

JEMAS(PG)-2024
Subject: Master's in Public Health (MPH)

QB No: 4102700001

Duration: 90 minutes

No of MCQ: 100

Full Marks: 100

INSTRUCTIONS

1. All questions are of objective type having four answer options for each.
2. **Category-1:** Carries **1** mark each and only one option is correct. In case of incorrect answer or any combination of more than one answer, $\frac{1}{4}$ mark will be deducted.
3. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C, or D.
4. Use only **Black/Blue ink ball point pen** to mark the answer by filling up of the respective bubbles completely.
5. Write Question Booklet number and your roll number carefully in the specified locations of the **OMR** sheet. Also fill appropriate bubbles.
6. Write your name (in block letter), name of the examination center and put your signature (as is appeared in Admit Card) in appropriate boxes in the **OMR sheet**.
7. The OMR sheet is liable to become invalid if there is any mistake in filling the correct bubbles for Question Booklet number/roll number or if there is any discrepancy in the name/ signature of the candidate, name of the examination center. The OMR sheet may also become invalid due to folding or putting stray marks on it or any damage to it. The consequence of such invalidation due to incorrect marking or careless handling by the candidate will be sole responsibility of candidate.
8. Candidates are not allowed to carry any written or printed material, calculator, pen, log-table, wristwatch, any communication device like mobile phones, bluetooth devices etc. inside the examination hall. Any candidate found with such prohibited items will be **reported against** and his/her candidature will be summarily cancelled.
9. Rough work must be done on the Question Booklet itself. Additional blank pages are given in the Question Booklet for rough work.
10. Hand over the OMR sheet to the invigilator before leaving the Examination Hall.
11. Candidates are allowed to take the Question Booklet after examination is over.

Signature of the Candidate: _____

(As in Admit Card)

Signature of the Invigilator: _____

ROUGH WORK ONLY

MASTER'S IN PUBLIC HEALTH (MPH)

1. Indole-3-acetic acid is the most common naturally occurring plant hormone of _____ class
 - (A) Gibberellin
 - (B) Auxin
 - (C) Ethylene
 - (D) Cytokinin
2. The tissue that provides maximum mechanical strength to the plant is
 - (A) Xylem
 - (B) Phloem
 - (C) Parenchyma
 - (D) Collenchyma
3. A cathode and an anode are the most common components of an electrochemical cell. Which of the following claims about the cathode is correct?
 - (A) Oxidation occurs at the cathode
 - (B) Electrons move into the cathode
 - (C) Usually denoted by a negative sign
 - (D) Is usually made up of insulating material
4. What's the difference between cold cream and vanishing cream?
 - (A) Vanishing cream is a water-in-oil emulsion whereas cold cream is an oil-in-water emulsion
 - (B) Both are examples of water-in-oil emulsions
 - (C) Both are examples of oil-in-water emulsions
 - (D) Vanishing cream is an oil-in-water emulsion whereas cold cream is a water-in-oil emulsion
5. The stage in which chromosomes align on the equator of spindle fibre is
 - (A) Telophase
 - (B) Anaphase
 - (C) Metaphase
 - (D) Prophase
6. The commercial and scientific method of beekeeping to produce wax and honey is known as _____.
 - (A) Silviculture
 - (B) Sericulture
 - (C) Apiculture
 - (D) Pisciculture
7. Altitude sickness is typically caused due to:
 - (A) The partial pressure of oxygen
 - (B) Increased levels of CO₂ in blood
 - (C) Cold temperatures
 - (D) None of the above
8. The most characteristic feature seen in peripheral blood film of leukaemia is:
 - (A) Increased Total WBC count
 - (B) Decreased WBC count
 - (C) Decreased RBC count
 - (D) Presence of high number of immature WBC

