

**CENTRAL COUNCIL FOR RESEARCH IN SIDDHA  
LABORATORY TECHNICIAN**

Date: 23.6.2016

Marks: 70 x 1 = 70

Duration: 90 minutes

1. The most sensitive biomarker used in the measurement of Glomerular filtration rate is  
a. serum creatinine                      b. uric acid clearance  
c. urea clearance                         d. serum cystatin C
2. FAD is reduced to FADH<sub>2</sub> during  
a. electron transport chain phosphorylation    b. lactate fermentation  
c. Krebs's cycle                                      d. glycolysis
3. Serum bilirubin is estimated by  
a. Vandenberg's test              b. Ehrlich's test              c. Fouchet's test              d. Hay's test
4. Which sugar in seminal fluid is utilized by spermatozoa for energy?  
a. glucose              b. galactose              c. mannose              d. fructose
5. What is the defective enzyme in Alkaptonuria?  
a. phenyl alanine hydroxylase              b. homogentisate oxidase  
c. tyrosinase                                      d. phenyl pyruvate hydroxylase
6. Bloom strength is used to check the quality of  
a. lactose              b. ampoules              c. hardness of tablets              d. gelatin
7. Measurement of inulin renal clearance is a measure for  
a. effective renal blood flow              b. renal drug excretion rate  
c. active renal secretion              d. glomerular filtration rate
8. Stevens Johnson syndrome is the most common adverse effect associated with one of the following category of drugs  
a. sulphonamides              b. macrolides              c. penicillins              d. tetracyclins
9. Glass transition temperature is detected through  
a. X-ray diffractometry                                      b. solution calorimetry  
c. differential scanning calorimetry              d. thermogravimetric analysis
10. Which one of the following anesthetics causes delirium and hallucination  
a. halothane              b. ketamine              c. nitrous oxide              d. thiopentone sodium
11. PCR technique was introduced by  
a. Ian Wilmut              b. Watson              c. Nowell Hagerford              d. Kary Mullis
12. Receptor for IgE is present on  
a. polymorphs              b. eosinophil              c. basophil              d. plasma cell
13. The bacterial cell wall mainly consists of  
a. peptidoglycon              b. phosphoric acid              c. carbohydrate              d. nitrates

14. Viruses can be cultivated only in  
 a.enriched media                      b.selective media  
 c. indicator media                      d.media containing living cells or tissues.
15. In patients suffering from AIDS which of the following lymphocyte count is reduced.  
 a. CD8 T lymphocytes                  b. CD4 T Lymphocytes  
 c. B lymphocyte                          d.cytotoxic T lymphocyte
16. Vivipary is a characteristic feature of \_\_\_\_\_ type of vegetation.  
 a. hydrophytes                  b.mesophytes                  c.mangrove                  d.dessert
17. Cross between the parent and its hybrid progeny is called \_\_\_\_\_  
 a.back cross    b.dominant cross    c.polyhybrid cross    d. reciprocal cross
18. Ergot is obtained from  
 a.*Albugo candida*    b.Yeast    c.*Claviceps purpurea*    d.*Neurospora crassa*
19. Symbiotic association found between algae & fungi  
 a.mycorrhizae                  b.lichens                  c.thallus                  d.ascus
20. Formation of fruit without fertilization is called  
 a.parthenocarpy    b.entomophily    c.xenogamy    d.geitonogamy
21. The chlorophyll pigment found in green sulphur bacteria is  
 a.bacteriochlorophyll    b.phycocyanin    c.phycoerythrin    d.bacterioviridin
22. Nitrogen is estimated using  
 a. Liebig's combustion method    b.Kjeldahal method  
 c. Carius method    d. Anthrone method
23. Ethyl formate reacts with  $\text{CH}_3\text{MgI}$  to give  
 a.formaldehyde    b.acetaldehyde    c.acetone    d. acetyl chloride
24. The SI unit of equivalent conductance is  
 a. $\text{mho m}^2 (\text{equiv})^{-1}$     b. $\text{mho}^2 \text{ m}^3 (\text{equiv})^{-3}$   
 c. $\text{mho m}^{-3} (\text{equiv})^{-1}$     d.  $\text{mho m}^2 (\text{gm equiv})^{-1}$
25. The number of components in a solution of common salt is  
 a. 0    b.1    c. 2    d. 3
26. Disorder associated with thiamine deficiency is  
 a.nyctalopia    b.Wernicke's psychosis    c.scurvy    d.rickets
27. Elevated levels of serum lipase indicate  
 a.obstructive jaundice    b.acute pancreatitis    c. acute parotitis    d.celiac sprue
28. Urea cycle occurs in  
 a.liver    b.gastrointestinal tract    c.spleen    d.kidney

