

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO LABORATORY TECHNICIAN

UNDER MIZORAM INSTITUTE OF MEDICAL EDUCATION AND RESEARCH (MIMER) - 2018

TECHNICAL PAPER – I

Time Allowed : 2 hours

Full Marks : 150

Attempt all questions.

All questions carry equal marks of 2 each.

1. Types of bones includes the following, except.
 - (a) Long and Short bones
 - (b) Irregular, flat bones
 - (c) Sesamoid bones
 - (d) Regular and Smooth
2. The length of Oesophagus is
 - (a) 24 cm
 - (b) 25 cm
 - (c) 25.5 cm
 - (d) 24.5 cm
3. The length of large intestine is about
 - (a) 1.5 metres
 - (b) 2.0 metres
 - (c) 2.5 metres
 - (d) 1.7 metres
4. The mucosal epithelium of urinary bladder is
 - (a) Glandular epithelium
 - (b) Transitional Epithelium
 - (c) Squamous epithelium
 - (d) None of these
5. The length of ureters are about
 - (a) 20-25 cm
 - (b) 27-35 cm
 - (c) 25-30 cm
 - (d) 20-30 cm
6. The lining epithelium of Vagina is
 - (a) Stratified squamous epithelium
 - (b) Non-stratified squamous epithelium
 - (c) Tall Columnar epithelium
 - (d) Cuboidal Epithelium
7. The Menstrual Cycle includes all, except
 - (a) Menstrual phase
 - (b) Proliferative phase
 - (c) Secretory phase
 - (d) Regenerative phase
8. The normal CSF volume is about
 - (a) 100-170 ml
 - (b) 70-140 ml
 - (c) 90-150 ml
 - (d) 80-140 ml
9. Enzymes are
 - (a) Catalyst
 - (b) Proteins
 - (c) Hormones
 - (d) Both (a) and (b)

10. Following Myocardial Infarction, the enzymes raises during 1-3 days is
- (a) SGOT (b) CPK
(c) SHBD (d) LDH
11. Serum Acid Phosphatase level increase in
- (a) Liver diseases (b) Acute Pancreatitis
(c) Renal Diseases (d) Melastatic Carcinoma of Postate
12. Serum Amylase level increases in
- (a) Acute Pancreatitis (b) Renal diseases
(c) Hepatitis (d) Both (b) and (c)
13. Site of enzymes synthesis in a cell is
- (a) Golgi bodies (b) Rough endoplasmic reticulum
(c) Mitochondria (d) All of these
14. Lipid stores present mainly in
- (a) Muscle (b) Adipose tissue
(c) Liver (d) Brain
15. Which one is saturated Fatty Acid
- (a) Oleic Acid (b) Stearic Acid
(c) Linoleic Acid (d) Linolenic Acid
16. Which one of the following has the highest cholesterol content?
- (a) Egg white (b) Egg yolk
(c) Fish (d) Meat
17. Ketone bodies are synthesized in
- (a) Muscles (b) Liver
(c) Brain (d) Adipose tissue
18. Thiamine deficiency causes
- (a) Scurvy (b) Xerophalmia
(c) Rickets (d) Beri Beri
19. Dietary requirement of Vitamin D in adult is about
- (a) 100 I.U. (b) 150 I.U.
(c) 400 I.U. (d) 200 I.U.
20. A deficiency of Vitamin B₁₂ causes
- (a) Haemolytic Anaemia (b) Thalassaemia
(c) Pernicious anaemia (d) Beri Beri
21. The normal range of plasma bicarbonate is
- (a) 5-7 mEg/l (b) 10-15 mEg/l
(c) 21-26 mEg/l (d) 30-37 mEg/l
22. Calcium absorption can be increased by which vitamin intake?
- (a) Vitamin A (b) Vitamin C
(c) Vitamin D (d) Biotin

