q95	B
Q96	D
Q97	C
Q98	B
Q99	B
Q100	C

Provisional Answer Key

Urban Training Health Centre/

Urban Training Health Centre (Medical Officer Health Cum Lecturer)

Test Booklet Question No. (Series A)	
Q1	B
Q2	D
Q3	D
Q4	C
Q5	B
Q6	A
Q7	B
Q8	A
Q9	C
Q10	C
Q11	D
Q12	B
Q13	C
Q14	D
Q15	C
Q16	A
Q17	A
Q18	B
Q19	B
Q20	C
Q21	C
Q22	A
Q23	D
Q24	B
Q25	D
Q26	B
Q27	B
Q28	B
Q29	B
Q30	C
Q31	C
Q32	C
Q33	C
Q34	C

Test Booklet Question No. (Series A)	
Q35	C
Q36	B
Q37	C
Q38	D
Q39	A
Q40	A
Q41	C
Q42	C
Q43	C
Q44	C
Q45	C
Q46	B
Q47	B
Q48	D
Q49	C
Q50	D
Q51	C
Q52	A
Q53	C
Q54	B
Q55	B
Q56	C
Q57	D
Q58	B
Q59	C
Q60	C
Q61	A
Q62	B
Q63	B
Q64	B
Q65	C
Q66	C
Q67	C
Q68	B

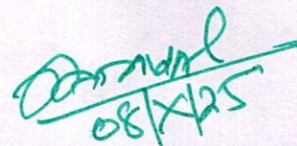
Test Booklet Question No. (Series A)	
Q69	C
Q70	B
Q71	D
Q72	C
Q73	A
Q74	B
Q75	C
Q76	A
Q77	B
Q78	B
Q79	C
Q80	B
Q81	B
Q82	B
Q83	A
Q84	D
Q85	B
Q86	D
Q87	A
Q88	C
Q89	B
Q90	D
Q91	C
Q92	B
Q93	D
Q94	D
Q95	C
Q96	C
Q97	D
Q98	A
Q99	B
Q100	B

The candidates are advised to refer to **Question Booklet (Series A)** to match the corresponding question(s) in their respective Question Booklet Series and if any candidate feels that the key to any of the question(s) is/are wrong, he/she may represent on prescribed format/proforma annexed as **Annexure-A** along with the documentary proof/evidence (**hard copies only**) and fee of Rs.500/- per question in the form of Demand Draft drawn in favour of **COE, J&K PSC** (refundable in case of genuine/correct representation) to the Controller of Examinations, Jammu & Kashmir Public Service Commission, from Thursday i.e. 09.10.2025 to 13.10.2025. **The candidates are further advised to clearly mention the question(s) objected to with reference to its serial number as it appears in the Question Booklet of Series A of the provisional answer key(s).**

Any objection/application not accompanied by the requisite Demand Draft of Rs.500/- as prescribed, shall not be considered/entertained under any circumstances. Candidates are, in their own interest, advised to adhere to these instructions and not submit any objection unaccompanied by the Demand Draft as required under extant rules. The Commission shall not entertain any such representation(s) after the expiry of the stipulated period i.e. after 13.10.2025 (Monday), 05.00 pm.

Further, objection(s) submitted in any other mode will not be entertained.

The provisional answer key(s) are also available on the website of the Commission <http://www.jkpsc.nic.in>.


08/10/25

(Sachin Jamwal) JKAS

Controller of Examinations

J&K Public Service Commission

No. PSC/Ex-Secy/2025/26

Copy to the: -

Dated: 08.10.2025

1. Director, Information and Public Relations, J&K for publication of the notice in all leading newspapers published from Jammu/Srinagar.
2. P.S. to Hon'ble Chairman, J&K Public Service Commission for information of the Hon'ble Chairman.
3. P.S. to Hon'ble Member, Shri _____ for information of the Hon'ble Member.
4. P. A. to Secretary, J&K Public Service Commission for information of the Secretary.
5. Main file/Stock file/Notice Board.

Annexure-A

Representation regarding objection(s) to any Question/Answer pertaining to the Written Examination conducted for the posts of Rural Training Health Centre/Medical Officer Health Cum Lecturer/AP-RTHC and Urban Training Health Centre/ Urban Training Health Centre (Medical Officer Health Cum Lecturer) in Health and Medical Education Department held on 08.10.2025

(NOTE: USE SEPARATE FORMS FOR SEPARATE QUESTIONS)

Discipline: _____
Name of the Applicant: _____
Roll No. : _____
Correspondence Address : _____
Contact/Mobile No. : _____
Date of Application: _____ .10.2025
Demand Draft Details: No. _____ Date _____ Amount _____
Candidates Account No.(16 digit) & IFSC Code : _____

Question No. in Series A	Details of the Objection	Resource Material (copy to be enclosed)	Details of the Website (if any)
<u>Correct Answer/Option as per candidate :</u>			

Signature of the Candidate

Note : Application for each question/answer shall be made on separate page in the given format, otherwise the first question entered in the format shall only be considered.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

Booklet Serial No. **330953**

Test Booklet Series

TEST BOOKLET
HEALTH & MEDICAL EDUCATION DEPARTMENT
MEDICAL OFFICER HEALTH CUM LECTURER / AP
RURAL TRAINING HEALTH CENTRE (RTHC)
WRITTEN TEST - 2025
(26)

A

Time Allowed: Two Hours

Maximum Marks: 100

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer /Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.
DO NOT write anything else on the Test Booklet.
4. This Test booklet contains **100** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer /Response Sheet provided. See directions in the Response Sheet.
6. All items carry equal marks.
7. Before you proceed to mark in the Answer /Response Sheet, the response to various items in the Test Booklet, you have to fill in some particulars in the Answer /Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer /Response Sheet**. You are permitted to take away with you the Test Booklet and **Candidate's Copy of the Response Sheet**.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. While writing Centre, Subject and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use **"ONLY BALL POINT PEN"**.
11. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.25)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

(26) (A)/2025

[P.T.O.]

1. Which of the following is **NOT** a core concept of Preventive, Social, and Community Medicine?
 - A) Community diagnosis
 - B) Individualized curative care
 - C) Population wide approaches
 - D) Mendelian's law and genetics

2. A medical officer was monitoring postnatal care provision in his PHC population area. He examined subcentre wise percentage of high-risk mothers identified during postnatal period. The numerator he referred to was number of post-natal high-risk mothers detected in the subcentre area. The correct denominator for this indicator would be:
 - A) Total pregnant women in the subcentre
 - B) Total live births in the subcentre
 - C) Total still births in the subcentre
 - D) Total deliveries in the subcentre

3. A health and wellness centre team functionaries are supposed to screen population above 30 years for non-communicable diseases (NCDs). Identify the correct frequency by method of screening for the given NCD from below:
 - A) Diabetes (glucometer) once every five years
 - B) Breast cancer (clinical breast examination) once every five years
 - C) Oral cancer (oral visual examination) once every three years
 - D) Cervical cancer (visual inspection with acetic acid) once every three years

4. Social stratification is a concept primarily studied under which branch of social sciences?
 - A) Social Psychology
 - B) Social Anthropology
 - C) Sociology
 - D) Economics

5. Global Warming is a significant concern related to:
 - A) E-waste disposal
 - B) Trade and health policy
 - C) Natural disasters
 - D) Health care legislation

6. The Census is a primary source of data for:
- A) Drug utilization
 - B) Demographic characteristics
 - C) Disease surveillance
 - D) Human resources for health
7. Which of the following is a measure of central tendency?
- A) Standard deviation
 - B) Range
 - C) Mean
 - D) Variance
8. What type of statistical analysis is used to examine the relationship between two or more variables?
- A) Measures of variability
 - B) Measures of central tendency
 - C) Correlation and regression analysis
 - D) Elementary statistical analysis
9. The Nutritive Value of Commonly Consumed Food Articles is important for understanding:
- A) Food additives
 - B) Food balance
 - C) Food safety
 - D) Food adulterants
10. In a sample of 300 adults, the medical officer wants to test whether the proportion of smokers is different in males vs females. Which statistical test is most appropriate for significance testing?
- A) Paired t-test
 - B) Chi-square test
 - C) Pearson correlation
 - D) Wilcoxon test
11. What is the primary purpose of "Triage" during a disaster response?
- A) Identifying the cause of the disaster
 - B) Prioritizing injured individuals for treatment
 - C) Calculating economic losses
 - D) Coordinating international aid

12. Which of the following is NOT an objective of Health Education?
- A) To improve communication in health.
 - B) To dictate individual lifestyle choices.
 - C) To motivate clients for healthy living.
 - D) To achieve health-related behavioral change.
13. The GATHER approach is primarily used in:
- A) Epidemiological studies
 - B) Health counselling
 - C) Health economics
 - D) Environmental health
14. What is a key measurement in epidemiology to assess disease burden?
- A) Individual patient weight
 - B) Morbidity and mortality rates
 - C) Hospital bed occupancy
 - D) Healthcare expenditure
15. Which of the following is a principle for disease control?
- A) Increase host susceptibility
 - B) Investigation of epidemics
 - C) Avoiding vaccinations
 - D) Ignoring disease patterns
16. Which of the following vaccines is an example of pure polysaccharide vaccine:
- A) Hepatitis B vaccine
 - B) Pneumococcal vaccine
 - C) Measles vaccine
 - D) JE vaccine
17. What is the purpose of "screening for disease"?
- A) To treat existing conditions
 - B) To identify undetected disease or risk factors
 - C) To conduct research on new drugs
 - D) To measure the severity of symptoms

18. Which of the following is an example of an arthropod-borne infection?
- A) Common cold
 - B) Malaria
 - C) Tuberculosis
 - D) Measles
19. The baby friendly hospital initiative is to promote feeding for:
- A) Antenatal women
 - B) Neonates
 - C) Under-5 children
 - D) Adolescents
20. The "Severe Visual Impairment" Under National Programme for Prevention and Control of Blindness and Visual Impairment is defined as:
- A) Presenting Visual Acuity $<3/60$ in the better eye
 - B) Presenting Visual Acuity $<6/60$ in the better eye
 - C) Best Corrected Visual Acuity $<3/60$ in the better eye
 - D) Best Corrected Visual Acuity $<6/60$ in the better eye
21. The ESI Act (Employees' State Insurance Act) comes under Ministry of:
- A) Health and family welfare
 - B) Home affairs
 - C) Labor and employment
 - D) Social Justice and empowerment
22. PERT (Program Evaluation and Review Technique) is a tool used in:
- A) Health care financing
 - B) Health economics
 - C) Project management
 - D) Human resource planning

23. The "Three-tier system" in healthcare typically refers to:
- A) Hospital, clinic, and home care
 - B) Primary, secondary, and tertiary care
 - C) Local, state, and national health departments
 - D) Public, private, and non-profit healthcare
24. What is a key role of voluntary health agencies in the health sector?
- A) Enforcing health legislation
 - B) Providing direct patient care exclusively
 - C) Supplementing government efforts
 - D) Setting national health policies
25. Bio-Terrorism is a public health aspect discussed in the context of:
- A) Health equity and social determinants
 - B) Global health diplomacy
 - C) Global Health Security
 - D) Sustainable Development Goals (SDG)
26. Telemedicine is an application of:
- A) Public Health Legislation
 - B) International Health Regulations
 - C) Information Technology in Public Health
 - D) Environmental Science
27. What is a key aspect of "descriptive" epidemiological studies?
- A) Testing hypotheses about cause and effect
 - B) Describing the distribution of disease
 - C) Intervening to prevent disease
 - D) Analyzing the effectiveness of treatments

