

168/2016

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. Which of the following has a laterally compressed body and no wings?  
(A) Mosquitoes (B) Lice  
(C) Fleas (D) Bugs
2. Sexes are separate in which of the following?  
(A) Amphistomes (B) Schistosomes  
(C) Distome (D) Monostome
3. Nematodes are best fixed in :  
(A) 10% formalin (B) Bouin's fluid  
(C) Phenol (D) Hot glycerine alcohol
4. California Mastitis Test is carried out in :  
(A) Serum (B) Milk  
(C) Blood (D) Dung
5. Commercially available concentrated formaldehyde is :  
(A) 37-41% weight/volume (w/v) (B) 100% weight/volume (w/v)  
(C) 98% weight/volume (w/v) (D) 1% weight/volume (w/v)
6. Miracidium, sporocyst, redia, cercaria, metacercaria are seen in the life cycle of :  
(A) Cestodes (B) Trematodes  
(C) Nematode (D) Arthropod
7. The eggs of which parasite has a Napoleon hat shape :  
(A) *Ancylostoma caninum* (B) *Toxocara vitulorum*  
(C) *Taenia solium* (D) *Schistosoma spindale*

8. For routine staining of blood smear by Giemsa method, the smear is fixed by :
- (A) Acetone (B) Acetic acid  
(C) Methanol (D) Chloroform
9. The vectors of *Babesia* species is :
- (A) Lice (B) Fleas  
(C) Ticks (D) Flies
10. In male *Sarcoptes* mite, suckers are present on legs :
- (A) 1, 2, 3 and 4 (B) 1, 2 and 3  
(C) 1 and 2 (D) 1, 2 and 4
11. The dog flea is :
- (A) *Toxocara canis* (B) *Ancylostoma caninum*  
(C) *Xenopsylla cheopis* (D) *Ctenocephalides canis*
12. 'Nits' are the pear shaped operculate eggs of :
- (A) Flies (B) Ticks  
(C) Lice (D) Worms
13. The thickness of a tissue section taken using microtome for histopathology is :
- (A) 5 microns (B) 50 microns  
(C) 100 microns (D) 1000 microns
14. The part of a microscope that serves to regulate light entering the condenser is :
- (A) Stage (B) Iris diaphragm  
(C) Blue filter (D) Revolving nose piece
15. Which of the following fixative contains picric acid, formaldehyde and glacial acetic acid?
- (A) Clarke's fluid (B) Bouin's solution  
(C) Carnoy's fluid (D) Neutral buffered formaldehyde
16. For fixation, the recommended quantity of the fixative should be :
- (A) 20 times the volume of the tissue (B) Half the volume of the tissue  
(C) 100 times the volume of the tissue (D) Equal to the volume of tissue

17. The unit for expressing Erythrocyte Sedimentation Rate (ESR) is :
- (A) Centimetre/minute (B) Millimetre/minute  
(C) Centimetre/hour (D) Millimetre/hour
18. The old name of aspartate aminotransferase (AST) is :
- (A) Acid phosphatase  
(B) Serum glutamate-pyruvate transaminase  
(C) Serum glutamic-oxaloacetic transaminase  
(D) Creatine phosphokinase
19. Which is not a liver function test?
- (A) Test for AST (B) Test for serum creatinine  
(C) Test for ALT (D) Albumin test
20. An example of a special staining is :
- (A) Periodic acid Schiff's staining (B) Acid fast staining  
(C) Grams staining (D) Leishman's staining
21. The staining technique that is preferred for viewing intracellular haemoprotzoans is :
- (A) Leishman's staining (B) Giemsa staining  
(C) Wright's staining (D) Gram's staining
22. The sterilization conditions in a steam jacketed autoclave is :
- (A) 121°C at 15 psi pressure for 5 min (B) 121°C at 5 psi pressure for 15 min  
(C) 121°C at 15 psi pressure for 150 min (D) 121°C at 15 psi pressure for 15 min
23. The special microscope used for detecting leptospire in blood sample is :
- (A) Dark field microscope (B) Phase contrast microscope  
(C) Stereo zoom microscope (D) Fluorescence microscope
24. The incorporation percentage of agar in common bacteriological media is :
- (A) 0.25% - 0.5% (B) 5% - 10%  
(C) 1.5% - 2% (D) 10% - 20%

25. An example for anaerobic media is :
- (A) Fluid thioglycollate medium (B) Nutrient broth  
(C) MacConkey broth (D) Peptone water
26. Which among the following is not a modification of Gram's staining?
- (A) Kopeloff and Bearman's modification (B) Burke's modification  
(C) Weigert's modification (D) Fleming's modification
27. In lactophenol cotton blue stain, the function of cotton blue is to :
- (A) Kill the fungus (B) Clear the fungus  
(C) Stain the fungus (D) Fix the fungus
28. The most common method of fixing a bacterial smear is :
- (A) Phenol fixing (B) Heat fixing  
(C) Acetic acid fixing (D) Methanol fixing
29. The natural immunity present in an individual is :
- (A) Innate immunity (B) Adaptive immunity  
(C) Active immunity (D) Adoptive immunity
30. Nosocomial infection means infection acquired from :
- (A) Shops (B) Community  
(C) Hospitals (D) Households
31. The specimen taken from a dead dog for diagnosis of rabies is :
- (A) Spleen (B) Brain  
(C) Liver (D) Tongue
32. For separation of serum, blood is collected in :
- (A) EDTA (B) Heparin  
(C) Sodium citrate (D) Dry tubes without any chemicals
33. Bacterial colonies having a raised or bulging centre is called :
- (A) Umbilicate (B) Flat  
(C) Umbonate (D) Pinpoint