23. Prolonged vomiting leads to loss of these ions
(a) Chloride (b) Bicarbonate
(c) Sodium (d) All of these
24. Metabolic alkalosis can occur in
(a) Severe diarrhea (b) Renal failure
(c) Diabetic Ketosis (d) Pyloric Stenosis
25. Increase in all these substances in blood indicates “renal condition”, except
(a) Urea (b) Glucose
(c) Creatinine (d) Uric Acid
26. Normal average Glomerular Filtration Rate (GFR) is
(a) 80 (b) 125
(c) 210 (d) 50
27. Primary bile acids are
(a) Trychocholic Acid (b) Deoxycholic Acid
(c) Taurocholic Acid (d) Lithocholic Acid
28. Which enzyme is responsible to convert indirect bilirubin into direct bilirubin in liver
(a) SGPT (b) SGOT
(c) Gamma GT (d) Glucuronyl transferase
29. In high prevalence area, the highest percentage of hepatitis-B transmission is through
(a) blood transfusion (b) during childbirth
(c) using contaminated razor (d) using infected needle
30. Following myocardial infarction, CK-MB rises within
(a) 1-3 days (b) 4-6 hours
(c) 12-16 hours (d) 3-5 days
31. Jaundice indicates that, when total serum bilirubin is-
(a) > 2.0 mg/dl (b) < 1.0 mg/dl
(c) All indirect type (d) All direct type
32. Solvent is
(a) Any substance that dissolves in a liquid
(b) Any liquid in which a substance dissolves
(c) Any solution which contains undissolved substance
33. At a given temperature a solution which does not change its pH even on addition of more alkalis or acid is
(a) Molar solution (b) Buffer solution
(c) Hypotonic solution (d) Hypertonic solution
34. All these reactions take place in Mitochondria, except
(a) EM pathway (b) Urea Cycle
(c) Krebs's Cycle (d) Electron transfer
35. Dextrose means
(a) Ribose (b) D-Fructose
(c) D-Glucose (d) Dextrin

36. The number of molecules of ATP produced by the total oxidation of acetyl COA in TCA Cycle is
(a) 4 (b) 8
(c) 12 (d) 2
37. Fluoride inhibits the following enzymes to prevent glycolysis
(a) Succinate dehydrogenase (b) Aconitase
(c) Glyceraldehyde 3-phosphate dehydrogenase (d) Enolase
38. Glucose can be synthesized from all, except
(a) Glycerol (b) Amino Acids
(c) Lactic Acid (d) Acetoacetate
39. Robert Koch's discovered the causative agents of the following, except
(a) Anthrax (*Bacillus anthracis*)
(b) Tuberculosis (*Mycobacterium tuberculosis*)
(c) Cholera (*Vibrio Cholerae*)
(d) Pneumonia (*Pneumococcus*)
40. Prokaryotic cells are normally
(a) Unicellular (b) Multicellular
(c) Monocellular (d) Mesosomes present
41. The backbone of cell wall in prokaryotes is
(a) Lipopolysaccharide (b) Polypeptide
(c) Murein (d) Protein
42. The organs of locomotion in bacteria are
(a) Pili (b) Pseudopods
(c) Flagella (d) Both (a) and (b)
43. Blood agar medium is
(a) Selective Medium (b) Differential Medium
(c) Selective differential Medium (d) All of these
44. Which of the following is not a selective medium
(a) Nutrient Agar Medium (b) Lowenstein Jensen Medium
(c) Blood Agar Medium (d) Thayer Martin Medium
45. B-lymphocytes are responsible for
(a) Cellular immunity (b) Humoral immunity
(c) Innate immunity (d) None of these
46. Widal Test is
(a) Precipitation Reaction (b) Agglutination Reaction
(c) Complement Fixation (d) Both (a) and (c)
47. Which of the following is toxoid vaccine?
(a) Typhoid (b) Influenza
(c) Diphtheria (d) Hepatitis B
48. ASO, (Antistreptolysin, O) is a quantitative test for
(a) Typhoid and Paratyphoid (b) Post streptococcal diseases
(c) Measles (d) Salmonella typhi