9. Which of these bacterial components is least likely to contain useful antigens?
- (A) Cell wall
 - (B) Flagella
 - (C) Ribosomes
 - (D) Capsule
10. Which of the following is not a recognised cause of diarrhoea?
- (A) *Vibrio cholerae*
 - (B) *Escherichia coli*
 - (C) *Clostridium perfringens*
 - (D) *Enterococcus faecalis*
11. Bacteria protect themselves from viruses by fragmenting viral DNA with
- (A) Ligase
 - (B) Endonuclease
 - (C) Exonuclease
 - (D) Gyrase
12. Which of the following is true about ELISA
- (A) Using radiolabelled second antibody
 - (B) Usage of RBCs
 - (C) Using complement-mediated cell lysis
 - (D) Addition of substrate that is converted into a coloured end product
13. Which of the following is a content of Inguinal canal:
- (A) Ilioinguinal nerve
 - (B) Ovarian artery
 - (C) Rectus sheath
 - (D) Sartorius muscle
14. Which of the following anti-inflammatory drugs has an additional cardiovascular advantage:
- (A) Ibuprofen
 - (B) Diclofenac
 - (C) Naproxen
 - (D) Aspirin
15. Which of the following is primarily an inflammatory mediator:
- (A) Thyroxin
 - (B) Interleukins
 - (C) Pancreatin
 - (D) Erythropoietin
16. Throttling, a nature of violent asphyxial death, is usually:
- (A) Suicidal in nature
 - (B) Accidental in nature
 - (C) Homicidal in nature
 - (D) Can be any of the above.
17. Which of the following is true about a malignant growth in human body:
- (A) Can never be prevented
 - (B) Atypical cells are rarely seen
 - (C) Is always due to chronic inflammation of the concerned tissue
 - (D) Metastasis is a common feature.

18. Primary importance to 'Pathological Generals' given by:
- (A) Dr Boger
 - (B) Dr Boenninghausen
 - (C) Dr J.T. Kent
 - (D) Dr Gross
19. Boenninghausen generalized the symptoms by adopting:
- (A) The general symptoms
 - (B) The doctrine of analogy
 - (C) The conceptual image
 - (D) The common symptoms
20. Which of the following remedies have a desire to kill a person who contradicts? :
- (A) Nux vom
 - (B) Hepar sulph
 - (C) Merc sol
 - (D) Nitric acid
21. Acute cerebral or basilar meningitis with threatened, effusion, nocturnal hallucination, wakes up from sleep frightened , screaming when Apis, Helliborous, Sulphur, though well selected fail.
- (A) Tuberculinum
 - (B) Nat Sulph
 - (C) Zinc
 - (D) Carbon
22. Mritashodhana is described by _____.
- (A) Charaka
 - (B) Sushruta
 - (C) Vagbhata
 - (D) Kashyapa
23. A 50-year-old male presents with a swelling in his right posterior mandible. An OPG reveals a multilocular radiolucency involving his right mandibular body and angle region. Which one of the following is the most likely diagnosis?
- (A) Adenomatoid odontogenic tumour
 - (B) Ameloblastoma
 - (C) Dentigerous cyst
 - (D) Odontoma
24. A 35-year-old female patient presents with pain and clicking in her right temporo-mandibular joint for the last 6 months. Clinical examination does not reveal odontogenic cause. What does this condition most likely represent?
- (A) Ankylosis of temporo-mandibular joint
 - (B) Fracture of the mandibular condyle
 - (C) Internal derangement of temporo-mandibular joint
 - (D) Myofascial pain

