

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF GRADE-III OF MIZORAM HEALTH SERVICE (GDMO SUB-CADRE) UNDER HEALTH & FAMILY WELFARE DEPARTMENT, GOVERNMENT OF MIZORAM. OCTOBER, 2022

TECHNICAL SUBJECT PAPER - III

Time Allowed : 2 hours

Full Marks : 200

*All questions carry equal marks of 2 each.
Attempt all questions.*

1. In RNTCP, the schedule for sputum examination for category I patients is:
 - (a) 2, 3 and 5 months
 - (b) 2, 4 and 6 months
 - (c) 1, 3 and 5 months
 - (d) 2, 5 and 7 months
2. Integrated Management of Neonatal and Childhood Illness (IMNCI) includes all except:
 - (a) Malaria
 - (b) Respiratory infections
 - (c) Diarrhoea
 - (d) Tuberculosis
3. Acute flaccid paralysis is reported in a child aged:
 - (a) 0-3 years
 - (b) 0-5 years
 - (c) 0-15 years
 - (d) 0-25 years
4. Under IPHS norms, a PHC in a hilly area should cater to a population of :
 - (a) 10,000
 - (b) 20,000
 - (c) 30,000
 - (d) 40,000
5. Under National Program for Control of Blindness, District blindness control society is headed by:
 - (a) District program manager
 - (b) District eye surgeon
 - (c) District collector
 - (d) District health officer
6. Sentinel surveillance for HIV under National AIDS Control program is used for all except:
 - (a) Estimation of total infection in community
 - (b) Estimation of total cases in hospitals
 - (c) Estimation of trend of the disease
 - (d) Classification of districts
7. All are true of Midday School Meal Programme except:
 - (a) Should supply 1/2 daily protein and 1/3rd or daily calories
 - (b) Is a substitute for regular food
 - (c) Locally available foods are used
 - (d) Cheap and easy to prepare
8. Under National Health Mission, lowest level at which Health Action Plan is prepared is:
 - (a) State level
 - (b) District Level
 - (c) Sub-centre Level
 - (d) Village Level
9. ASHA worker works for _____ population:
 - (a) 3000
 - (b) 1000
 - (c) 5000
 - (d) 400

10. The dose of Vit-A supplement administered in “Prevention of nutritional blindness in children programme” is:
- (a) 25,000 IU/ml (b) 1 lakh IU/ml
(c) 3 lakh IU/ml (d) 5 lakh IU/ml
11. James Lind is known for:
- (a) Germ theory of disease (b) Multifactorial causation of disease
(c) Prevention of scurvy by citrus fruits (d) Web of causation
12. Which of the following is an Indicator of Mortality?
- (a) Life Expectancy (b) Notification Rate
(c) DALY (d) Bed turn-over ratio
13. Natural history of disease is best studied by:
- (a) Cross sectional study (b) RCT
(c) Case-control study (d) Cohort study
14. Epidemiological triad contain all except:
- (a) Agent (b) Manpower
(c) Host (d) Environment
15. Pap smear test for detection of carcinoma of cervix is which level of prevention?
- (a) Primordial (b) Primary
(c) Secondary (d) Tertiary
16. Incidence of a disease in a population of 30,000 and 300 new cases is:
- (a) 0.1 per 1000 (b) 10 per 1000
(c) 100 per 1000 (d) 1 per 1000
17. Time interval between receipt of infection by a host and maximum infectivity of that host is known as:
- (a) Generation time (b) Incubation period
(c) Serial interval (d) Secondary attack rate
18. All of the following are experimental studies except:
- (a) Randomised Control Trial (b) Field trial
(c) Case Series (d) Community trial
19. Relative Risk can be determined by which type of epidemiological study?
- (a) Case-control study (b) Ecological studies
(c) Cohort study (d) Cross-sectional study
20. In a randomized controlled trial, the essential purpose of randomization is:
- (a) To produce double blinding (b) To decrease the follow-up period
(c) To decrease the sample size (d) To eliminate the selection bias
21. Monkey Pox virus is:
- (a) An enveloped double-stranded RNA virus (b) An enveloped single-stranded DNA virus
(c) An enveloped double-stranded DNA virus (d) An enveloped single-stranded RNA virus
22. Bitot’s spots is seen in:
- (a) Vitamin D deficiency (b) Vitamin E deficiency
(c) Vitamin A deficiency (d) Vitamin C deficiency
23. BCG is:
- (a) Live attenuated vaccine (b) Killed vaccine
(c) Live vaccine (d) Hybrid vaccine