49. VDRL is used for diagnosis of
- (a) TB (b) Diphtheria
(c) Pneumonia (d) Syphilis
50. Which of the following enzymes is most commonly used in ELISA?
- (a) Horse radish peroxidase (b) Alkaline phosphatase
(c) Invertase (d) Both (a) and (b)
51. Humoral immunity is mediated by
- (a) T. lymphocytis (b) B. lymphocytes
(c) Macrophage (d) Mast Cells
52. Exotoxins are
- (a) Protein of high molecular weight
(b) They are produced by both gram negative and gram positive bacteria
(c) Heat stable
(d) Both (a) and (b)
53. Shick's test is used in
- (a) Meningitis (b) Diphtheria
(c) Typhoid (d) Leprosy
54. AFB staining is also called
- (a) Gram staining (b) Giemsa's staining
(c) Ziehl Neelsen staining (d) Leishman staining
55. Which of the following bacteria is biological indicator of water pollution?
- (a) N. Meningitidis (b) E. Coli
(c) B. Anthracis (d) C. Diphtheria
56. Shigella dysenteriae causes
- (a) Anaemia (b) Amoebic dysentery
(c) Cholera (d) Bacillary dysentery
57. The following are the species of Plasmodium, except
- (a) P. Ovale (b) P. Malariae
(c) P. Falciparum (d) Quinidian
58. The toxic fluid secreted by A. lumbricoides is called as :
- (a) Ascaric Acid (b) Ascarron
(c) Hepton (d) None of these
59. The 4 nucleated cyst of E. histolytica is called
- (a) Oocyst (b) Procyst
(c) Metacyst (d) Hydatid Cyst
60. Oral thrush is caused by
- (a) Fusarium (b) Candida
(c) Penicillium (d) None of these
61. Extensive branch, filamentous body of a fungus is called:
- (a) Hyphae (b) Mycelium
(c) Mold (d) Mushroom

62. Toxins produced by fungi are called:
- (a) Exotoxins
 - (b) Mycotoxins
 - (c) Neurotoxins
 - (d) Enterotoxins
63. In AIDS, there is a depletion of
- (a) CD₄ lymphocytes
 - (b) Monocytes
 - (c) Granulocytes
 - (d) Reticulocytes
64. Hepatitis 'A' is transmitted through
- (a) Blood products
 - (b) Sexual intercourse
 - (c) Faecal oral route
 - (d) All of these
65. Polio is an
- (a) Echo virus
 - (b) Flavi virus
 - (c) Entero virus
 - (d) Arbo virus
66. Hepatitis 'C' is also called
- (a) Infectious hepatitis
 - (b) Serum hepatitis
 - (c) Delta hepatitis
 - (d) Transfusion hepatitis
67. Hydrophobia is an alternative name for
- (a) Measles
 - (b) Rubella
 - (c) Rabies
 - (d) Hepatitis
68. The following are gram's negative bacilli, except
- (a) E.Coli
 - (b) Shigella
 - (c) Salmonella
 - (d) Bacillus anthracis
69. Dengue is transmitted by mosquito
- (a) Culixine
 - (b) Aedes aegypti
 - (c) Anopheline
 - (d) None of these
70. The following are the intracellular parasites, except.
- (a) L.D bodies
 - (b) Malarial parasites
 - (c) Microfilaria
 - (d) Leishmania Tropica
71. Life cycle of plasmodium in man is known as
- (a) Schizogony
 - (b) Plasmiagony
 - (c) Sporogony
 - (d) Both (b) and (c)
72. A relationship in which both parasites get benefit without causing any harm to the host is
- (a) Mutualism
 - (b) Antagonism
 - (c) Commensalism
 - (d) Symbosis
73. The other name of Ancylostoma Duodenale is
- (a) Ascaris Lumbricoides
 - (b) Hook worm
 - (c) Round worm
 - (d) Enterobias vermicularis
74. Paratenic Host means-
- (a) Harbours the adult stage of parasites
 - (b) A host where the parasites remain viable without further development
 - (c) Harbours the larval stage of the parasite
 - (d) None of these

75. Black water fever is caused by

(a) *Plasmodium vivax*

(b) *Plasmodium ovale*

(c) *Plasmodium falciparum*

(d) Algid malariae

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