25. A 35-year-old male patient presents with recurrent meal time swelling in his right submandibular region. On clinical examination you identify a hard lump in his oral floor. Which one of the following is the most likely diagnosis?
- (A) Sialadenitis
 - (B) Sialolithiasis
 - (C) Sialosis
 - (D) Sialorrhoea
26. When assessing a patient's vertical skeletal pattern which clinical method can be used?
- (A) Assessing where the soft tissue A and B points lie relative to zero meridian
 - (B) Assessing the Frankfort mandibular plane angle
 - (C) Calculation of the chin throat length
 - (D) Measurement of the upper lip length
27. Which feature is commonly seen in a patient with a thumb sucking habit?
- (A) Retained deciduous incisors
 - (B) Incomplete overbite or localised anterior openbite
 - (C) Lateral openbites
 - (D) Retroclined upper incisors
28. Generally steroidal hormones are administered in the form of:
- (A) Dental cones
 - (B) Multi layered tablets
 - (C) Implants
 - (D) Soluble tablets
29. The opium alkaloid Papaver somniferum is obtained from:
- (A) Leaf
 - (B) Root
 - (C) Seed
 - (D) Stem
30. Which drug is used to treat amoebic hepatitis:
- (A) Chloroquine
 - (B) Proguanil
 - (C) Trimethoprim
 - (D) Pyrimethamine
31. The radio-frequency radiation is associated with:
- (A) Light consisting of one colour only
 - (B) Nuclear magnetic resonance
 - (C) Gas chromatography
 - (D) Non-aqueous titration
32. In case of needle-stick injury; the first step to be taken by a health care worker is:
- (A) Report to the supervisor
 - (B) Start prophylactic antibiotics immediately
 - (C) Apply tourniquet above the site
 - (D) Wash the area with soap and water

33. The nurse is to administer an IM injection to a 6-month-old child. What is the most appropriate site to use?
- (A) Vastus lateralis
 - (B) Dorsal gluteal
 - (C) Ventral gluteal
 - (D) Rectus abdominis
34. The nurse is to administer a tuberculin skin test. What is the correct procedure?
- (A) Give it subcutaneously in the inner aspect of the forearm.
 - (B) Use a 21-gauge needle and administer in the forearm.
 - (C) Give it at a 10-degree angle in the volar surface of the arm.
 - (D) Administer it intradermally in the upper arm.
35. After which immunization the nurse would expect a permanent scar?
- (A) DPT
 - (B) BCG
 - (C) Measles vaccination
 - (D) Hepatitis B vaccination
36. Understanding other cultures from the perspective of your culture is called as:
- (A) Ethnocentrism
 - (B) Ethnicity
 - (C) Cultural relativism
 - (D) Cultural anthropology
37. Who said, “Man is a Social Animal”?
- (A) Aristotle
 - (B) Comte
 - (C) Plato
 - (D) Socrates
38. ‘Minorities giving up their ancestral customs and adopting the culture of majority’ is called:
- (A) Socialization
 - (B) Integration
 - (C) Accommodation
 - (D) Assimilation
39. ‘A traditional and widely accepted way of behaving or doing something that is specific to a particular society, place, or time’ is called:
- (A) Folkways
 - (B) Law
 - (C) Custom
 - (D) Rules
40. ‘The aggregate of patterned social arrangements in society that are both emergent and determinant of the action of individuals’ is known as:
- (A) Social structure
 - (B) Social norm
 - (C) Social behaviour
 - (D) Social conduct

41. 'Behaviours that violate social norms, and to the study of the causes of these behaviours' is referred to as:
- (A) Sociology
 - (B) Social pathology
 - (C) Social psychology
 - (D) Social studies
42. What do you mean by a mixed economy?
- (A) Modern and traditional industries
 - (B) Public and private sectors
 - (C) Foreign and domestic investments
 - (D) Commercial and subsistence farming
43. What is Gross Domestic Product (GDP)?
- (A) The total value of goods and services manufactured in the country
 - (B) The total value of all the transactions in the country
 - (C) The reduction in the total value of goods and services produced in the country
 - (D) The monetary value of all finished goods and services made within a country during a specific period.
44. Which of the following are authentic institutional sources of rural credit?
- (A) Regional rural banks
 - (B) Landlords
 - (C) Traders
 - (D) Moneylenders
45. The apex funding agency in India for providing rural credit is _____.
- (A) State Bank of India
 - (B) Regional rural banks
 - (C) National Bank for Agriculture and Rural Development (NABARD)
 - (D) None of the above
46. _____ is a promise to farmers that the government would buy their produce at a particular price.
- (A) Maximum Retail Price
 - (B) Minimum Support Price
 - (C) Minimum Retail Price
 - (D) Maximum Support Price
47. Operation Flood is related to _____.
- (A) Milk cooperatives
 - (B) Pulses cooperatives
 - (C) Cereals cooperatives
 - (D) None of the above
48. Which of these schemes allows people from Below Poverty Line (BPL) to get essential goods at subsidised rates?
- (A) Public Distribution System
 - (B) Buffer Stock
 - (C) Minimum Support Price
 - (D) None of the above