29. In the process of transcription, the flow of genetic information is from  
 a. DNA to RNA      b. RNA to Protein      c. RNA to DNA      d. protein to RNA
30. The key enzyme in the regulation of fatty acid synthesis is  
 a. acetyl CoA carboxylase      b. protein phosphatase  
 c. AMP activated protein kinase      d. kinase
31. Which one of the following is beta lactamase inhibitor  
 a. penicillanic acid      b. embonic acid      c. cephalosporanic acid      d. clavulanic acid
32. The biliary drug excretion is  
 a. passive process      b. ionic transport      c. active process      d. non-ionic transport
33. Which one of the following stereo-isomers of chloramphenicol is the biologically active isomer  
 a. L-erythro      b. L-threo      c. D-erythro      d. D-threo
34. In Alzheimer's disease improvement of memory is brought about by drugs which increase transmission in  
 a. cholinergic receptors      b. dopaminergic receptors  
 c. GABA receptors      d. adrenergic receptors
35. Fluorescent dye used for ophthalmological diagnosis is injected in  
 a. subclavian vein      b. popliteal vein      c. femoral vein      d. ante-cubital vein
36. International Normalized Ratio is used to assess function of  
 a. prothrombin time      b. activated partial thromboplastin time  
 c. platelet function test      d. von Willibrand factor Assay
37. In starvation, first nutrient to be depleted in the body is:  
 a. fat      b. carbohydrate      c. protein      d. vitamins
38. The principle of autoclave is  
 a. dry heat sterilisation      b. moist heat sterilisation      c. filtration      d. Radiation
39. The confirmatory test used to diagnose AIDS is  
 a. ELISA      b. PCR      c. viral culture      d. western blot
40. Coenocytic condition means  
 a. multiple nucleus      b. no nucleus      c. one nucleus      d. dividing nucleus
41. Characteristic inflorescence of ficus is called \_\_\_\_\_  
 a. catkin      b. umbel      c. hypanthodium      d. capitulum
42. Arrangement of either sepals or petals of a flower in bud condition is termed as  
 a. aestivation      b. attenuate      c. amplexicaul      d. arillus
43. Starch is detected in plant sections by treating with  
 a. ferric chloride solution      b. Jeffrey's reagent      c. Millon's reagent      d. iodine solution