28. Collection, Classification, and Presentation of Statistical Data are fundamental aspects of:
- A) Inferential statistics
 - B) Descriptive statistics
 - C) Probability theory
 - D) Sampling error analysis
29. Computing indices like rates and ratios is crucial for:
- A) Patient satisfaction surveys
 - B) Obtaining information and making comparisons
 - C) Individual patient assessments
 - D) Developing new medical technologies
30. Choosing appropriate sampling methods and sample size is a critical step in:
- A) Designing of Studies
 - B) Using statistical tables
 - C) Applying suitable tests of significance
 - D) Presenting results
31. Which of the following is directly related to "Association and Causation" in epidemiology?
- A) Collecting individual medical histories
 - B) Understanding the relationship between risk factors and disease
 - C) Burden of disease metrics
 - D) Forest and funnel plotting
32. A surveillance team from the World Health Organisation was reviewing the situation of leprosy in an area targeted for elimination. The most important indicator that the team should pay attention to is the active transmission of leprosy in the targeted areas:
- A) Prevalence Rate
 - B) New Case Detection Rate
 - C) Grade II Deformity among newly detected cases
 - D) New cases among Children (less than 15 years)

33. Which dimension of health is reflected in a person's ability to cope with daily stresses and maintain positive relationships?
- A) Physical health
 - B) Mental health
 - C) Social health
 - D) Spiritual health
34. The study of group dynamics and leadership patterns is a component of:
- A) Health Economics
 - B) Health Communication
 - C) Social and behavioral sciences
 - D) Behavioral Economics
35. A "life table" is a statistical tool primarily used in:
- A) Analyzing dietary intake trends
 - B) Monitoring disease outbreaks
 - C) Measuring population mortality and survival
 - D) Analyzing social stratification
36. Which of the following correctly describes strategy for nutrition programmes in India-
- A) Daily calcium supplementation for adolescent boys
 - B) Mandatory deworming of elderly population every six months
 - C) Weekly iron and folic supplementation for adolescent girls and boys
 - D) Vitamin A supplementation for all age groups
37. The vaccine equipment/infrastructure available at primary health centre for maintaining cold chain is:
- A) Walk-in-coolers
 - B) Walk-in-freezers
 - C) Ice Lined Refrigerator
 - D) Refrigerated van

38. A community health officer is tasked with conducting a rapid health needs assessment in a newly urbanized slum area. Which of the following social determinants of health would be MOST challenging to quantify using standard survey methods in this context accurately?
- A) Access to potable water sources
 - B) Educational attainment of adults
 - C) Cultural factors influencing health-seeking behavior
 - D) Type of housing structure
39. In the context of the "Iceberg Phenomenon" of disease, a public health intervention solely focused on reported cases of a chronic non-communicable disease would primarily miss:
- A) The secondary prevention efforts are already in place.
 - B) The true burden of disease in the community.
 - C) The effectiveness of tertiary care services.
 - D) The historical evolution of the disease within the population.
40. A community physician is designing a study to evaluate the impact of a new health education program on reducing lifestyle diseases. To ensure the program's effectiveness is rigorously assessed, which biostatistical method would be LEAST appropriate for analyzing the pre- and post-intervention data in a non-randomized setting?
- A) Paired t-test
 - B) Analysis of Covariance (ANCOVA)
 - C) Simple linear regression
 - D) Chi-square test for independence
41. When analyzing the "ecology of health", a critical understanding for a community health specialist includes discerning:
- A) The impact of individual genetic predispositions on disease susceptibility only.
 - B) The complex interplay between environmental factors, human behavior, and health outcomes.
 - C) The historical progression of medical treatments.
 - D) The financial implications of healthcare expenditures.

42. A community health officer was reviewing the functioning of grassroots workers at the village level. Which of the following list of service parameters BEST applies to assess the role of an ASHA (Accredited Social Health Activist) worker:
- A) Number of pregnant women identified, and Number of oral contraceptive pills distributed
 - B) Number of women given Depot Provera Injection, and number of severe malnutrition children managed
 - C) Number of anaemic pregnant women identified for blood transfusion, and number of diabetic cases given drugs
 - D) Number of women with Cu-T insertion, and number of hypertensive cases given drugs
43. A public health nurse is attempting to address vaccine hesitancy in a rural community. Drawing upon principles of social psychology, the MOST effective initial strategy would involve:
- A) Providing a detailed scientific explanation of vaccine mechanisms.
 - B) Focusing on the group dynamics and leadership patterns within the community to identify key influencers.
 - C) Distributing leaflets with general information about vaccine benefits.
 - D) Implementing a mandatory vaccination policy.
44. In a scenario where a community is experiencing a sudden increase in respiratory illnesses, and the underlying cause is suspected to be related to air quality, which of the following actions represents the HIGHEST level of preventive intervention?
- A) Treating symptomatic individuals with medication.
 - B) Implementing a public awareness campaign on personal protective measures.
 - C) Advocating for stricter industrial emission controls.
 - D) Monitoring hospital admissions for respiratory complaints.
45. A health manager is conducting an operational research study to optimize the allocation of resources within a district health system. Which management tool would be MOST appropriate for visualizing the dependencies and critical path of various health interventions?
- A) SWOT analysis (Strengths, weaknesses, opportunities, and threats)
 - B) Gantt chart
 - C) PERT (Program Evaluation and Review Technique)
 - D) Delphi technique

46. The concept of "Medico-Social Work" in a hospital sociology context primarily addresses:
- A) The clinical diagnosis and treatment of complex medical conditions.
 - B) The social and psychological factors influencing a patient's health and recovery.
 - C) The administrative management of hospital resources.
 - D) The prescription of appropriate medications.
47. A researcher is designing a community-based intervention study to tackle a specific deficiency disease. To accurately assess the impact of the intervention, the MOST critical biostatistical consideration for sample size calculation would be:
- A) Variability (standard deviation)
 - B) Effect Size
 - C) Statistical power
 - D) Level of significance
48. When evaluating the effectiveness of a national nutrition program, the concept of "Nutrition Monitoring and Surveillance" is crucial for:
- A) Identifying individual cases of malnutrition for clinical intervention.
 - B) Tracking long-term trends in nutritional status
 - C) Checking community cooking practices in mid-day meal scheme.
 - D) Forecasting agricultural crop production.
49. The safe disposal of municipal waste in an urban setting presents complex challenges often requiring a balance between environmental protection and economic feasibility. Which approach, while environmentally sound, might be economically prohibitive for many developing cities?
- A) Open dumping with subsequent burning.
 - B) Landfilling with basic compaction.
 - C) Advanced waste-to-energy incinerators.
 - D) Composting of organic waste for agricultural use.
50. In the context of disaster preparedness and response, the National Disaster Management Authority's (NDMA) role extends beyond immediate relief to include:
- A) Providing long-term psychological counseling services to affected individuals.
 - B) Comprehensive frameworks for mitigation, preparedness, response, and recovery.
 - C) Managing all medical interventions during a disaster.
 - D) Focusing on the management of biomedical waste during a disaster.

51. During an investigation of an epidemic, determining the "dynamics of disease transmission" is crucial. This involves understanding:
- A) Only the clinical symptoms observed in affected individuals.
 - B) The interaction between the agent, host, and environment, and the chain of infection.
 - C) The historical prevalence of similar diseases in the region.
 - D) The cost of treating infected patients.
52. The "cold chain" in immunization programs is a complex logistical system. A significant failure in the cold chain could lead to:
- A) An increase in adverse events after vaccination.
 - B) Reduced vaccine potency and efficacy.
 - C) Higher rates of active immunity development.
 - D) A decrease in the cost of vaccine delivery.
53. When evaluating a new screening test for a disease, a high sensitivity is crucial if the primary objective is to:
- A) Minimize false positives and avoid unnecessary follow-up procedures.
 - B) Detect as many true cases as possible, even at the risk of some false positives.
 - C) Confirm a definitive diagnosis in symptomatic individuals.
 - D) Distinguish between different subtypes of the disease.
54. The National Programme related to Non-Communicable Diseases faces unique challenges compared to communicable disease programs, primarily due to:
- A) The acute and easily identifiable nature of NCDs.
 - B) Need for long-term multi-sectoral interventions.
 - C) The presence of effective vaccines for prevention.
 - D) The limited impact of NCDs on healthcare systems.
55. The emergence and re-emergence of infectious diseases pose a significant global health security threat. Which of the following factors plays the MOST critical role in this phenomenon?
- A) Decreased international travel.
 - B) Rapid urbanization and increased human-animal interfaces.
 - C) Improved diagnostic technologies.
 - D) Availability of online health information.

56. In the context of "Hospital Acquired Infection" (HAI), successful prevention strategies demand a comprehensive approach that includes:
- A) Focusing solely on the antibiotic treatment of infected patients.
 - B) Rigorous infection control protocols, surveillance, and antimicrobial stewardship.
 - C) Limiting patient admissions to reduce crowding in the patient care settings.
 - D) Relying entirely on pre-exposure prophylaxis for healthcare workers.
57. The "rights of a child" and the issue of "child labour" are intertwined social determinants affecting child health. Addressing child labour effectively requires:
- A) Providing free education without addressing the underlying economic vulnerabilities.
 - B) Implementing strict punitive measures against child labourers.
 - C) Multi-sectoral interventions addressing poverty, education, and legal frameworks.
 - D) Focusing solely on nutritional support for child labourers.
58. The "PCPNDT Act" in India primarily aims to address:
- A) Prevention of child malnutrition.
 - B) Sex-selective abortions and female feticide.
 - C) Regulation of assisted reproductive technologies
 - D) Control of infectious diseases.
59. "Preventive geriatrics" moves beyond just treating illnesses in the elderly to focus on:
- A) Promoting early retirement and reduced physical activity.
 - B) Healthy ageing, lifestyle interventions, and social support.
 - C) Encouraging dependency on caregivers.
 - D) Maximizing the use of advanced medical technologies.
60. The "Demographic Transition Model" describes the shift in population patterns. A country moving from Stage 2 (high birth rates, falling death rates) to Stage 3 (falling birth rates, low death rates) would typically experience:
- A) A rapid decrease in total population size.
 - B) Continued high natural increase, followed by a slowdown in growth.
 - C) An immediate shift to an aging population structure.
 - D) Increased reliance on pronatalist policies.