49. Which of the following is true about distress sales?

- (A) It refers to the farmers selling off their worst crops
- (B) It refers to the farmers selling off their crops at very low prices
- (C) It refers to the farmers selling off their crops through commissioning agents
- (D) It refers to the farmers selling off their crops through government systems

50. Which of the following agencies provide help related to Microfinance?

- (A) State Bank of India
- (B) Regional rural banks
- (C) National Bank for Agriculture and Rural Development (NABARD)
- (D) Self-help groups

51. The process helped in allocating power to lower strata of the administrative process, therefore, facilitating ease of management and operations is known as:

- (A) Bureaucratisation
- (B) Institutionalisation
- (C) Rural development
- (D) Decentralisation

52. The present objectives and strategies of Rural Development are:

- (A) Generating Self-employment, introducing innovative wage programmes, providing basic amenities, giving better opportunities at livelihood, and providing basic infrastructure facilities.
- (B) Introducing better municipality amenities that would help in the better management of municipalities in rural areas
- (C) Introducing departments that would help people to address their grievances easily and enable government officials to quickly address those grievances and solve these problems
- (D) Helping farmers to buy better grade seeds and get access to manures and fertilizers for farming

53. Which of the following should be the priority as the objective of rural development:

- (A) Facilities for professional education
- (B) Facilities for modern recreation
- (C) Facilities for self-employment
- (D) Facilities for Corporate planning

54. Which of the following agencies is responsible for computing the National Income Statistics in India?

- (A) Reserve Bank of India
- (B) Central Statistical Office
- (C) Ministry of Finance
- (D) Planning Commission

55. Disguised unemployment exists primarily in the _____ sector in our country.
- (A) Defence
 - (B) Agriculture
 - (C) Manufacturing
 - (D) None of the above
56. Which of the following scenarios explain economic development?
- (A) Improvement in the distribution system
 - (B) Improvement in the technology
 - (C) Improvement in the production
 - (D) All of the above
57. Which of the following is not an indicator of an economically developed nation?
- (A) High levels of literacy
 - (B) Low death rate
 - (C) High per capita income
 - (D) A high proportion of labour in the primary sector
58. The instances of severe unemployment rates, lack of net capital, and increased percentage of technological imports are repeatedly noticed in which type of the following economies?
- (A) Partially developed or marginalized economies
 - (B) Backward economies
 - (C) Developed economies
 - (D) None of the above
59. What is the underlying concept of economic development?
- (A) It is just another synonymous term with economic growth.
 - (B) It is obtained by tracking modifications in output allocation and financial structure.
 - (C) Economic development is sustainable improvement in GNP.
 - (D) Improving the livelihood of urban people.
60. Which of the following is a non-economic factor of growth?
- (A) Ideal legislative structure
 - (B) Collection of natural resources
 - (C) Growth of overall population in course of time
 - (D) Capital accumulation
61. It means the lack of basic capacity to participate effectively in society, not having enough to feed and clothe and provide shelter to a family.
- (A) Substance abuse
 - (B) Poverty
 - (C) Gambling
 - (D) Obesity

