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) Sexamoid 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) Secretary 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 Pancreatitits
   (c) Renal Diseases  (d) Melastatic Carcinoma of Postate

12. Serum Amylase level increases in
   (a) Acute Pancreatitits  (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 B_{12} causes
   (a) Haemolytic Anaemia  (b) Thalassaemia
   (c) Pernicious anaemia  (d) Beri Beri

21. The normal range of plasma bicarbonate is
   (a) 5-7 mEq/l  (b) 10-15 mEq/l
   (c) 21-26 mEq/l  (d) 30-37 mEq/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 occurs 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 is
   (a) Trychocholic Acid  (b) Deoxycholic Acid
   (c) Taurocholic Acid  (d) Lithocholic Acid

28. Which enzymes is responsible to convert indirect bilirubin into direct bilirubin in liver
   (a) SGPT  (b) SGOT
   (c) Gamma GT  (d) Glucuronyl tranferase

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 undissolves 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 takes place in Mitochondria, except
    (a) EM pathway  (b) Urea Cycle
    (c) Kreb’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 deferential 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) Diptheria  (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  
   (c) Pneumonia  
   (b) Diptheria  
   (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. lymphocylis  
   (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  
   (c) Typhoid  
   (b) Diptheria  
   (d) Leprosy  

54. AFB staining is also called  
   (a) Gram staining  
   (c) Ziehl Neelsen staining  
   (b) Giema’s 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. Diptheria  

56. Shigella dysenteriae causes  
   (a) Anaemia  
   (c) Cholera  
   (b) Amoebic dysentery  
   (d) Bacillary dysentery  

57. The following are the species of Plasmodium, except  
   (a) P. Ovale  
   (c) P. Falciparum  
   (b) P. Malariae  
   (d) Quitodian  

58. The toxic fluid secreted by A.lumbricoides is called as :  
   (a) Ascaric Acid  
   (c) Hepton  
   (b) Ascaron  
   (d) None of these  

59. The 4 nucleated cyst of E.histolytica is called  
   (a) Oocyst  
   (c) Metacyst  
   (b) Procyst  
   (d) Hydatid Cyst  

60. Oral thrush is caused by  
   (a) Fusarium  
   (c) Penicillium  
   (b) Candida  
   (d) None of these  

61. Extensive branch, filamentous body of a fungus is called:  
   (a) Hyphae  
   (c) Mold  
   (b) Mycelium  
   (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) CD$_4$—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) Symbiosis

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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