61. "Social Marketing" in the context of family welfare services differs from traditional commercial marketing by primarily aiming to:
- A) Maximize profit from contraceptive sales.
 - B) Promote socially desirable behaviors through persuasive communication.
 - C) Exclusively target high-income populations.
 - D) Advertise brand-specific family planning products and commodities.
62. In occupational health, "Ergonomics" plays a crucial role in preventing:
- A) Exposure to lead and mercury in occupational settings.
 - B) Musculoskeletal disorders related to workplace design and tasks.
 - C) Infectious disease transmission among industrial workers.
 - D) Psychological hazards like stress in professionals.
63. The "Social security of women in Industry" under relevant legislation like the ESI Act aims to address specific vulnerabilities, which MOST significantly include:
- A) Access to higher management positions.
 - B) Maternity benefits and protection against discrimination during pregnancy.
 - C) Equal pay for equal work.
 - D) Access to advanced vocational training.
64. Addressing "Drug dependence and addiction" in a public health framework requires a multi-pronged approach that goes beyond individual treatment to include:
- A) Solely punitive legal measures.
 - B) Prevention programs, harm reduction strategies, and rehabilitation services.
 - C) Promoting the recreational use of substances.
 - D) Restricting access to all pharmaceutical drugs.
65. The principles of the administration process in health management emphasize "evaluation". This involves:
- A) Tracking annual budget expenditures and finances incurred.
 - B) Systematically assessing the effectiveness, efficiency, and impact.
 - C) Primarily focusing on regular annual staff performance appraisals.
 - D) Rapidly implementing new initiatives without prior testing.

66. The concept of "Health Care financing" in a national health system is a complex policy issue. Which financing mechanism is MOST likely to promote equitable access to healthcare for all citizens, regardless of income?
- A) Predominantly out-of-pocket payments.
 - B) Fee-for-service models with no government subsidies.
 - C) Universal health coverage funded through progressive taxation.
 - D) Private health insurance schemes with high deductibles.
67. An undergraduate batch of students was carrying out an eye survey among elderly for examination of visual impairment in an urban resettlement colony. The measure pair that could be computed through this eye survey is:
- A) Incidence, Relative Risk
 - B) Prevalence, Odds Ratio
 - C) Prevalence, Relative Risk
 - D) Incidence, Odds Ratio
68. "Bio-Terrorism" poses a unique public health challenge due to:
- A) Its predictability and slow onset of symptoms.
 - B) The intentional and often covert release of biological agents.
 - C) Its limited potential for international spread.
 - D) The availability of immediate cures for all potential agents.
69. A public health initiative in a tribal district focuses on reducing childhood stunting through integrated interventions including maternal education, access to clean drinking water, and food security. Which combination of Sustainable Development Goals (SDGs) is most directly targeted by such a program?
- A) SDG 1 (Poverty), SDG9 (Industry, Innovation and Infrastructure), SDG 16 (Peace, Justice and Strong Institutions)
 - B) SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-Being), SDG 6 (Clean Water and Sanitation)
 - C) SDG 3 (Good Health and Well-Being), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action)
 - D) SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 17 (Partnerships for the Goals)

70. "E-Sanjeevani" can significantly enhance health service delivery by Arogya Ayushman Mandirs (AAM):
- A) Replacing all in-person consultations with virtual ones.
 - B) Facilitating remote medical consultations.
 - C) Primarily focusing on administrative tasks in hospitals.
 - D) Eliminating the need for trained healthcare professionals.
71. In "Research methodology," a researcher aims to establish a cause-and-effect relationship between an exposure and a disease. Which type of epidemiological study is generally considered the strongest for this purpose?
- A) Cross-sectional study
 - B) Quasi-experimental study
 - C) Randomized controlled trial
 - D) Case-control study
72. The "scope and Uses of Biostatistics" in community medicine extend beyond simple data analysis to include:
- A) Prescribing individual patient treatments.
 - B) Designing studies and interpreting findings.
 - C) Performing statistical and machine surgical procedures.
 - D) Developing new pharmaceutical drugs.
73. When applying statistical methods in the "Designing of Studies", "Choosing of appropriate sampling methods and sample size" is paramount to ensure:
- A) The study is financially viable.
 - B) Generalizability and have sufficient power.
 - C) Data collection is completed quickly.
 - D) The research team is comfortable with the methodology.
74. The correct application of a "suitable test of significance" in biostatistics depends heavily on:
- A) The researcher's personal preference.
 - B) The type of data (e.g., nominal, ordinal, interval, ratio).
 - C) The aesthetic appeal of the statistical output.
 - D) The speed at which the analysis can be performed.

75. The fundamental difference between "association" and "causation" in epidemiology is that:
- A) Association implies a direct cause-and-effect relationship.
 - B) Causation proves critically the temporality of events.
 - C) Causation can be proven with a single observational study.
 - D) Association indicates a non-statistical relationship.
76. The evolution of public health services from a focus on sanitation to a broader scope encompassing disease prevention, health promotion, and social determinants reflects a shift towards:
- A) A purely biomedical model.
 - B) A holistic, community-oriented approach.
 - C) Centralized individual treatment.
 - D) A solely reactive disease management system.
77. In the context of "lifestyle diseases", a major challenge for public health interventions is:
- A) The easy identification of a single causative agent.
 - B) The need for addressing complex determinants.
 - C) The absence of any effective treatment options.
 - D) Their limited impact on global health burden.
78. The "disposal of E-waste" poses a significant environmental and health hazard due to:
- A) Its rapid biodegradability.
 - B) Toxic heavy metals and hazardous chemicals.
 - C) Its value as a renewable energy source.
 - D) Its inert nature, causing no environmental harm.
79. Which of the following best describes the role of "Health Education Objectives" in a public health campaign?
- A) To administer vaccinations to resistant communities.
 - B) To promote health knowledge and behavior.
 - C) To conduct epidemiological investigations.
 - D) To allocate financial resources for health infrastructure.

80. The "National Immunization Schedule" is a dynamic document that undergoes periodic revisions primarily based on:
- A) Political considerations and expert opinions.
 - B) Evidence on disease prevalence, vaccine efficacy, and safety
 - C) The availability of funding for all possible vaccines.
 - D) Individual physician and medical college faculty preferences.
81. From a community medicine perspective, "low birth weight" is a crucial indicator because it is strongly associated with:
- A) Higher educational attainment in adulthood.
 - B) Increased risk of infant mortality and morbidity.
 - C) Reduced need for specialized neonatal care.
 - D) Improved nutritional status in infancy.
82. The concept of "fertility indicators" is essential for understanding population dynamics and evaluating the success of:
- A) Occupational health programs.
 - B) Family welfare policies.
 - C) Social health interventions.
 - D) Environmental health projects.
83. When considering "Health Problems and their solutions" in health management, a common challenge in developing countries' "Three tier system" is:
- A) Overutilization of tertiary care facilities for primary care needs
 - B) Uniform distribution of resources across all three tiers.
 - C) Exclusive focus on preventive care at all levels.
 - D) Lack of patient referral pathways.
84. The "International Statistical Classification of Disease and Related Health Problems" (ICD) is fundamentally important for public health because it allows for:
- A) Individual patient identification and tracking.
 - B) Standardized coding of diseases and health conditions.
 - C) Direct treatment recommendations for specific illnesses.
 - D) Personal medical record keeping only.

85. "Operational research" in health management is a practical approach that primarily aims to:
- A) Develop new medical technologies.
 - B) Improve the efficiency and effectiveness of health systems.
 - C) Conduct basic scientific research on disease mechanisms.
 - D) Formulate health policies without empirical data.

86. The "Impact on Health" of natural disasters extends beyond immediate casualties to include:
- A) Only temporary damage to infrastructure.
 - B) Long-term public health consequences.
 - C) A reduction in chronic disease prevalence.
 - D) Enhanced community resilience without any negative health outcomes.

87. **The Case:** A 4-year-old child is brought to a clinic with fever and painful swelling of the parotid glands. The mother confirms that the child's immunizations are not up-to-date according to the National Immunization Schedule.

Question: The child's symptoms are characteristic of which vaccine-preventable disease?

- A) Diphtheria
- B) Measles
- C) Mumps
- D) Pertussis

88. **The Case:** A 55-year-old woman is diagnosed with hypertension during a routine check-up, with an average reading of 160/100 mmHg over three separate visits. She has a family history of heart disease and is a smoker.

Question: According to the national program for non-communicable diseases, what is the most critical initial management step besides medication?

- A) Recommending immediate hospital admission
- B) Focusing solely on a low-salt diet
- C) Lifestyle modifications, including smoking cessation and diet
- D) Screening all family members immediately

89. **The Case:** A farmer presents with a low-grade fever, muscle pain, and severe headaches. His history reveals that he frequently handles cattle and consumes raw milk from his farm.

Question: Which of the following zoonotic diseases should be considered a primary differential diagnosis?

- A) Dengue Fever
- B) Japanese Encephalitis
- C) Brucellosis
- D) Tetanus

90. **The Case:** A 40-year-old man who has worked in a battery recycling plant for 15 years complains of abdominal pain, constipation, and irritability. A blood test reveals anemia and basophilic stippling of red blood cells.

Question: These clinical features are most likely due to chronic exposure to which occupational hazard?

- A) Arsenic
- B) Mercury
- C) Lead
- D) Carbon monoxide

91. **The Case:** A 35-year-old truck driver presents with significant weight loss, chronic diarrhea, and oral thrush. He has a history of engaging in high-risk sexual behavior.

Question: The patient's presentation with opportunistic infections is highly suggestive of which underlying condition?

- A) Tuberculosis
- B) Acquired Immunodeficiency Syndrome (AIDS)
- C) Chronic Liver Disease
- D) Severe Malnutrition

92. **The Case:** An 18-month-old child from a low-income family is brought to an Anganwadi center. The child is apathetic, has visible wasting of muscles and fat, and a weight-for-height Z-score of less than -3 SD. There is no edema.

Question: This child is suffering from which form of Protein-Energy Malnutrition (PEM)?

- A) Kwashiorkor
- B) Marasmus
- C) Nutritional dwarfism
- D) Vitamin A deficiency

93. **The Case:** A 62-year-old patient who underwent abdominal surgery four days ago develops a fever of 101°F and purulent discharge from the surgical wound. A culture of the discharge grows Methicillin-Resistant *Staphylococcus aureus* (MRSA).

Question: What is the most appropriate classification for this type of infection?

- A) A community-acquired infection
- B) A zoonotic disease
- C) An emerging infectious disease
- D) A hospital-acquired infection

94. **The Case:** A 70-year-old woman is brought to the emergency room after a fall in her home, resulting in a hip fracture. She has a history of being post-menopausal for 20 years and a low dietary calcium intake.

Question: Her fracture is likely a complication of which underlying geriatric health problem?

- A) Osteoarthritis
- B) Osteoporosis
- C) Sarcopenia
- D) Dementia

95. **The Case:** A public health team is planning a program to detect tuberculosis early in a high-risk slum community. They plan to use a mobile van with X-ray facilities and sputum microscopy for symptomatic individuals.

Question: This activity is an example of which type of public health intervention?

- A) Primordial prevention
- B) Active screening for disease
- C) Health promotion
- D) Disability limitation

96. **The Case:** Several individuals from a remote, impoverished community present with paralysis of their lower limbs. An investigation reveals that during a recent drought, their diet was almost exclusively composed of a hardy pulse known locally as 'khesari dal' (*Lathyrus sativus*).

Question: This neurological condition, known as neurolathyrism, is caused by which of the following?