62. All except which of the following cardiovascular risk factors are substantially influenced by lifestyle choices?
- (A) Obesity
 - (B) Diabetes mellitus
 - (C) Smoking
 - (D) Arteriosclerosis
63. Which of the following is an important deterrent to proper decision making regarding the choice of contraceptive methods:
- (A) Female literacy
 - (B) Male participation in planning
 - (C) Affluence of the family
 - (D) Cafeteria choice
64. Which of the following is not to be considered by the family while planning for pregnancy:
- (A) Provision of liquid cash
 - (B) Knowledge about Govt. incentives
 - (C) Organizational propriety of the hospital management
 - (D) Arrangement of a potential blood donor.
65. All of the following are causes of childhood malnutrition; except:
- (A) Ignorance about adequacy and diversity of food
 - (B) Poor purchasing power
 - (C) Poor access to supplementary nutrition programmes
 - (D) Preterm birth
66. Adolescent health care delivery should always have a specific focus on:
- (A) Privacy
 - (B) Specific set of diseases
 - (C) Lifestyle modification
 - (D) Addiction to counterfeit substances
67. Geriatric care is special as it must be with:
- (A) Special search for malignancies
 - (B) Done in a secluded and quiet chamber
 - (C) By super-specialists having experience in geriatrics
 - (D) Compassion and dignity to the age of the patient
68. A violation of the law committed by a young that would have been a crime if committed by an adult is known as:
- (A) Juvenile delinquency
 - (B) Youthful mischief
 - (C) Societal aberration
 - (D) Social problem

69. Which of the following events connected to childhood immunization is related primarily to societal apathy:
- (A) Left out cases
 - (B) Drop out cases
 - (C) Adverse events following immunization
 - (D) Delay in incorporating newer vaccines in the National Immunization Schedule
70. About industrialization of the society, which of the following effects can be called as beneficial:
- (A) Development of urban slum
 - (B) Societal conflict
 - (C) Growing demand for raw materials
 - (D) Increased child labour
71. Which of the following measures of central tendency suits best to a set of data having outliers:
- (A) Mean
 - (B) Median
 - (C) Mode
 - (D) Any of the above
72. For advanced statistical inferences, which of the following measures of dispersion is preferable:
- (A) Range
 - (B) Mean deviation
 - (C) Calculated deviation
 - (D) Standard deviation
73. All of the following characteristics of normal curve are true except:
- (A) It is a bell-shaped curve
 - (B) Mean, mode and median of the data set coincides
 - (C) The total area under the curve is 100
 - (D) 95% of the data fall within ± 2 Standard deviations about the mean.
74. The measure of the “tailedness” of a distribution of data is known as;
- (A) Kurtosis
 - (B) Peakedness
 - (C) Leptosis
 - (D) Plateuness
75. The central limit theorem of biostatistics states that:
- (A) All types of biological data are centered around a central value
 - (B) The biological normative values always follow normal distribution
 - (C) All the sample values of the population data will be distributed randomly
 - (D) The mean values of the samples drawn from a population will be distributed normally around the population mean

76. The rate of natural increase (RNI) in the population of a country is calculated as:

- (A) Same with Fertility rate
- (B) Birth rate – Death rate
- (C) Fertility rate – Death rate
- (D) Same with Birth rate

77. Replacement level fertility means:

- (A) Total Fertility Rate of 2.1
- (B) Crude Birth Rate of 30
- (C) Crude Death Rate of 10
- (D) Net Reproduction Rate of 2

78. Which of the following countries show a declining trend in the demographic cycle

- (A) India
- (B) China
- (C) United States
- (D) Bulgaria

79. What characterizes the high stationary phase in demography:

- (A) High Birth rate, Low Death rate
- (B) Low Birth rate, High Death rate
- (C) High Birth rate, High Death rate
- (D) Low Birth rate, Low Death rate

80. The most socially sensitive indicator of mortality is:

- (A) Crude Death Rate
- (B) Infant Mortality Rate
- (C) Perinatal Mortality Rate
- (D) Maternal Mortality Ratio.

