

MIZORAM PUBLIC SERVICE COMMISSION
TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO
LABORATORY TECHNICIAN (CONTRACT)
UNDER HEALTH & FAMILY WELFARE DEPARTMENT, FEBRUARY, 2017.

PAPER - I

Time Allowed : 2 hour

Full Marks : 150

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

1. The length of Oesophagus is
 - (a) 24 cm
 - (b) 25 cm
 - (c) 26 cm
 - (d) None of these
2. The production of gastric juice per day is about
 - (a) 1.5 litres
 - (b) 1.0 litres
 - (c) 1.25 litres
 - (d) 2 litres
3. The weight of liver is about
 - (a) 1.5 kgs
 - (b) 2 kgs
 - (c) 2.50 kgs.
 - (d) None of these
4. The size of the kidneys are
 - (a) $12 \times 5 \times 3$ cms
 - (b) $12 \times 6 \times 4$ cms
 - (c) $12 \times 7 \times 5$ cms
 - (d) None of these
5. The lining epithelium of urinary bladder is
 - (a) Squamous cells
 - (b) Transitional cells
 - (c) Columnar cells
 - (d) Ciliated columnar cells
6. The length of fallopian tubes are
 - (a) 17 cms
 - (b) 14 cms
 - (c) 15 cms
 - (d) 16 cms
7. The lining epithelium of cervix (ectocervix) is
 - (a) Glandular epithelium
 - (b) Squamous epithelium
 - (c) Navicular cells
 - (d) Cuboidal epithelium
8. The buffer solution is prepared by combining
 - (a) A weak acid and its salt
 - (b) A weak base and its salt
 - (c) Acidic salt and basic salt
 - (d) All of these

9. The enzymes mainly used in ELISA Technique are
- (a) Acid phosphatase
 - (b) Glucose oxidase
 - (c) Alkaline phosphatase
 - (d) Both (b) and (c)
10. Which is flammable hazard
- (a) Picric acid
 - (b) Ether
 - (c) Hydrochloric acid
 - (d) Sodium cyanide
11. 1g means
- (a) 100 mg
 - (b) 10 mg
 - (c) 1000 mg
 - (d) 10000 mg
12. When strong acid is mixed with water
- (a) Water is added to acid
 - (b) Acid is added to water slowly
 - (c) Both (a) & (b)
 - (d) None of these
13. The most active site of Protein synthesis is the
- (a) Nucleus
 - (b) Ribosomes
 - (c) Mitochondria
 - (d) Cell sap
14. These are cellular organelles called “suicide bags”
- (a) Lysosomes
 - (b) Ribosomes
 - (c) Nucleolus
 - (d) Golgi’s bodies
15. The following substances are cell inclusions, except
- (a) Melanin
 - (b) Glycogen
 - (c) Lipids
 - (d) Vitamins
16. Which of the following is reducing compounds ?
- (a) Co_2
 - (b) O_2
 - (c) NADH
 - (d) NAD^+
17. The first law of thermodynamics states that energy can be
- (a) Converted
 - (b) Destroyed
 - (c) Created
 - (d) All of these
18. A catalyst
- (a) Stops a reaction
 - (b) Speed up a reaction
 - (c) Slow down a reaction
 - (d) Make a reaction to go in different direction
19. Chemically water is
- (a) Amphoteric
 - (b) Neutral
 - (c) Alkaline
 - (d) Acidic
20. Positive Benedict’s test in urine, means the presence of
- (a) Sucrose
 - (b) Non glucose reducing substance
 - (c) Glucose
 - (d) Both (b) and (c)

21. Dextrose means
- (a) Ribose (b) D-fructose
(c) D-glucose (d) Dextrin
22. Gluconeogenesis is decreased by the action of the following hormone-
- (a) Inulin (b) Glucagon
(c) Glucocorticoids (d) Thyroxine
23. Which hormone is responsible for glucose uptake by Liver Cells
- (a) Glucagon (b) Insulin
(c) Epinephrine (d) Norepinephrine
24. Obesity increase the risk of
- (a) Diabetes mellitus (b) Gout
(c) Cardiovascular diseases (d) Both (a) and (c)
25. Conversion of glucose to glucose-6-phosphate in liver is catalysed by
- (a) Hexokinase (b) Glucokinase
(c) G₆PD (d) Both (a) & (b)
26. 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
27. During normal Resting state, most of the blood glucose is used by
- (a) Kidneys (b) Brain
(c) Liver (d) Adipose tissue
28. Normal fasting blood glucose and glycosuria indicates
- (a) Diabetes mellitus (b) Renal glycosuria
(c) Diabetes insipidus (d) All of these
29. Which protein is found in hair ?
- (a) Myoglobin (b) Collagen
(c) Keratin (d) Myosin
30. Which one is a sulphur containing Amino-acid
- (a) Cysteine (b) Tyrosin
(c) Valine (d) Alanine
31. Which of the following is an essential amino-acid
- (a) Aspartate (b) Glutamate
(c) Alanine (d) Valine
32. The main site of urea synthesis is
- (a) Liver (b) Brain
(c) Skin (d) Intestine