- A) Food additives
- B) A mycotoxin
- C) A bacterial infection
- D) Food toxins naturally present in the pulse

97. **The Case:** A pregnant woman in her second trimester visits her local ICDS centre for a health check-up. As part of the national nutrition programme, she is counseled on diet and provided with a key supplement to prevent anemia in both herself and her developing baby.

Question: Which of the following supplements is routinely provided to pregnant women under national programmes to prevent anemia?

- A) Vitamin A and Zinc tablets
- B) Calcium and Vitamin D tablets
- C) Iron and Folic Acid tablets
- D) Multivitamin and mineral tablets

98. **The Case:** A mother brings her 4-month-old infant to the health center with a cough for the past three days. The health worker, trained in IMNCI, counts the baby's respiratory rate as 52 breaths per minute. There is no chest in drawing or any general danger signs.

Question: According to the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) guidelines, what is the correct classification for this infant's condition?

- A) Severe Pneumonia
- B) Pneumonia
- C) Cough or Cold
- D) Very Severe Disease

99. **The Case:** During a counseling session, a new mother on her fourth day post-delivery expresses concern that her milk is not sufficient and wants to start her baby on formula feed.

Question: What is the most appropriate advice regarding infant feeding that the healthcare provider should give for the first six months?

- A) Start the baby on semi-solid food immediately.
- B) Continue with exclusive breastfeeding as it is sufficient for the baby.
- C) Supplement breast milk with formula milk to ensure adequate nutrition.
- D) Give the baby sips of boiled water between feeds to prevent dehydration.

100. **The Case:** As part of the School Health Services, a 9-year-old student is found to have difficulty reading the blackboard. A vision screening test conducted by the health team shows his visual acuity to be 6/12.

Question: What is the most appropriate next step for the school health team?

- A) Advise the teacher to move the student to the front bench.
- B) Provide the student with Vitamin A supplements.
- C) Refer the student for a complete eye examination by a specialist.
- D) Re-screen the student after one year.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

Booklet Serial No. **331025**

Test Booklet Series

TEST BOOKLET

**HEALTH & MEDICAL EDUCATION DEPARTMENT
MEDICAL OFFICER HEALTH CUM LECTURER
URBAN TRAINING HEALTH CENTRE (UTHC)**

A

Written Test - 2025

(27)

Time Allowed: Two Hours

Maximum Marks: 100

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer /Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.
DO NOT write anything else on the Test Booklet.
4. This Test booklet contains **100** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer /Response Sheet provided. See directions in the Response Sheet.
6. *All* items carry equal marks.
7. Before you proceed to mark in the Answer /Response Sheet, the response to various items in the Test Booklet, you have to fill in some particulars in the Answer /Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer /Response Sheet**. You are permitted to take away with you the Test Booklet and **Candidate's Copy of the Response Sheet**.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. While writing Centre, Subject and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use **"ONLY BALL POINT PEN"**.
11. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.25)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

(27) (A)/2025

[P.T.O.]

1. On a Monday afternoon, a 30-year-junior resident in surgery department is referred to Medical superintendent for evaluation following a needle-stick injury that occurred during surgery. The source patient is known to be infected with HIV and has advanced AIDS. Which of the following factors carries the greatest risk for transmission of HIV to the Junior resident?
 - A) Stage of AIDS of the source patient
 - B) Depth of the injury during the needle stick injury
 - C) Presence of visible blood on the needle
 - D) Coinfection of the source patient with other infections due to decreased immunity.
2. In July 1999, CDC recommended that health-care providers and parents postpone use of the rhesus rotavirus vaccine-tetravalent for infants, at least until November 1999. What was the reason for withdrawal of this vaccine?
 - A) Because of the shortage of supply of the vaccine
 - B) Because of the increased risk of episodes of inconsolable crying in infants
 - C) Because of increased risk of Guillain Barre Syndrome among infants due to poor control of endemic poliomyelitis
 - D) Because of the increased frequency of intussusception among infants in the first 1-2 weeks after vaccination.
3. You are a medical officer at a district hospital tasked with designing a targeted Hepatitis C screening program to maximize early detection and optimize resource allocation. Hepatitis C, a bloodborne viral infection, is a major public health concern due to its potential to cause chronic liver disease. Your hospital has limited funding, so you must prioritize screening for the highest-risk group based on evidence-based guidelines. Which of the following groups should you prioritize for routine Hepatitis C screening?
 - A) All blood donors visiting the hospital's blood bank for routine donations.
 - B) Healthcare workers in the dialysis unit with frequent exposure to blood products.
 - C) Patients with type 2 diabetes attending the outpatient clinic for routine check-ups.
 - D) Individuals reporting a history of intravenous drug use, even if only once in the past.
4. A 6-year-old child is brought to your OPD with complaints of fever, malaise, and a vesicular rash that started 24 hours ago. He has been going to school every day. He has one younger sister aged 3 years without a history of similar illness in past. She also does not have a vaccination history for the disease. His mother is 38 weeks pregnant. Both the sister and mother are susceptible. Which of the following is the most appropriate management of contacts?
 - A) Observation only for all contacts as it looks like a mild viral self-limiting exanthematous fever.
 - B) Immunoglobulin should be administered to the mother, sibling, and susceptible classmates.
 - C) Immunoglobulin should be administered to the mother and sibling, and vaccine should be given to the susceptible classmates
 - D) Immunoglobulin for the mother and vaccine for his sibling and susceptible classmates

5. Which of the following is true regarding Simultaneous administration of vaccines?
- I. Vaccines may be combined in the same syringe for single administration to reduce pain from multiple injections.
 - II. It increases the probability that a child, adolescent, or adult will be vaccinated fully by the appropriate age
 - III. It is usually advised for travellers
 - IV. It is advised when a health-care provider is uncertain that a patient will return for additional doses of vaccine
 - V. May lead to significantly enhanced immunogenicity to either component as compared to separate administration.

Choose correct answer from options given below:

- A) I, II, III
- B) II, III, IV
- C) III, IV, V
- D) I, IV, V

6. Which of the following is true regarding combination vaccines?
- I. Adverse events might occur more frequently after administration of a combination vaccine compared with administration of separate antigens at the same visit
 - II. Leads to improved vaccine coverage rates
 - III. Have longer shelf life than the individual component vaccines
 - IV. Cold chain maintenance cost is increased due to more stringent temperature requirements of combination vaccines

Choose correct answer from options given below:

- A) I, II
- B) II, III
- C) III, IV
- D) I, IV

7. You are incharge of a PHC. A nurse comes to you with an issue about administering two live vaccines to a patient. She administered a BCG vaccine to a child who reported for first time for vaccination at eight and a half months. Later to catch up for the remaining vaccination schedule, the mother came again at 9 months and got the child vaccinated with measles vaccine in the absence of the nurse. Which of the following will be the correct advice to the nurse?
- A) There is no problem with vaccination and the mother can be sent back to home safely and asked to return for next vaccination as per schedule.
 - B) The second vaccine administered should not be counted and the dose should be repeated at least 4 weeks later
 - C) Both the vaccines should be administered again simultaneously after 28 days of second vaccination.
 - D) The first vaccine should not be counted and the dose should be repeated at least 4 weeks later

8. Which of the following vaccines may be administered at any time before, concurrent with, or after administration of any antibody-containing preparation such as immune globulin, hyperimmune globulin, or intravenous immune globulin?
- Ty21a typhoid
 - Measles
 - Dengue
 - Varicella
9. ANM of your health centre comes to you with a query regarding vaccination of a child who does not have adequate documentation of vaccinations. For which of the following vaccines will you advise a serologic testing for assessment of immunity of the child?
- Influenza vaccine
 - PPSV23 (Pneumococcal polysaccharide vaccine)
 - Hepatitis B
 - Diphtheria vaccine
10. Which of the following about lepromin test is True?
- It is positive in most children in first six months
 - It is a diagnostic test
 - It is an important aid to classify type of leprosy disease
 - BCG vaccination may convert lepra reaction from negative to positive
- Choose correct answer from options given below:**
- I, II
 - I, III
 - III, IV
 - I, IV
11. An outbreak of plague is reported in your district. Being a district health administrator, you are required to assess the severity of spreading of plague. Which of the following would help you be useful measure?
- average number of free-living fleas per species per rodent burrow
 - percentage of different species of fleas that are found on rats
 - average number of fleas of all species per rat
 - average number of *X. cheopis* per rat
12. You are working in a tobacco cessation clinic. A chronic smoker comes to you for smoking cessation. You are considering the use of pharmacotherapy for the same. Which of the following statement is true regarding the same?
- You should discuss the role of pharmacotherapy ONLY after at least one quit attempt based on self-will alone (without any quit-aids) has failed
 - You should advise use of pharmacotherapy to completely suppress ALL of the physiologically caused nicotine withdrawal symptoms from the target quit date onwards
 - You should advise minimal use of pharmacotherapy as most nicotine withdrawal symptoms are without any physiological basis
 - You should advise the patient to quit smoking by self-will regardless of his status of nicotine dependence

13. You are required to educate health care professionals about disposal of Radioactive waste. Which of the following is the best method to dispose them?
- A) Physical treatment
 - B) Incineration
 - C) Landfill
 - D) Injection wells
14. Child Health Screening and Early Intervention Services under NHM envisage to cover 30 identified health conditions for early detection and free treatment and management. Which of the following diseases is Not included in the list?
- A) Developmental Dysplasia of the Hip
 - B) Vitamin A Deficiency
 - C) Autism
 - D) Measles
15. A 50-year-old female presents to your OPD with a self-palpated thyroid nodule. After the appropriate work-up, fine-needle aspiration cytology (FNA) of the nodule is performed. The FNAC result is negative. The patient asks, "What are the chances that I really do not have cancer?" You reply that the probability of thyroid cancer is low in her case because FNA has a high:
- A) Specificity
 - B) Sensitivity
 - C) Negative predictive value
 - D) Positive predictive value
16. A new diagnostic test for Thyroid Cancer has a sensitivity of 90% and a specificity of 95%. If applied to a population of 10,000 patients in which the prevalence of thyroid cancer is 1%, how many false negative results would you expect?
- A) 10
 - B) 90
 - C) 495
 - D) 9405
17. Phenylketonuria (PKU) is a rare, inherited metabolic disorder that prevents the body from breaking down the amino acid phenylalanine. If untreated, PKU can lead to serious health problems, including intellectual disability, seizures, and behavioral problems. The main treatment for PKU is a carefully controlled low-phenylalanine diet. Which of the following characteristics would be most desirable in a screening test for this disease?
- A) High Sensitivity
 - B) High Specificity
 - C) High Positive predictive value
 - D) High Negative predictive value

18. A 40 year old primigravida comes to your OPD for prenatal counseling. Her gestational age is 20 weeks. She is concerned about the risk of Down syndrome in her child as she has been told by her friend that there are increased chances due to her age. She wants to get an early diagnosis so that she can plan for medical termination of pregnancy if required. You tell her about the two tests available and tell her that triple screening may detect up to 50% of cases while amniocentesis may detect up to 90% of cases. Based on her statement, which of the following is true?
- A) Amniocentesis has higher false positive rate than triple screening
 - B) Amniocentesis has higher sensitivity than triple screening
 - C) Amniocentesis has higher specificity than triple screening
 - D) Amniocentesis has higher false negative rate than triple screening
19. A serologic test is introduced for the diagnosis of HIV infection. When tested on the general population, the sensitivity and specificity of the test are 85% and 78%, respectively. If the test is applied to a population of sex workers with a higher probability of HIV infection, which of the following changes would you expect?
- A) Specificity increases, PPV Increases, NPV decreases
 - B) Specificity does not change, PPV Increases, NPV decreases
 - C) Specificity does not change, PPV Increases, NPV increases
 - D) Specificity decreases, PPV decreases, NPV increases
20. The School Health Programme relies on a "cascade model of training" for its Health and Wellness Ambassadors. Considering the dual ownership of the program by the Ministry of Health and Family Welfare (MoHFW) and the Ministry of Human Resource and Development (MHRD), what is the most critical implication of this specific training structure for program success?
- A) It ensures that the majority of training content is exclusively focused on medical interventions, thereby minimizing educational aspects
 - B) It centralizes all training responsibilities at the National Institute of Health and Family Welfare (NIHFW) and National Council of Educational Research and Training (NCERT), reducing local adaptability.
 - C) It facilitates integrated knowledge transfer from both health and education domains down to the school level, ensuring a holistic understanding of child well-being.
 - D) It primarily aims to reduce training costs by utilizing existing teaching staff, rather than improving the quality or breadth of health education.