44. Sacred basil-*Ocimum tenuiflorum* belongs to the family  
 a. apiaceae      b. lamiaceae      c. rubiaceae      d. acanthaceae
45. Cell which keeps changing its shape is called as  
 a. pleomorphic      b. symbiont      c. gram negative      d. spirilla
46. Common name of chloral is  
 a. trichloro acetone      b. trichloro formaldehyde  
 c. trichloro acetaldehyde      d. trichloro propionaldehyde
47. Borax is also known as  
 a.  $K_2B_4O_7$       b.  $Na_2B_4O_7$       c. NaOH      d. KOH
48. The characteristic IR -absorption band of carbonyl group in aldehyde is  
 a.  $2000-1950\text{ cm}^{-1}$       b.  $1250\text{ cm}^{-1}$       c.  $1700\text{ cm}^{-1}$       d.  $1580\text{ cm}^{-1}$
49. 1.75 g of NaCl is dissolved in 5.85 g of water, the per cent by weight of NaCl is  
 a. 23.0      b. 46.0      c. 35.0      d. 107.0
50. Which among the following is not a reducing sugar?  
 a. lactose      b. maltose      c. sucrose      d. galactose
51. Which of the following is used as an anticoagulant for estimation of blood glucose?  
 a. sodium fluoride      b. sodium citrate      c. sodium acetate      d. sodium lactate
52. The best marker to screen hypothyroidism is  
 a. T4      b. T3      c. TSH      d. Thyroglobulin
53. Anisocytic stomata is present in  
 a. senna      b. digitalis      c. belladonna      d. coca
54. Quinoline alkaloids are biosynthesized via which one of the following pathways  
 a. shikimic acid-tyrosine      b. shikimic acid-tryptophan  
 c. shikimic acid cathnone      d. shikimic acid-phenylalanine
55. Pick the safest anaesthetic for use in asthmatic patients  
 a. phenobarbital      b. morphine      c. chloral hydrate      d. ketamine
56. Identify the contrast agent used for MRI scan  
 a. polonium      b. gadolinium      c. strontium      d. plutonium
57. Gastro-oesophageal reflux is best detected by  
 a. X-ray      b. isotopic scan      c. barium study      d. endoscopy
58. Selective destruction of T helper cells is seen in  
 a. stroke      b. embolism      c. AIDS      d. ischemic heart disease

59. The temperature of the floatation bath for tissue sections should be:  
 a. 5–10° C below the melting point of paraffin wax used  
 b. same as that of paraffin wax used  
 c. 5–10°C above the melting point of paraffin wax used  
 d. 10–20° C above the melting point of paraffin wax used
60. The following is an adhesive mixture for coating glass slides  
 a. Mayer's egg albumin      b. 50% methanol      c. acetone      d. 50% ethanol
61. Which of the following does not kill endospore  
 a. autoclave      b. incineration      c. hot air oven      d. pasteurisation
62. Little leaf of brinjal is caused by \_\_\_\_\_  
 a. nematode      b. mycoplasma      c. virus      d. bacteria
63. Swollen leaf base is known as  
 a. pulvinus      b. convergent      c. stipule      d. pinnae
64. Which one of the following is insectivorous plant  
 a. Cuscuta      b. Salvia      c. Merremia      d. Drosera
65. Arrangement of leaves on the stem or the branches is known as  
 a. Phyllotaxy      b. Phyllode      c. Tendrils      d. Peduncle
66. Morphine is obtained from  
 a. *Rauwolfia serpentina*      b. *Cinchona officinalis*  
 c. *Papaver somniferum*      d. *Aconitum ferox*
67. The process used for the manufacture of ammonia is  
 a. Contact      b. Haber's      c. Ostwald      d. Linde's
68. The cathode rays are  
 a. a stream of electrons      b. a stream of positive ions  
 c. a stream of unchanged particles      d. the same as canal rays
69. DDT stands for  
 a. p,p'– dibromo diphenyl trichloro ethane  
 b. p,p'– dichloro diphenyl trichloro ethane  
 c. p,p'– dichloro diphenyl trichloro propylene  
 d. p,p'– dichloro diphenyl trichloro ethyne
70. Quinonoid form of phenolphthalein in basic medium is  
 a. colorless      b. pink      c. yellow      d. red

KEY

1.	D
2.	C
3.	A
4.	D
5.	B
6.	D
7.	D
8.	A
9.	C
10.	B
11.	D
12.	C
13.	A
14.	D
15.	B
16.	C
17.	A
18.	C
19.	B
20.	A
21.	D
22.	B
23.	B
24.	D
25.	C
26.	B
27.	B
28.	A
29.	A
30.	A
31.	D
32.	C
33.	D
34.	A
35.	D

36.	A
37.	B
38.	B
39.	D
40.	A
41.	C
42.	A
43.	D
44.	B
45.	A
46.	C
47.	B
48.	C
49.	A
50.	C
51.	A
52.	C
53.	C
54.	B
55.	C
56.	B
57.	D
58.	C
59.	A
60.	A
61.	D
62.	B
63.	A
64.	D
65.	A
66.	C
67.	B
68.	A
69.	B
70.	B