81. All of the following are determinants of health except:

- (A) Medical
- (B) Economic
- (C) Environmental
- (D) Cosmic

82. The disease which is targeted for eradication in near future is:

- (A) Small Pox
- (B) Measles
- (C) Tuberculosis
- (D) Malaria

83. Which of the following disease has got a definite geographical predominance:
- (A) Kala-azar
 - (B) COVID 19
 - (C) Rota viral diarrhea
 - (D) Tetanus
84. Which of the following disease is transmitted through mosquitoes:
- (A) Leptospirosis
 - (B) Plague
 - (C) Japanese Encephalitis
 - (D) Cholera
85. Which of the following is an arboviral disease:
- (A) Filaria
 - (B) Typhoid
 - (C) Common cold
 - (D) Dengue
86. Acute glomerular nephritis in children is usually a sequel of:
- (A) Staphylococcus infection over tonsils
 - (B) Group A Streptococcus infection in throat
 - (C) Adeno virus infection in nose
 - (D) Pox virus infection of urinary tract
87. The commonest cause of blindness in India is:
- (A) Cataract
 - (B) Vitamin A deficiency
 - (C) Retinal detachment
 - (D) Corneal opacity
88. All of the cancers can be easily detected early enough for effective treatment except:
- (A) Carcinoma Breast
 - (B) Carcinoma Cervix uteri
 - (C) Carcinoma Gall bladder
 - (D) Carcinoma skin
89. All are risk factors for development of Coronary Artery Disease:
- (A) Atherosclerosis
 - (B) Sedentary lifestyle
 - (C) Smoking
 - (D) Thin built

90. Which of the following can be attributed to causation of the common type of diabetes:

- (A) Genetic predisposition
- (B) Too much fruits in diet
- (C) Excess of salt in diet
- (D) Restriction in water intake

91. The lowest tier in Indian public healthcare delivery system; wherein a doctor can be posted is:

- (A) Subcentre
- (B) Primary Health Centre
- (C) Subdivisional Hospitals
- (D) Rural Superspeciality Hospitals

92. All of following are international NGOs working in the field of health except:

- (A) WHO
- (B) UNICEF
- (C) ICMR
- (D) FAO

93. Which of the following statements about Census is correct:

- (A) It was conducted in independent India only twice
- (B) Religion of the individual was never asked
- (C) No scope for data regarding those who migrated
- (D) Data regarding economic as well as non-economic activity was generated

94. Within how many days all births in a family should be registered in India:

- (A) 7 days
- (B) 14 days
- (C) 21 days
- (D) 28 days

95. The commonest occupational disease in India is:

- (A) Anthracosis
- (B) Silicosis
- (C) Asbestosis
- (D) Bagassosis

96. Which of the effects of Noise pollution is not reported so far:

- (A) Acid Peptic Disease
- (B) Hypertension
- (C) Deafness
- (D) Sleep disturbances

97. A patient should be screened for Tuberculosis if he has cough for more than how many weeks:

- (A) One week
- (B) Two weeks
- (C) Three weeks
- (D) Four weeks

98. Children with diarrhea without dehydration should be primarily managed with:

- (A) Ringer's Lactate IV drip
- (B) ORS solution
- (C) Anti-motility drugs
- (D) Home Available Fluids

99. Which of the following activity is included in the services of the ICDS workers:

- (A) Administering vaccines
- (B) Measuring birth weights of the babies
- (C) Providing supplementary nutrition
- (D) Providing formal primary education

100. The most effective method of prevention of the problem of Thalassemia is:

- (A) Blood transfusion
- (B) Routine pre-marital screening for detection of Thalassemia carriers
- (C) Routine use of Iron chelating agents
- (D) No effective method exists