21. A national health policy review committee is evaluating the long-term impact potential of the SAANS campaign. When assessing its core strategic direction, which of the following best represents the ultimate measurable goal the initiative aims to achieve, as distinct from its immediate operational objectives?
- A) To create widespread community awareness regarding interventions for the protection and prevention of childhood pneumonia.
 - B) To increase caregiver capabilities in early identification of pneumonia symptoms and appropriate care-seeking.
 - C) To reduce childhood pneumonia mortality in India to less than 3 per thousand live births by 2025.
 - D) To effectively dispel prevailing myths and trigger positive behavior change related to pneumonia management
22. WHO guidance recommends NOT to implement one of these interventions in School health services.
- A) Universal screening for maltreatment by a parent or guardian
 - B) Screening for hypertension
 - C) Screening for scoliosis
 - D) Screening for substance use (such as tobacco, alcohol, and illicit drugs)
23. The process of enabling individuals to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions. It can happen formally or informally, in a group or one-on-one and in a clinical setting or at a broader level (including social mobilization and advocacy).
- This is the definition of:**
- A) Health counselling
 - B) Health education
 - C) Health literacy
 - D) Health promotion
24. John Snow's pioneering investigation into the 1854 cholera outbreak in London, where he meticulously mapped cases and identified the Broad Street pump as the source of the contaminated water, is a foundational example of epidemiological work. This investigation effectively demonstrated that removing the pump handle could stop the outbreak.
- Snow's conclusion, focusing on a specific environmental source as the cause of the outbreak, most directly aligns with identifying a cause within which conceptual framework of disease causation, even though the specific microbial agent wasn't yet identified?
- A) Web of causation
 - B) Single necessary cause
 - C) Multifactorial causation
 - D) Germ theory

25. In a community of 50,000 people, surveillance data indicate that there were 1,000 existing cases of a specific chronic disease on January 1, 2023. During the year 2023, 200 new cases of the disease were diagnosed, and 50 people with the disease died. Assuming no recovery or migration, what was the point prevalence of the disease on January 1, 2024?
- A) 1,000 / 50,000
 - B) 1,200 / 50,000
 - C) 1,200 / 49,950
 - D) 1,150 / 50,000
26. In evaluating the effectiveness of a new screening program for early detection of cancer, researchers compare the survival rates of individuals diagnosed through screening versus those diagnosed symptomatically outside of the screening program. If the screening program tends to identify cases that are inherently slower-growing and have a better prognosis than cases diagnosed symptomatically, this can lead to an apparent improvement in survival among screened individuals that is not due to the benefit of early treatment. This phenomenon is known as:
- A) Lead-time bias
 - B) Length-time bias
 - C) Overdiagnosis bias
 - D) Selection bias
27. A new rapid diagnostic test for a specific infection has a sensitivity of 90% and a specificity of 85%. In a community A with a prevalence of the infection (5%), what is the most likely impact of using this test as a *screening* tool on the positive predictive value (PPV) as compared to community B with a prevalence of 15%?
- A) PPV will be low in community B due to the higher prevalence of the disease.
 - B) PPV will be low in community A due to the low prevalence of the disease.
 - C) PPV will be high in both community due to the test's ability to correctly identify most infected individuals.
 - D) PPV will be low in both community due to the high number of false negatives.
28. A case-control study investigates the association between prior physical inactivity (Exposure A) and the development of type 2 diabetes (Outcome B). The study reports a statistically significant association (Odds Ratio > 1). Researchers suspect that obesity (Factor C) may act as a confounder. For obesity to be a confounder in this study, which of the following conditions must be met?
- A) Obesity is associated with physical inactivity, associated with type 2 diabetes, and lies in the causal pathway between physical inactivity and type 2 diabetes.
 - B) Obesity is associated with physical inactivity, associated with type 2 diabetes independent of physical inactivity, and is not in the causal pathway between physical inactivity and type 2 diabetes.
 - C) Obesity is associated with type 2 diabetes, associated with physical inactivity independent of type 2 diabetes, and is not in the causal pathway between physical inactivity and type 2 diabetes.
 - D) Obesity is associated with physical inactivity, but not necessarily with type 2 diabetes, and is not in the causal pathway between physical inactivity and type 2 diabetes.

29. Following a mass exposure event to a harmful environmental toxin, a public health team begins monitoring exposed individuals. They are particularly interested in the period between the initial exposure and the development of the first noticeable signs and symptoms of illness in these individuals.

According to the sources' discussion of the natural history of disease, this specific period falls within?

- A) Pre-pathogenesis phase
 - B) Pathogenesis phase
 - C) Clinical horizon phase
 - D) Tertiary prevention phase
30. Historical efforts to improve public health saw significant progress in the 19th century with advancements in sanitation, water supply, and understanding of infectious disease spread, leading to dramatic reductions in mortality rates. This period, marked by governmental recognition of the need for public health infrastructure and action, is known as the:
- A) Ancient era of medicine
 - B) Renaissance period
 - C) Rise of Public Health
 - D) Social Engineering Phase
31. A case-control study investigates the association between smoking and lung cancer. Cases are patients with lung cancer, and controls are individuals without lung cancer from the same hospital, admitted for unrelated conditions. The study reports an Odds Ratio (OR) of 15. Assuming there is no significant confounding or bias, how should this OR be interpreted in the context of estimating the relative risk?
- A) Smokers are 15 times less likely to develop lung cancer than non-smokers.
 - B) Smoking causes 15% of lung cancer cases.
 - C) Smokers have approximately 15 times the risk of developing lung cancer compared to non-smokers.
 - D) Lung cancer is 15 times more prevalent among smokers.
32. A research team is evaluating an established screening program for a specific cancer. They find that the 5-year survival rate among individuals diagnosed via screening is significantly higher than among those diagnosed clinically due to symptoms. They also observe that some cases detected by screening are very slow-growing and might never have progressed to cause symptoms or death during the person's lifetime. This observation is most consistent with the presence of which specific type of bias in the evaluation?
- A) Lead-time bias
 - B) Length-biased sampling
 - C) Overdiagnosis bias
 - D) Selection bias

33. Which chemical agent is explicitly mentioned as being effective against vegetative bacteria, but less so against bacterial spores?
- A) Ethylene oxide
 - B) Autoclaving
 - C) Alcohol
 - D) Formaldehyde
34. One of the objectives of epidemiological investigation of an epidemic is to identify the source and mode of transmission. If an investigation points to contaminated food served at a restaurant as the cause of an outbreak, this identifies which element in the chain of infection, related to the environment?
- A) Host
 - B) Reservoir
 - C) Vehicle
 - D) Vector
35. A municipal public health team is investigating a potential association between increased incidence of respiratory illness in a neighbourhood and emissions from a newly constructed industrial facility nearby. They decide to measure levels of specific air pollutants in the ambient environment at various locations around the facility and in the affected neighbourhood. Measuring pollutant levels at a given location primarily quantifies what type of exposure?
- A) Personal exposure
 - B) Internal dose
 - C) Ambient exposure
 - D) Biological exposure
36. A scientist is conducting research to understand how a newly identified chemical contaminant affects liver function at a molecular level. The scientist uses microarrays (gene chips) to observe changes in gene expression in liver cells exposed to varying concentrations of the chemical *in vitro*. This approach aligns most closely with which emerging scientific field relevant to environmental health?
- A) Physiologically Based Pharmacokinetic Modelling (PBPK)
 - B) Toxicogenomic
 - C) Ecotoxicology
 - D) Environmental Psychology

37. In assessing the risk of a noncarcinogenic chemical exposure in a community, an environmental health professional calculates the Hazard Index (HI). The exposure assessment yields an estimated average daily exposure level for the community, and the dose-response assessment provides a reference dose (RfD). The calculated HI for the average population is 0.75. According to the sources, what does this result typically suggest?
- A) The exposure level is likely to cause adverse health effects.
 - B) The risk level is of concern for the average population.
 - C) The exposure level is below the RfD and suggests low risk.
 - D) The exposure level exceeds the acceptable threshold for carcinogens.
38. A developing country with high rates of enteric diseases is planning to install a new municipal water treatment plant. An environmental health expert is advising the government on the choice of water treatment options. What crucial factor should the expert's recommendations primarily take into account, beyond simply eliminating coliform bacteria as an indicator?
- A) The cost-effectiveness of using bottled water instead of treated tap water.
 - B) The potential for emerging issues like chemical contaminants from industrial discharge.
 - C) The aesthetic preferences of the local population regarding water taste and odour.
 - D) Directly monitoring for specific pathogens like *Vibrio cholerae* for better public health protection.
39. A scientist is evaluating the acute toxicity of a chemical compound. They perform studies to determine the dose that is lethal to 50% of a test population. What is this measure called?
- A) LD50
 - B) Cancer Slope Factor (CSF)
 - C) Reference Dose (RfD)
 - D) Margin of Exposure (MOE)
40. An environmental health professional is asked to advise a school cafeteria on interventions to encourage healthier food choices among students. Drawing on principles from Environmental Psychology, which among the following interventions would be most aligned with modifying the environment to influence behavior, in the context of a cafeteria setting?
- A) Placing healthier food options in more convenient or attractive locations.
 - B) Posting nutritional content labels on all food items.
 - C) Providing educational brochures about healthy eating.
 - D) Offering monetary rewards for choosing fruits and vegetables.