24. Incidence of TB in a community measured by:
- (a) Tuberculin test +
 - (b) Sputum culture
 - (c) Mantoux test +
 - (d) Sputum smear +
25. Which of the following has the highest tendency to progress into chronic state?
- (a) Hepatitis A
 - (b) Hepatitis B
 - (c) Hepatitis C
 - (d) Hepatitis D
26. Cysticercosis Cellulosa is caused by infection with:
- (a) Taenia saginata
 - (b) Taenia solium
 - (c) Echinococcus granulosus
 - (d) Diphyllbothrium latum
27. Chandler's index is used for:
- (a) Ankylostoma duodenale
 - (b) Ascaris lumbricoides
 - (c) Strongyloides
 - (d) Trichuris trichiura
28. Which of the following is known as Tiger Mosquito?
- (a) Anopheles mosquito
 - (b) Aedes mosquito
 - (c) Mansonioides mosquito
 - (d) Culex mosquito
29. Class II exposure to rabies in animal bites includes the following:
- (a) Scratches with oozing of blood
 - (b) Licks on a fresh wound
 - (c) Scratches without oozing of blood
 - (d) Bites from wild animals
30. Which of the following is not true of Measles?
- (a) High secondary attack rate
 - (b) Only one strain causes infection
 - (c) Not infectious in pro-dromal stage
 - (d) Infection confers lifelong immunity
31. A patient is called obese as per WHO classification if BMI is:
- (a) > 20
 - (b) > 25
 - (c) > 30
 - (d) > 40
32. All of the following are non-modifiable risk factors for Diabetes Mellitus except is:
- (a) Ethnicity
 - (b) Age
 - (c) Sex
 - (d) Dietary habits
33. All of the following are classified as Occupational cancers except:
- (a) Skin cancer
 - (b) Breast cancer
 - (c) Lung cancer
 - (d) Bladder cancer
34. The most common cause of blindness in India is:
- (a) Cataract
 - (b) Trachoma
 - (c) Refractive errors
 - (d) Vitamin A deficiency
35. 'Rule of Halves' is associated with:
- (a) CHD
 - (b) Hypertension
 - (c) Blindness
 - (d) Accidents and Injuries
36. Glycosylated haemoglobin reflects the mean blood glucose level of previous:
- (a) 15 days
 - (b) 1 month
 - (c) 3 months
 - (d) 6 months
37. Most common cause of stroke in India is:
- (a) Cerebral thrombosis
 - (b) Cerebral embolism
 - (c) Cerebral hemorrhage
 - (d) Subarachnoid hemorrhage

38. All of the following are barrier methods of contraception except:
- (a) Condoms
 - (b) Cervical cap
 - (c) Oral contraceptive pills
 - (d) Diaphragm
39. DASH diet is advised to patients with:
- (a) Diabetes mellitus
 - (b) Hypertension
 - (c) Pregnancy
 - (d) COPD
40. The current national programme for control of iodine deficiency disorder is:
- (a) National Goitre Control Programme
 - (b) National Iodine Deficiency Management Programme
 - (c) National Program to Control Iodine Disorders
 - (d) National Iodine Deficiency Disorder Control Programme
41. Scabies, an infection of the skin caused by *Sarcoptes scabiei*, is an example of:
- (a) Water-borne disease
 - (b) Water-washed disease
 - (c) Water-based disease
 - (d) Water-related disease
42. For air pollution, the best indicator used in India is:
- (a) SO₂
 - (b) Dust
 - (c) CO₂
 - (d) Lead particles
43. Waste water generated from kitchen is called:
- (a) Refuse
 - (b) Garbage
 - (c) Sullage
 - (d) Sewage
44. Criteria for "Problem village" include all except:
- (a) Where no water source in a distance of 1.6 km from community
 - (b) Water is more than depth of 15 meter
 - (c) There is excess of Na⁺, K⁺, F⁺ salts
 - (d) Risk of Guinea worm infection
45. Which of the following is not a major greenhouse gas?
- (a) Ozone
 - (b) Water vapour
 - (c) Methane
 - (d) Carbon dioxide
46. Beri-beri is caused due to deficiency of?
- (a) Vitamin K
 - (b) Vitamin B1
 - (c) Vitamin C
 - (d) Vitamin B12
47. The recommended daily extra calorie requirement during pregnancy is:
- (a) 50
 - (b) 150
 - (c) 350
 - (d) 450
48. Recommended Dietary Allowance (RDA) is the level of dietary intake equal to:
- (a) Mean + 1 Standard Deviation
 - (b) Mean + 2 Standard Deviation
 - (c) Mean + 2.5 Standard Deviation
 - (d) Mean + 3 Standard Deviation
49. All of the following are micronutrient deficiency disorders except:
- (a) Iron deficiency anemia
 - (b) Pellagra
 - (c) Beri-beri
 - (d) Protein Energy Malnutrition
50. All of the following are nominal data except:
- (a) Gender
 - (b) Country
 - (c) Position in class
 - (d) Ethnicity