33. The main protein of cow's milk is
(a) Albumin (b) Casein
(c) Gamma globulin (d) Glutein
34. The normal range of serum Total protein is
(a) 6.0 – 8.0 g/dl (b) 2.0 – 1.8 g/dl
(c) 3.0 – 4.0 g/dl (d) 4.0 – 6.0 g/dl
35. Bence Jones proteins may be excreted in urine of patient suffering from
(a) Diabetes insipidus (b) Pre-renal condition
(c) Multiple myeloma (d) Hyper thyroidism
36. Serum Acid Phosphatase level increase in
(a) Liver diseases (b) Acute pancreatitis
(c) Renal diseases (d) Metastatic carcinoma of prostate
37. Serum amylase level increase in
(a) Acute pancreatitis (b) Renal diseases
(c) Hepatitis (d) All of these
38. Which one of the following is a smallest bacteria
(a) N. Gonorrhoea (b) M. Tuberculosis
(c) Mycoplasma (d) Vibrio cholerae
39. The organs of locomotion in bacteria are
(a) Flagella (b) Pili
(c) Pseudopodia (d) Both (b) & (c)
40. Bacterial capsules are
(a) Antiphagocytic (b) Antibacteriophagic
(c) Anti toxic (d) Both (a) & (b)
41. The surface antigens present in cell wall of gram positive bacteria are
(a) LPS (b) Techoic Acid
(c) Lipoproteins (d) Glycoproteins
42. Endotoxin present in cell wall of gram negative bacteria is
(a) Polypeptide (b) Mucopolysaccharide
(c) Lipopolysaccharide (d) Glycolipids
43. Bacteria which prefer low temperature (0-22°C) for growth are known as
(a) Thermophilic (b) Mesophilic
(c) Thermodeuric (d) Psychrophilic
44. Blood Agar medium is –
(a) Selective medium (b) Differential medium
(c) Selective differential medium (d) All of these

45. Which one of the following is not a selective medium
- (a) Nutrient agar medium (b) L.J. medium
(c) Blood agar medium (d) Thayer Martin medium
46. Paraffin oil can be sterilised by
- (a) Hot air oven (b) Filtration
(c) Autoclaving (d) Disinfection
47. Best autoclaving is achieved at
- (a) 121°C for 15 minutes. (b) 120°C for 1 hour
(c) 110°C for 2 hours (d) 100°C for 3 hours
48. Disposable syringes or plastic goods are best sterilised by
- (a) Ethylene oxide gas (b) Formalin
(c) Ozone (d) Glutaraldehyde
49. Which of the following is an inborn immunity ?
- (a) Natural active immunity (b) Natural passive immunity
(c) Innate immunity (d) Both (a) & (b)
50. B-lymphocytes are responsible for
- (a) Cellular immunity (b) Humoral immunity
(c) Innate immunity (d) None of these
51. Lymphokines are produced by
- (a) T cells (b) 1g G
(c) B. cells (d) 1g M
52. Widal test is
- (a) Precipitation reactions (b) Agglutination reaction
(c) Complement fixation (d) Both (b) & (c)
53. Which of the following methods of ELISA is used for the detection of antibody ?
- (a) Direct method (b) Indirect method
(c) Both (a) & (b) (d) None of these
54. L.J. medium is used for cultivation of
- (a) M. Tuberculosis (b) B. anthracis
(c) Cl. Tetani (d) H. influenza
55. Which of the following bacteria is biological indicator of water pollution?
- (a) N. Meningitidis (b) E. Coli
(c) B. anthracis (d) C. Diptheria
56. Shigella dysenteriae causes
- (a) Anaemia (b) Cholera
(c) Amoebic dysenteriae (d) Bacillary dysentery

57. VDRL is a screening test for
- (a) Gonorrhoea (b) Pneumonia
(c) AIDS (d) Syphilis
58. Extensive branched filamentous body of a fungus is called
- (a) Hyphae (b) Mycelium
(c) Mold (d) Mushroom
59. One of the following is not the major group of true fungi
- (a) Slime molds (b) Molds
(c) Yeasts (d) Mushroom
60. The most common method of reproduction in yeast is
- (a) Fusion (b) Budding
(c) Fragmentation (d) Sexual
61. Oral thrush is caused by
- (a) Penicillium (b) Fusarium
(c) Candida (d) None of these
62. Which of the following hepatitis is called infectious hepatitis?
- (a) Hepatitis – A (b) Hepatitis – B
(c) Hepatitis – C (d) Hepatitis – D
63. Hepatitis A is transmitted through
- (a) Blood product (b) Sexual intercourse
(c) Fecal-oral-route (d) None of these
64. In AIDS, there occur depletion of
- (a) Monocytes (b) Granulocytes
(c) Reticulocytes (d) CD₄ lymphocytes
65. Polio is caused by –
- (a) Echovirus (b) Flavivirus
(c) Enterovirus (d) Arbovirus
66. Dengue is caused by
- (a) Retrovirus (b) Flavivirus
(c) Herpes virus (d) Adenovirus
67. Hydrophobia is an alternative name for
- (a) Measles (b) Hepatitis
(c) Rabies (d) Rubella
68. An organism that lives in or on another organism and derived its nourishment without giving anything, in return is called
- (a) Microbe (b) Germs
(c) Parasites (d) All of these

69. The 4 nucleated cyst of *E. histolytica* is called
(a) Oocyst (b) Procyst
(c) Metacyst (d) Hydatid cyst
70. Amoebiasis is caused by
(a) *E. histolytica* (b) *E. vermicularis*
(c) *E. granulosus* (d) *E. coli*
71. The larvae of *T. Solium* is
(a) *C. cellulosa* (b) *C. bovis*
(c) Both (a) & (b) (d) None of these
72. Toxic fluid secreted by *A. lumbricoides* is called
(a) Ascaris Acid (b) Ascaron
(c) Hepton (d) None of these
73. The life cycle of malarial parasites in man is called
(a) Schizogony (b) Gametogony
(c) Sporogony (d) None of these
74. A relationship in which both organisms (parasites and host) are benefitted is
(a) Antagonism (b) Synergism
(c) Parasitism (d) Mutualism
75. The other name of *ankylostoma duodenale* is
(a) Round worm (b) Thread worm
(c) Tape worm (d) Hook worm

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