41. An environmental epidemiologist has completed a study suggesting a strong association between exposure to a local industrial emission and a rare health outcome in the community. The findings have significant public health implications but may face strong opposition from the industry. What ethical obligation does the epidemiologist have regarding these findings?
- A) To present the findings only to scientific peers and avoid public engagement.
 - B) To selectively present data that strongly support the link, minimizing uncertainty.
 - C) To present the technical details and context of the environmental problem, including uncertainties, openly and honestly.
 - D) To wait until all possible alternative explanations have been definitively ruled out before communicating the findings.
42. A patient presents with a generalized vesicular rash. Upon examination, lesions in various stages of development (macules, papules, vesicles, pustules, and scabs) are noted simultaneously in the same area of the body. The prodromal symptoms were mild. Based on the rash characteristics and prodrome described in the sources, which disease is the most likely diagnosis, and which disease is explicitly contrasted with it regarding rash development?
- A) Measles; contrasted with Rubella
 - B) Smallpox; contrasted with Chickenpox
 - C) Chickenpox; contrasted with Smallpox
 - D) Rickettsial pox; contrasted with Indian tick typhus
43. A community physician encounters an outbreak of Mumps, particularly affecting adolescent males. Which complication should the physician be most attentive in his specific demographic, despite the overall low mortality of the disease?
- A) Pancreatitis
 - B) Encephalitis
 - C) Orchitis
 - D) Loss of hearing
44. The Mumps component of the MMR vaccine is prepared from a specific strain propagated on a particular cell type in Serum Institute of India Pvt. Ltd. Which strain and cell type combination for the Mumps component is specifically used?
- A) SA 14-14-2 strain propagated on vero cells
 - B) EZ strain propagated on HDC
 - C) LZ strain propagated on chick embryo fibroblast cells
 - D) Nakayama strain propagated on mouse brain

45. An immunization survey following a measles outbreak in a community health center area found the following data among preschool children aged 12-23 months: 200 children in total, 100 immunized against measles, 10 cases of measles among immunized children, and 90 cases of measles among unimmunized children. Calculate the Vaccine effectiveness in % based on this data.
- A) 10%
 - B) 80%
 - C) 89%
 - D) 40%
46. A public health manager is evaluating strategies for controlling Congenital Rubella Syndrome (CRS) in a region that has recently initiated widespread Rubella vaccination. Which vaccination approach is described as the strategy aiming for **elimination** of both Rubella disease and CRS, rather than just preventing CRS?
- A) Vaccinating only adolescent girls and women of childbearing age with Monovalent Rubella vaccine.
 - B) Implementing universal vaccination of infants using MMR vaccine.
 - C) Utilizing Human Normal Immunoglobulin for passive immunization of pregnant women exposed to Rubella.
 - D) Conducting mass campaigns with Rubella vaccine solely targeting school-aged children (9 months to 15 years)
47. During a Measles-Rubella (MR) vaccination campaign, a health worker reconstitutes an MR vaccine vial with the provided diluent. According to the cold chain guidelines and vaccine handling information, within what maximum timeframe after reconstitution must this vaccine generally be used or discarded?
- A) Within 2 hours.
 - B) Within 4 hours.
 - C) Within 6 hours.
 - D) Within 8 hours.
48. A new screening test for Influenza A is being evaluated in a population of 5000 individuals. A prior study using a gold standard laboratory method determined that the true prevalence of Influenza A in this population is 10%. The new screening test demonstrated a sensitivity of 85% and a specificity of 95%. Calculate the estimated number of individuals who would test positive with this new screening test in this population.
- A) 425
 - B) 475
 - C) 500
 - D) 650

49. Which of the following type of Influenza vaccines is noted for its characteristics of being highly safe, effective, stable, potent, and purified, while also being more costly and typically administered in multiple doses?
- A) Live attenuated vaccine.
 - B) Killed vaccine (e.g., Whole or Split virus vaccine).
 - C) Subunit vaccine.
 - D) Tissue culture vaccine.
50. A public health unit is reviewing historical epidemiological data on infectious diseases in a tropical zone. The records indicate that Rubella incidence follows a distinct seasonal pattern. During which season is Rubella occurrence typically highest in tropical regions?
- A) Monsoon season.
 - B) Dry season.
 - C) Autumn and winter.
 - D) Spring and early summer.
51. A district with a population of 2.5 million reports 30 cases of suspected meningococcal meningitis over a one-week period during the dry season. The district health officer needs to quickly assess if this constitutes an epidemic requiring mass vaccination. Which among the following is the relevant epidemiological threshold for considering mass vaccination during a meningococcal disease outbreak that he should refer to?
- A) Reporting of an unusual isolate or shifting age distribution of cases
 - B) An attack rate exceeding 5 cases per lakh population in a given area.
 - C) An attack rate exceeding 10 cases per lakh population in a given area.
 - D) Doubling of reported cases over the last three months.
52. Based on the provided sources, the estimated prevalence of infectious tuberculosis (TB) cases in India is approximately 4 per 1000 population. The Revised National Tuberculosis Control Programme (RNTCP) aimed to detect at least 70 percent of these estimated infectious cases. In a population of 500,000, how many infectious TB cases would be missed by the program if it achieved its 70% detection target?
- A) 600 cases
 - B) 2000 cases
 - C) 1400 cases
 - D) 2800 cases

53. A patient diagnosed with HIV infection in India is also found to have active pulmonary tuberculosis. Considering the integrated management approach recommended in the sources for co-infected individuals, which strategy is emphasized for this patient?
- A) Treating TB first with standard regimens, delaying ART until TB treatment is complete.
 - B) Initiating ART immediately, regardless of TB treatment status, under the 'Test and Treat' policy.
 - C) Managing both conditions simultaneously with appropriate anti-TB drugs and antiretroviral therapy (ART).
 - D) Relying solely on syndromic case management for both TB and HIV symptoms at the primary care level.
54. What is considered the 'gold standard' serological test for the serodiagnosis of Leptospirosis due to its diagnostic specificity?
- A) Weil-Felix test
 - B) Microscopic Agglutination Test (MAT)
 - C) ELISA (Enzyme-Linked Immunosorbent Assay)
 - D) Rapid Diagnostic Test (RDT)
55. A 25-year-old male patient, diagnosed with pulmonary MDR-TB and eligible for the BPaLM regimen, successfully completes the standard 26-week treatment course without interruptions or regimen modifications. According to the guidelines, how many total doses of Bedaquiline were administered to this patient?
- A) 78
 - B) 86
 - C) 90
 - D) 182
56. A 50-year-old male patient is diagnosed with Rifampicin-resistant, Fluoroquinolone-resistant pulmonary TB. He has no prior exposure to Bedaquiline, Pretomanid, or Linezolid. Pre-treatment evaluation shows no contraindications for newer drugs. According to the guidelines, what is the recommended first-preference treatment regimen for this patient?
- A) 9-11-month shorter oral MDR/RR-TB regimen
 - B) 18-20 months longer oral M/XDR-TB regimen
 - C) BPaLM regimen
 - D) 6-month H mono/poly DR-TB regimen

57. A 20-year-old female patient with pulmonary MDR-TB, receiving the BPaLM regimen (including 600 mg Linezolid daily) for 15 weeks, misses 3.5 weeks of all doses due to personal reasons. Upon returning to the clinic and expressing willingness to resume treatment, what is the recommended action for her BPaLM regimen under the National Tuberculosis Elimination Programme (NTEP) guidelines?
- A) Continue the BPaLM regimen and extend the treatment duration by 3.5 weeks.
 - B) Stop the current BPaLM regimen and declare the outcome as 'Treatment completed'.
 - C) Continue the BPaLM regimen at reduced doses for the remaining period.
 - D) Stop the current BPaLM regimen, declare the outcome as 'Treatment regimen changed', and consider a longer oral M/XDR-TB regimen.
58. A 68-year-old male patient with MDR-TB is being considered for the BPaLM regimen. During pre-treatment evaluation, his laboratory results show a Haemoglobin (Hb) level of 7.5 g/dL, a platelet count of 160,000/mm³, and a serum creatinine level within the normal range. He denies symptoms of neuropathy. Based on these findings and the guidelines, which of the following is the most appropriate consideration for initiating BPaLM?
- A) Initiate BPaLM with careful monitoring, as all parameters meet eligibility criteria.
 - B) The Hb level represents a relative contraindication before initiating BPaLM.
 - C) The platelet count is a relative contraindication, precluding BPaLM initiation.
 - D) The patient's age is an absolute contraindication for the BPaLM regimen.
59. According to the guidelines, which of the following monitoring parameters is specifically recommended to be performed monthly from Month 2 onwards for patients on the standard 26-week BPaLM regimen?
- A) S. Electrolytes (Na, K, Mg, Ca)
 - B) Visual acuity and color vision test
 - C) Culture at the C&DST lab
 - D) Chest X-Ray and LFT
60. A study was conducted to assess the extrapyramidal side effects of a new antipsychotic drug in patients with schizophrenia. Many of these patients were smokers and some of them were on anticholinergic drugs. What was the role of the anticholinergic drugs in this study?
- A) Confounder
 - B) Random Variable
 - C) Effect Modifier
 - D) Independent Variable

61. A patient presents to a Model Hepatitis Treatment Centre (MTC) in India with signs consistent with chronic liver disease. Initial serological screening, performed at a government facility, returns a positive anti-HCV antibody test result. According to the standard diagnostic algorithm and patient management approach outlined by the National Viral Hepatitis Control Program (NVHCP), what is the *mandatory next step* that must be performed to confirm active infection and determine eligibility for Hepatitis C treatment?
- A) Perform a qualitative HCV RNA test to confirm active infection
 - B) Conduct transient elastography (FibroScan) to assess liver fibrosis
 - C) Quantitative Hepatitis C RNA (viral load) estimation from a plasma sample
 - D) Order liver function tests (LFTs) to evaluate liver damage
62. The "National Health Policy 2017" emphasizes a shift towards a more integrated approach to healthcare. Which of the following is highlighted as a key element for achieving universal health coverage (UHC) and responding to public health emergencies, even beyond routine care?
- A) Strict adherence to isolated vertical programs for efficiency.
 - B) Retaining a certain excess in health infrastructure, human resource, and advanced technological capacity within public health systems.
 - C) Exclusive reliance on the private sector for high-end technological capacity.
 - D) Centralizing all healthcare decisions to the national level for uniformity.
63. A newly opened Integrated Counseling and Testing Center (ICTC) aims to align its services with the "National AIDS Control Program Phase IV." What is a key objective for strengthening counselling and testing services under this phase?
- A) To increase testing coverage among high-risk groups annually
 - B) To expand access to pregnant women every year
 - C) To integrate HIV testing with routine health services nationwide
 - D) To promote social media campaigns for HIV status awareness
64. A health worker in an urban setting is encountering challenges in controlling mosquito breeding. According to the "Urban Malaria Scheme (UMS)," what is a primary control measure recommended for vector mosquitoes in urban areas?
- A) Large-scale indoor residual spraying (IRS) of all households.
 - B) Recurrent anti-larval measures with approved larvicides.
 - C) Mass drug administration of antimalarial drugs.
 - D) Biological control using genetically modified mosquitoes.