51. Corpus delicti means:
- (a) Proof of occurrence of crime
 - (b) Decomposed body
 - (c) Identification of dead person
 - (d) None
52. Barr body is not seen in:
- (a) Turner syndrome
 - (b) Klinefelter syndrome
 - (c) Down's syndrome
 - (d) Marfan's syndrome
53. The most reliable dental change used in Gustafson's method for age estimation is:
- (a) Attrition
 - (b) Cementum
 - (c) Secondary dentin deposition
 - (d) Transparency of root
54. Two identical twins will not have same:
- (a) Fingerprints
 - (b) Iris color
 - (c) DNA
 - (d) Blood group
55. Suspended animation may be seen:
- (a) Strangulation
 - (b) Hanging
 - (c) Drowning
 - (d) Burn
56. True about rigor mortis are all, except:
- (a) Seen immediately after death
 - (b) It last 18–36 h in summer
 - (c) It disappears in the sequence as it appears
 - (d) It last 24–48 h in winter
57. Casper's dictum for rate of decomposition in air: water: buried bodies is:
- (a) 8 : 4 : 1
 - (b) 4 : 2 : 1
 - (c) 1 : 2 : 4
 - (d) 1 : 4 : 8
58. Dribbling of saliva is feature of:
- (a) Antemortem hanging
 - (b) Strangulation
 - (c) Postmortem hanging
 - (d) Drowning
59. Best indicator of antemortem drowning is:
- (a) Froth in nostrils
 - (b) Cutis anserina
 - (c) Washerwoman's hand
 - (d) Water in stomach
60. Bansdola is a form of strangulation by:
- (a) Ligature
 - (b) Hands
 - (c) Wooden sticks
 - (d) Bend of elbow
61. Sec 44 IPC defines:
- (a) Injury
 - (b) Hurt
 - (c) Grievous hurt
 - (d) Assault
62. Incised looking laceration is seen in all, except:
- (a) Iliac crest
 - (b) Zygomatic bone
 - (c) Shin
 - (d) Chest
63. Tattooing in entry wound of a firearm injury is due to:
- (a) Burns
 - (b) Smoke
 - (c) Gunpowder
 - (d) Wads
64. Fracture-a-la signature is:
- (a) Gutter fracture
 - (b) Depressed fracture
 - (c) Ring fracture
 - (d) Sutural separation

65. Commonest source of extradural hemorrhage:
- (a) Middle meningeal artery
 - (b) Basilar artery
 - (c) Charcot's artery
 - (d) Middle cerebral artery
66. Lucid interval is classically seen in:
- (a) Intracerebral hematoma
 - (b) Acute subdural hematoma
 - (c) Chronic subdural hematoma
 - (d) Extradural hematoma
67. According to 'rule of 9', perineum burns constitute:
- (a) 1% burns
 - (b) 9% burns
 - (c) 18% burns
 - (d) 27% burns
68. Burns in children assessed by:
- (a) Rule of nine
 - (b) Lund and Browder
 - (c) Palmer surface method
 - (d) Hasse's rule
69. Sparrow foot marks are associated with which type of injury:
- (a) Motor cyclist's fracture
 - (b) Under-running or tail gating
 - (c) Steering wheel impact
 - (d) Wind screen impact
70. Grievous injury includes all, except:
- (a) Emasculation
 - (b) Loss of 15 days work
 - (c) Permanent disfigurement
 - (d) Fracture of bones
71. Rape is defined under:
- (a) Sec. 320 IPC
 - (b) Sec. 375 IPC
 - (c) Sec. 376 IPC
 - (d) Sec. 351 IPC
72. Gastric lavage is contraindicated in the following:
- (a) Barbiturate poisoning
 - (b) Kerosene poisoning
 - (c) Paracetamol poisoning
 - (d) Carbolic acid
73. Cholera presents with symptoms mimicking:
- (a) Arsenic poisoning
 - (b) Dhatura poisoning
 - (c) Barbiturate poisoning
 - (d) Morphine poisoning
74. Cobras belong to:
- (a) Viperidae
 - (b) Elapidae
 - (c) Colubriadae
 - (d) Crotalidae
75. Opium is derived from:
- (a) Leaf
 - (b) Root
 - (c) Poppy seed
 - (d) Unripe capsule
76. There are two taps in a tank. One tap fills that tank in 10 hours and the other empties it in 8 hours. If both the taps are opened simultaneously, in how many hours will the tank be completely filled?
- (a) 10 hours
 - (b) 13 hours
 - (c) 18 hours
 - (d) will never fill up completely
77. Antonym of the word 'favourable'
- (a) Unequal
 - (b) Opposite
 - (c) Unfavourable
 - (d) Infavourable
78. When two walls of a square shaped room meet together, then the angle made by the walls will be:
- (a) 30°
 - (b) 90°
 - (c) 100°
 - (d) 105°