65. A community health worker is promoting healthy lifestyles to prevent non-communicable diseases (NCDs) at a population level. According to the "National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Strokes (NPCDCS)," which approach to primary prevention is considered most beneficial, cost-effective, and sustainable for the *whole population*?
- A) High-risk approach focusing on individual screening.
 - B) Targeted interventions for those already diagnosed with NCDs.
 - C) Population-based approach focusing on risk factor reduction in the whole population.
 - D) Tertiary prevention through advanced medical procedures.
66. A public health officer is developing a strategic plan for the "National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD)." What is the overarching vision of NP-NCD?
- A) To eliminate all NCDs by 2030.
 - B) To focus solely on the diagnosis and treatment of NCDs.
 - C) To reduce mortality due to NCDs by one-third by 2030
 - D) To shift the entire burden of NCD management to the private sector.
67. A 30-year-old HIV-positive mother delivers at a tertiary care center. She is on lifelong ART and has an undetectable viral load. She asks if she can breastfeed. According to current MAA-aligned national guidelines, what is the best response?
- A) Breastfeeding is contraindicated for all HIV-positive mothers
 - B) Breastfeeding is allowed only if formula is unavailable
 - C) Exclusive breastfeeding is recommended with continued ART
 - D) Expressed breast milk is safer than direct breastfeeding in all cases
68. In a performance review of a district hospital, you find that exclusive breastfeeding at discharge rose from 58% to 76% in one year. If 2,500 live births occurred each year, how many additional infants were exclusively breastfed in the second year?
- A) 400
 - B) 450
 - C) 500
 - D) 600
69. A Medical Officer is undergoing training on the "Integrated Management of Neonatal and Childhood Illnesses - IMNCI-PLUS" strategy, an Indian adaptation of the WHO-UNICEF IMCI framework. The IMNCI-PLUS strategy incorporates country-specific modifications.
- Which of the following is a key enhancement unique to India's IMNCI-PLUS adaptation?
- A) Prioritizing care for children aged 2 months to 5 years, excluding neonates for feasibility.
 - B) Emphasizing facility-based management over community-based interventions.
 - C) Incorporating home-based newborn care into the integrated strategy.
 - D) Streamlining guidelines by removing nutritional counseling components.

70. "Sapna" is a community-based mascot concept developed to promote health awareness through key Information, Education, and Communication (IEC) messages. The role is typically played by a local school-going girl who volunteers to represent 'Sapna' in her village. Multiple girls can take on this role within the same community to strengthen outreach efforts.

This mascot is used in which of the following programme:

- A) National Mental health programme
 - B) National Leprosy eradication programme
 - C) National AIDS Control Programme
 - D) National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and stroke
71. You are attending a district review meeting on the implementation of the Anemia Mukh Bharat (AMB) strategy. The District Nodal Officer emphasizes a structured approach known as the "6x6x6 strategy", which is central to AMB's nationwide implementation. As a recently appointed Community Medicine specialist, you are asked to outline the key pillars of this strategy.

Which of the following accurately represents the components of the "6x6x6 strategy" under Anemia Mukh Bharat?

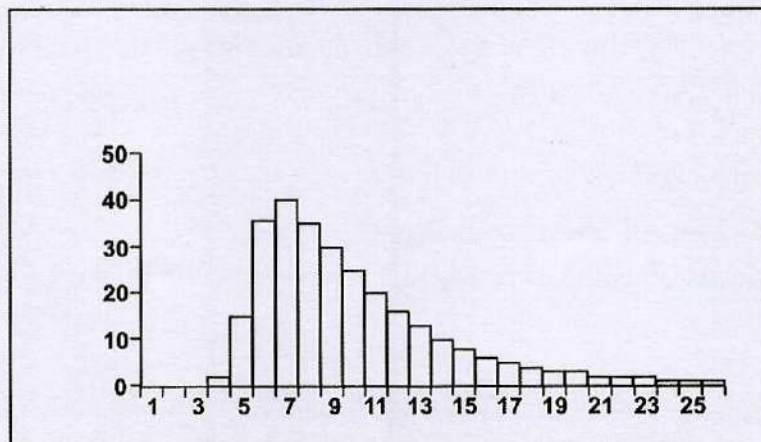
- A) 6 Beneficiaries, 6 Communication strategies, 6 levels of coordination
 - B) 6 Intervention, 6 Communication strategies, 6 levels of coordination
 - C) 6 Ministries, 6 Communication strategies, 6 methods of treatment
 - D) 6 Beneficiaries, 6 interventions and 6 institutional mechanisms
72. A public health professional is evaluating the "National Nutrition Mission (Poshan Abhiyan)." What is a key technological initiative mentioned that is being integrated into this mission for real-time monitoring?
- A) Manual reporting of growth data to district headquarters.
 - B) Satellite imagery for food security assessment.
 - C) Technology-based real-time monitoring growth of children and check the pilferage of food/ration.
 - D) Biometric scanning for nutritional assessment at the household level

73. A sample of 1000 people has been examined at a communicable disease clinic. 50 of them were diagnosed with Covid-19 and the rest were healthy and asymptomatic. Then the same people have been sent for PCR testing, and the results of the test and the experts' opinions are given in below Table

		Clinic	
		+	-
PCR	+	44	9
	-	6	941
Total		50	950

Which of the following correctly denotes the sensitivity, specificity in the above example?

- A) 0.88 and 0.991
 B) 0.991 and 0.88
 C) 0.830 and 0.994
 D) 0.994 and 0.830
74. Which of the following terms accurately describe the distribution shown in below Figure?



- A) Negatively skewed
 B) Positively skewed
 C) Symmetrical Distribution
 D) Skewed to the left

75. In a study on the effectiveness of a zinc supplement in preventing failure of a medical outcome, the absolute risk of failure for the placebo group was 17.03%, and for the zinc group was 10.24%. Calculate the Number Needed to Treat (NNT) to prevent one failure of the medical outcome.
- A) 0.0679
 - B) 6
 - C) 15
 - D) 30
76. A retrospective case-control study aims to investigate the association between early-life diet and the development of a rare adult disease. Cases are identified from a hospital registry, and controls are selected from a healthy volunteer pool. The researchers attempt to match controls to cases based on age and sex. Which of the following types of bias is *most likely* to affect this study design, despite the matching?
- A) Recall bias
 - B) Performance bias, due to differences in treatment provided to cases and controls.
 - C) Detection bias.
 - D) Attrition bias.
77. A pharmaceutical company conducts a large clinical trial to test a new drug for reducing the risk of a rare but serious adverse event. They set the alpha (α) level at 0.05 and the power at 0.90. The trial concludes that the new drug does not significantly reduce the risk of the adverse event ($p = 0.07$). However, unknown to the researchers, the drug *does* have a real, small beneficial effect in the population. In this situation, which type of error has the researchers most likely made?
- A) Type I error (false positive).
 - B) Type II error (false negative).
 - C) Both Type I and Type II errors simultaneously.
 - D) No error, as the p-value is greater than alpha
78. A researcher calculates Pearson's correlation coefficient between two continuous variables, physical activity (measured in MET-hours/week) and body fat percentage, in a large cohort of adults. The calculated coefficient is $r = -0.75$ ($p < 0.001$). Which of the following is the most accurate interpretation of this result?
- A) Higher physical activity causes a significant reduction in body fat percentage.
 - B) There is a strong, statistically significant negative linear association between physical activity and body fat percentage.
 - C) 75% of the variation in body fat percentage is explained by physical activity.
 - D) The relationship is curvilinear, indicating that very high levels of physical activity have a diminishing return on body fat reduction.

79. A District Medical Officer is evaluating the impact of the RMNCH+A approach in their district. Despite improvements in institutional delivery rates, neonatal mortality rates remain stubbornly high, particularly in the first week of life. Which of the following gaps in the continuum of care, as emphasized by RMNCH+A, is MOST likely contributing to this persistent challenge?
- A) Insufficient focus on adolescent reproductive and sexual health (ARSH) services.
 - B) Inadequate provision of pre-conception care and early antenatal registration.
 - C) Weak linkages between facility-based care and home/community-based newborn care.
 - D) Overemphasis on family planning methods rather than comprehensive MCH services.
80. A 15-month-old child is brought to the Anganwadi Centre for growth monitoring. The child's current weight is 7.5 kg. Review of the Mother and Child Protection Card (MCPC) reveals the child's birth weight was 2.8 kg, and at 9 months, the weight was 6.0 kg. The new WHO Child Growth Standards adopted in the MCPC indicate that the child's weight has consistently fallen below the -3SD curve for the past 6 months. The AWW also notes inadequate feeding practices as per the mother's report. Which of the following is the most appropriate classification of the child's nutritional status and the immediate action required?
- A) Moderately underweight; provide supplementary nutrition at the Anganwadi and counsel the mother on complementary feeding practices.
 - B) Severely underweight; immediately refer the child to a district hospital for inpatient management due to high risk of complications.
 - C) Normal growth for age; reassure the mother and provide routine nutrition education focusing on healthy eating habits.
 - D) Stunted growth; recommend Iron and Folic Acid supplementation and deworming.
81. A Block Medical Officer is attempting to improve the utilization of institutional delivery services by promoting Village Health Sanitation and Nutrition Committees (VHSNCs) and Accredited Social Health Activists (ASHAs) under the National Rural Health Mission (NRHM). Despite these efforts, a significant proportion of "low-risk" pregnancies continue to deliver at home with Traditional Birth Attendants (TBAs). What is a recognized limitation or challenge in relying solely on the "At Risk" approach in MCH, as implied by the sources?
- A) It overburdens health workers with identifying an extensive list of risk factors, diverting them from essential services.
 - B) "Low-risk" pregnancies can encounter unexpected complications during labor, leading to a loss of credibility for health workers.
 - C) TBAs are inherently resistant to collaboration, rendering community participation strategies ineffective.
 - D) The approach fails to account for environmental determinants of health, such as poor sanitation and lack of safe water.

82. A 25-year-old woman, who delivered a healthy baby at a PHC 4 days ago, presents with fever (38.5°C), lower abdominal pain, and foul-smelling vaginal discharge. Her fundal height is higher than expected. Which of the following is the most likely diagnosis and the most appropriate immediate step in management?
- A) Urinary tract infection (UTI); collect urine sample and start oral antibiotics.
 - B) Puerperal sepsis; initiate broad-spectrum intravenous antibiotics and refer to a well-equipped hospital if further management is needed.
 - C) Postpartum hemorrhage (PPH) due to retained products; perform manual vacuum aspiration (MVA) at the PHC.
 - D) Engorged breasts; advise warm compresses and frequent breastfeeding.
83. A District RCH Officer is implementing a new initiative to improve the quality of maternal and child health services. As part of this, a "Paradigm Shift" in approach is emphasized. Which of the following best describes this shift as articulated in the RCH program?
- A) From a top-down, centralized, target-driven approach to a bottom-up, decentralized, client needs-driven approach.
 - B) From focusing solely on family planning to integrating all aspects of human sexuality and reproductive health needs.
 - C) From providing services primarily in hospitals to emphasizing community-based outreach programs.
 - D) From a disease-specific approach to an integrated management of childhood illnesses strategy.
84. A 22-year-old pregnant woman, 20 weeks gestational age, attends her first antenatal care (ANC) visit at a rural sub-centre. She reports no specific complaints. As per the RCH program, what is the minimum recommended frequency of antenatal check-ups for a normal pregnancy, and what is the primary purpose of these visits?
- A) One visit; to confirm pregnancy and assess fetal viability.
 - B) Two visits, both in the last trimester; to identify high-risk cases for hospital delivery.
 - C) Three visits, with at least two in the last trimester; to monitor progress, identify, and refer high-risk cases.
 - D) Four visits, with the first in the first trimester; to ensure comprehensive care and prevent all complications.
85. A community health worker is using the Mother and Child Protection Card (MCPC) to monitor a child's health and development. Which of the following statements best describes the role of the MCPC in identifying developmental issues?
- A) The MCPC uses specific age-based checklists to diagnose neurodevelopmental disorders like cerebral palsy and mental retardation.
 - B) It includes "Red Flag Signs" of developmental issues to guide early identification and referral for comprehensive assessment.
 - C) The MCPC's primary function for development is to track IQ scores and cognitive development based on standardized tests.
 - D) It replaces the need for specialized developmental screening tools like the Denver Development Screening Test (DDST) at the primary care level.