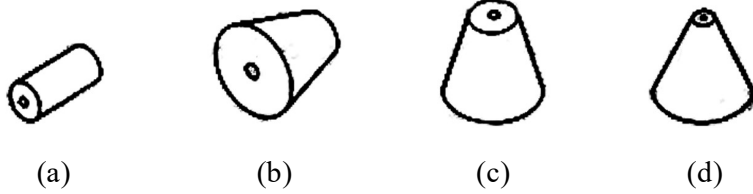
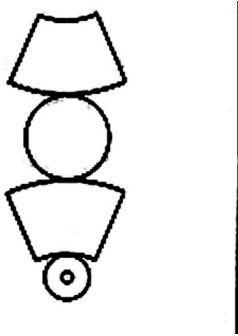
79. What will be the ratio of 90cm to 1.5m?
(a) $\frac{3}{2}$ (b) $\frac{3}{5}$
(c) $\frac{3}{6}$ (d) $\frac{3}{8}$
80. The Yamuna River is smaller than Beas but longer than Satluj River. The Ganga River is longer than Beas River. Which is the shortest river?
(a) Satluj River (b) Ganga River
(c) Beas River (d) Yamuna River
81. If the first day of the year is Friday, what will be the last day of that year?
(a) Monday (b) Friday
(c) Sunday (d) Tuesday

Direction (Questions No. 82 - 85) : Examine the statements given below each question on the basis of whatever is given and asked in the question, and not in reference to your personal opinion or reality.

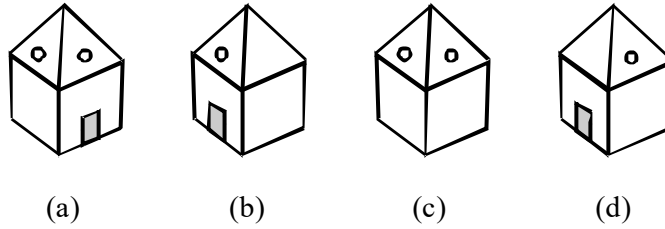
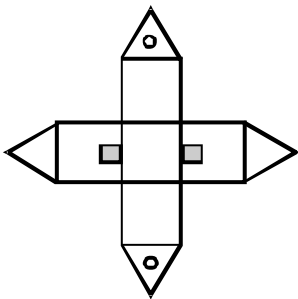
82. Kavita's percentage of marks was higher than Seema but lower than Lata. Meena's percentage was higher than Rachna but lower than Seema. Whose percentage is the highest?
(a) Kavita (b) Seema
(c) Lata (d) Meena
83. Find a pair of statements from the below four, in which both the statements cannot be true simultaneously, but can both be false.
1. All men are intelligent. 2. Some men are not intelligent.
3. Some men are intelligent. 4. No man is intelligent.
(a) 1 and 2 (b) 2 and 3
(c) 1 and 4 (d) 3 and 4
84. Assuming that the pens can be of only one colour, which is either yellow or green, which of the two statements from the above can be true at a time?
1. All pens are yellow. 2. No pen is yellow.
3. Some pens are green. 4. No pen is green.
(a) 1 and 2 (b) 2 and 3
(c) 3 and 4 (d) 1 and 4
85. Assuming that the pens can be of only one colour, which is either yellow or green, if statement 2 is false, which of the remaining statements will be proved true in indicating the colour of the pens?
1. All pens are yellow. 2. No pen is yellow.
3. Some pens are green. 4. No pen is green.
(a) 1 (b) 3
(c) 4 (d) none of the above

Direction (Questions No. 86 - 89) : The next few questions consist of patterns which can be folded into figures. For each pattern, five figures are shown. You are to decide which of these figures can be made from the pattern shown. The pattern always shows the outside of the figure.