86. A Public Health Specialist is designing a training module for medical students on the shift in health care approaches for mother and child in India. She wants to highlight the evolution from fragmented programs to an integrated, client-centered approach. Which of the following historical developments best illustrates this paradigm shift?
- A) The transition from the National Family Planning Programme (started 1951) to the Family Welfare Programme (1984-1989).
 - B) The integration of various programs under Child Survival and Safe Motherhood (CSSM) in 1992-93.
 - C) The launch of the Universal Immunization Programme (UIP) in 1985-1986.
 - D) The re-orientation of the Family Welfare Programme to the Reproductive and Child Health (RCH) Programme in 1997.
87. An occupational health physician is reviewing the health surveillance program for a group of factory workers exposed to significant noise levels, consistently above 85 dB(A). The program currently relies on annual audiograms. During a review, it's noted that several workers exhibit a characteristic "notch" at 4 kHz on their audiograms. The physician is evaluating the effectiveness and compliance of the current program. Which statement correctly describes an aspect of effective hearing conservation programs and the interpretation of findings?
- A) The noise-induced hearing loss (NIHL) notch at 4 kHz or 6 kHz on an audiogram is diagnostic, and health surveillance for noise exposure is a legal requirement when noise exceeds 80 dB.
 - B) Hearing aids restore hearing to normal for affected employees, eliminating the need for further workplace intervention.
 - C) Self-recorded audiometry is the best method to evaluate the effectiveness of noise conservation programs due to its convenience.
 - D) Tinnitus is rarely disabling and not normally associated with noise exposure; thus, its presence is not a significant concern in surveillance.
88. A large chemical manufacturing plant is undergoing a safety audit following a recent incident where a worker experienced acute respiratory symptoms after exposure to an unknown substance during a maintenance operation. The worker was not wearing appropriate respiratory protective equipment. The safety officer identifies that the plant has a good record of providing PPE but the incident highlights gaps in its use and comprehensive hazard identification. Considering a hierarchical approach to hazard control, which intervention should the plant prioritize to prevent future similar incidents?
- A) Enhance training programs for workers on the proper use and maintenance of personal protective equipment (PPE).
 - B) Implement a rigorous schedule of medical surveillance for all workers potentially exposed to airborne hazards.
 - C) Substitute the hazardous substance with a less toxic alternative, or implement local exhaust ventilation at the source of emission.
 - D) Establish a robust accident investigation protocol to determine root causes and enforce disciplinary actions for non-compliance.

89. An occupational health physician is asked to assess an employee from a printing factory who has recently been diagnosed with noise-induced hearing loss (NIHL). The employer is seeking advice on their legal duties regarding this diagnosis.

Which of the following statements is true regarding noise-induced hearing loss and employer responsibilities?

- A) Employers have no legal duty to move employees against their wishes, even with a diagnosis of NIHL.
 - B) An audiogram can be diagnostic of NIHL, typically showing a notch at 4 kHz and/or 6 kHz.
 - C) Consent is not needed to release anonymized surveillance data to the Health and Safety Executive (HSE).
 - D) Noise-induced hearing loss is not reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).
90. An occupational health physician is conducting a pre-placement medical examination for a new employee at a lead smelting plant. The candidate has a history of mild anemia and occasional constipation, but denies any neurological symptoms. The physician needs to understand the specific occupational hazards and appropriate health surveillance for lead exposure. Which of the following is correct regarding lead toxicity and its occupational management?
- A) Lead toxicity typically causes epilepsy and biliary cirrhosis as primary manifestations.
 - B) Routine testing for TB is indicated for workers exposed to lead due to synergistic effects.
 - C) An occupational health physician should prescribe chelating agents for all workers with detectable blood lead levels.
 - D) Industrial and personal hygiene, such as not bringing food into workrooms, are of great importance in prevention.
91. A pregnant factory worker is concerned about occupational hazards in her workplace and how they might affect her and her unborn child. She works in a general manufacturing environment that uses various chemicals, but she is unsure about specific exposures. Which of the following statements about occupational hazards is most accurate in the context of general manufacturing?
- A) Cadmium exposure in the workplace primarily causes hepatic carcinoma.
 - B) Tetrachloroethylene is commonly used in paper manufacture.
 - C) Isocyanates are respiratory sensitizers found in two-part paint.
 - D) Penile cancer is typically associated with quarrying due to silica exposure.

92. A district health authority plans to introduce a new cervical cancer screening program using HPV testing in a resource-constrained rural region with limited laboratory infrastructure. The region has a target population of 250,000 eligible women. The annual cost of HPV testing is estimated at Rs 10 per test, and the current annual budget allocation for women's health is Rs 1,000,000. An alternative strategy involves expanding visual inspection with acetic acid (VIA) screening, which costs Rs 2 per test. Both methods have demonstrated effectiveness, but HPV testing offers higher sensitivity.

Based on a cost-effectiveness principle focusing on maximizing early detection within the current budget for women's health, which of the following is the most appropriate initial planning decision for the district health authority?

- A) Implement HPV testing for 100,000 women annually, prioritizing high-risk groups, and reallocate remaining women's health funds to other programs.
 - B) Implement VIA screening for the entire eligible population of 250,000 women, as it allows broader coverage within the budget, potentially identifying more cases overall despite lower sensitivity.
 - C) Conduct a pilot program of HPV testing for 50,000 women and conduct a detailed cost-utility analysis to compare both methods, given the higher sensitivity of HPV testing.
 - D) Defer the decision and advocate for a 20% increase in the women's health budget to implement HPV testing for the entire population, aligning with the goal of universal health coverage.
93. A state government is developing a new policy aimed at significantly reducing the burden of Non-Communicable Diseases (NCDs) by promoting healthy lifestyles and early screening. The policy draft primarily outlines interventions led by the health department. Community health experts argue that to achieve broad public health goals for NCDs, a "whole of the government" and "whole of the society" approach is crucial. Which of the following best represents an integrated strategy for stakeholder engagement that aligns with the "whole of the government" and "whole of the society" principles for effective NCD policy implementation?
- A) The health department should conduct mass media campaigns on healthy lifestyles, and periodically consult with civil society organizations for feedback.
 - B) Private healthcare providers should be incentivized to offer free NCD screening, and their data integrated into the national surveillance system.
 - C) The NCD policy should be developed by an expert committee without extensive external consultation to ensure scientific rigor and timely implementation.
 - D) The policy should mandate inter-sectoral coordination committees involving ministries like education etc. and alongside active engagement with local community leaders.

94. Which among the following statements are true regarding epidemiology of diphtheria in post vaccination era?

- I. After the introduction of three primary and three booster series of childhood diphtheria vaccination in a population where diphtheria is endemic, age shift phenomenon is observed.
- II. In the first stage, disease incidence shifts from predominantly pre-school pattern to a greater proportion of cases in school-age children.
- III. In the second stage, cases are seen primarily in adolescents and young adults aged >15 years.
- IV. Infection in infants younger than 6 months is rare due to the presence of maternal antibodies.

Choose the correct answer from options given below:

- A) I, II, III only
- B) II and III only
- C) II, III, IV only
- D) All of the above

95. A District Hospital is grappling with a high rate of hospital-acquired infections (HAIs), increasing the average length of stay. The current practice involves general training sessions on infection control but lacks consistent monitoring and feedback mechanisms. To effectively reduce Hospital Acquired Infections (HAIs) and improve quality of care, the hospital management should prioritize which of the following quality assurance strategies?

- A) Implement a punitive system for staff members found not adhering to infection control protocols, linking it to salary deductions.
- B) Invest heavily in advanced sterilization equipment, assuming technology alone will eliminate most infections.
- C) Develop and strictly enforce standardized operating procedures (SOPs) for safe medication use and interactive training sessions and a patient safety incident reporting.
- D) Increase the bed occupancy rate to 100% to optimize resource utilization, as HAIs are often a factor of under-utilization.

96. A new community-based intervention aimed at improving infant nutrition through structured mother-to-mother peer support groups has been implemented for one year in a district. The district health management wants to evaluate the program's *impact* on the nutritional status of infants. The current reporting system provides data on the number of peer group meetings held and mothers attended. Which of the following would be the most appropriate *impact indicator* to evaluate the effectiveness of this infant nutrition program, and how would it ideally be measured?
- A) Percentage of mothers attending peer support group meetings, measured through monthly attendance registers.
 - B) Number of peer support groups formed, measured through quarterly reports.
 - C) Reduction in the prevalence of underweight/stunting among under-five children, measured through annual surveys.
 - D) Mothers' self-reported knowledge about infant feeding practices, measured through exit interviews after meetings.
97. A public health initiative aims to improve community sanitation practices, including safe disposal of human excreta and waste water management, in a rural village. The new strategy emphasizes community ownership and sustainability. To foster genuine community ownership and achieve sustainable improvements in sanitation practices, which strategic approach aligns best with the principles of primary healthcare?
- A) Provide direct financial incentives to individual households for constructing latrines, as this directly addresses affordability.
 - B) Impose strict regulations and penalties for non-compliance with sanitation norms, enforced by external authorities.
 - C) Focus on developing advanced wastewater treatment plants, assuming technological solutions are paramount for sustainability.
 - D) Engage and empower local community structures in the planning and monitoring of sanitation interventions
98. A Primary Health Centre (PHC) is attempting to improve the quality of its antenatal care (ANC) services. The medical officer and supervisors are struggling to determine if the *actual quality* of ANC services delivered by health workers is meeting standards, as current reports primarily track only the *number* of ANC check-ups performed. To assess the *quality* of ANC services delivered by health workers, which of the following would be the most effective strategy for the PHC management?
- A) Conduct direct observations of health workers and providing immediate on-the-job training.
 - B) Implement a "Likert scale" survey among pregnant women to measure their satisfaction levels with the ANC services.
 - C) Increase the frequency of reporting the number of ANC check-ups to daily, to ensure more timely quantitative data.
 - D) Compare the reported number of ANC check-ups against the national target of 100% coverage to identify gaps in outreach.

99. "The systematic study of the means by which biomedical and other relevant knowledge is brought to bear on the health of individuals and communities under a given set of conditions" falls within the purview of
- A) Biomedical research
 - B) Health systems research
 - C) Intersectoral research
 - D) Operations research
100. A health indicator such as infant mortality rate is able to measure the health status of infants, the health status of the mother as well as the socio-economic development of the region. It changes with any change in the health status of the infants. Which of the following statements is true?
- A) It is sensitive and specific
 - B) It is sensitive but not specific
 - C) It is specific but not sensitive
 - D) It is neither sensitive nor specific
-