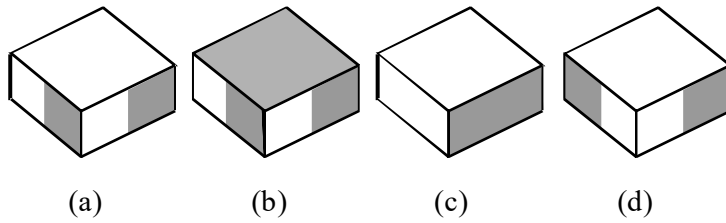
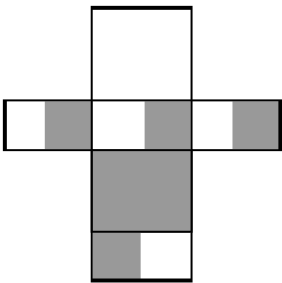
86.



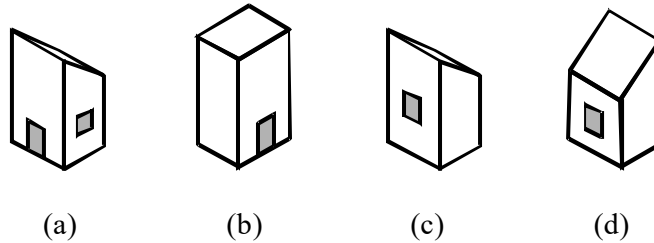
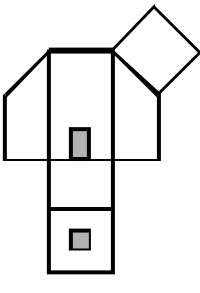
87.



88.

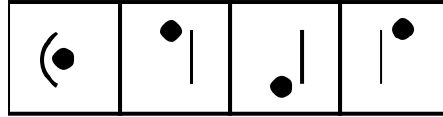
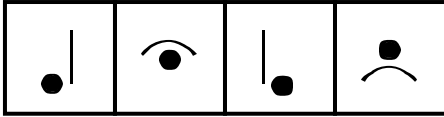


89.



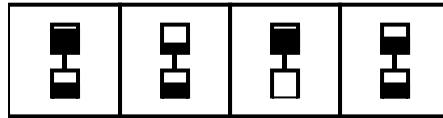
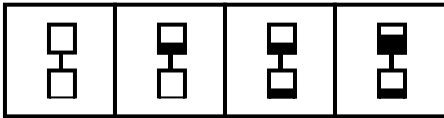
Direction (Questions No. 90 - 92) : In this test, you will see rows of designs or figures. The first row has four designs called **Problem figures**. These are followed by five designs called **Answer figures**. The four problem figures make a series, with the fifth figure missing. You have to choose the correct missing fifth figure for the Problem figures from among the Answer figures and mark it on your answer sheet.

90.



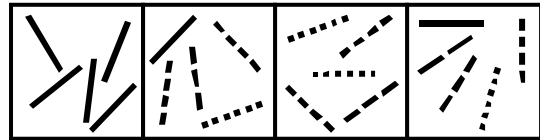
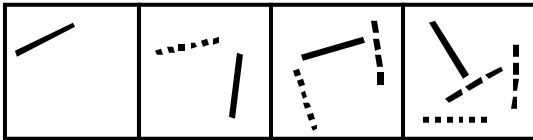
(a) (b) (c) (d)

91.



(a) (b) (c) (d)

92.



(a) (b) (c) (d)

Direction (Questions No. 93 - 96) : Choose the correct word which will fill the blanks so that the sentences will be true and sensible.

93. War is to pacifist as religion is to _____.

- (a) devout
- (b) sacred
- (c) atheist
- (d) minister

94. _____ is to land as knot is to sea.

- (a) desert
- (b) mile
- (c) acre
- (d) farm

95. _____ is to bird as shedding is to dog.

- (a) calling
- (b) flying
- (c) migrating
- (d) moulting

96. Coloured is to bleached as flushed is to _____.

- (a) blushed
- (b) drained
- (c) wan
- (d) truffle

97. Add

2ft. 3in.
28ft. 11 ½ in.
17ft. 5 in.
4 ½ in.

- (a) 49ft.
- (b) 48ft. 2in.
- (c) 47ft. 24in.
- (d) 48ft.

98. $25 = ?\%$ of 125

(a) $\frac{1}{5}$

(b) 5

(c) 20

(d) 31.25

99. $4/? = ?/100$ What one number can replace both question marks?

(a) 1

(b) 20

(c) 25

(d) 200

100. Divide 2.25 by .75

(a) .0003

(b) .03

(c) .3

(d) 3

* * * * *