34. Methyl red test is used to detect :
- (A) Acid production from glucose (B) Indole production  
(C) Urease production (D) Hydrogen sulphide production
35. The most common enzyme used in a polymerase chain reaction is :
- (A) RNA polymerase (B) Taq polymerase  
(C) Reverse transcriptase (D) DNA ligase
36. Indian Standards Institution is now known as :
- (A) ISO (B) AGMARK  
(C) PFA (D) BIS
37. The maximum permissible level of total hardness in drinking water as per Indian standard is :
- (A) 100 mg/litre (B) 600 mg/litre  
(C) 300 mg/litre (D) 1200 mg/litre
38. The headquarters of FAO is situated in :
- (A) Geneva (B) Munich  
(C) Rome (D) Prague
39. The agar recommended for antibiotic sensitivity testing is :
- (A) Nutrient agar (B) Potato dextrose agar  
(C) MacConkey agar (D) Mueller Hinton agar
40. Which among the following is not a platform test for milk?
- (A) Total plate count test (B) Organoleptic test  
(C) Alcohol test (D) Clot on boiling test
41. Urinary crystal having coffin lid appearance is :
- (A) Uric acid (B) Triple phosphate  
(C) Calcium oxalate (D) Urate

42. Drepanocytes are seen in :
- |                |                         |
|----------------|-------------------------|
| (A) Alcoholism | (B) Thalassaemia        |
| (C) Uremia     | (D) Sickle cell anaemia |
43. In D<sub>1</sub> Guglielmo's syndrome the predominant cell is :
- |                  |                 |
|------------------|-----------------|
| (A) Erythroblast | (B) Lymphoblast |
| (C) Promonocyte  | (D) Myelocyte   |
44. Which of the following is a water soluble wax?
- |                  |               |
|------------------|---------------|
| (A) Paraffin wax | (B) Celloidin |
| (C) Carbo wax    | (D) Ester wax |
45. Urobilinogen is completely absent in :
- |                          |                            |
|--------------------------|----------------------------|
| (A) Obstructive jaundice | (B) Haemolytic jaundice    |
| (C) Hepatic jaundice     | (D) Physiological jaundice |
46. Non specific PAS staining is encountered after this fixation :
- |                       |                          |
|-----------------------|--------------------------|
| (A) Mercuric chloride | (B) Potassium dichromate |
| (C) Osmium tetroxide  | (D) Glutaraldehyde       |
47. DIC is a complication of :
- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| (A) Acute promyelocytic leukaemia | (B) Chronic myeloid leukaemia     |
| (C) Hairy cell leukaemia          | (D) Chronic lymphocytic leukaemia |
48. 1 gm Hb can bind with :
- |                               |                                |
|-------------------------------|--------------------------------|
| (A) 3.47 ml of O <sub>2</sub> | (B) 0.134 ml of O <sub>2</sub> |
| (C) 1.34 ml of O <sub>2</sub> | (D) 13.4 ml of O <sub>2</sub>  |
49. Black coloured urine is a feature of :
- |                              |                   |
|------------------------------|-------------------|
| (A) Phenyl ketonuria         | (B) Alkaptonuria  |
| (C) Urinary tract infections | (D) Keto acidosis |
50. Glanzmann's disease is associated with :
- |                                    |                                 |
|------------------------------------|---------------------------------|
| (A) Defective platelet aggregation | (B) Defective platelet adhesion |
| (C) Normal clot retraction         | (D) None of these               |

51. Length of wintrobe's haematocrit tube :
- (A) 9 cm (B) 10 cm  
(C) 11 cm (D) 12 cm
52. Betke-Kleihauer method is used to detect :
- (A) Hb A (B) Hb F  
(C) Hb C (D) None of these
53. Green coloured vacutainer tube contains :
- (A) Fluoride (B) EDTA  
(C) Citrate (D) Heparin
54. Coulter counter is based on :
- (A) Impedence method (B) Light reflection  
(C) Light refraction (D) All the above
55. The stain used to demonstrate Barr Body :
- (A) H & E stain (B) Reliculin stain  
(C) PAS stain (D) Shorr stain
56. Weight of NaOH to be taken for preparing 0.2 m NaOH in 100 ml quantity is \_\_\_\_\_  
[Mol. wt NaOH 40].
- (A) 8 gm (B) 0.8 gm  
(C) 0.08 gm (D) 4 gm
57. Which among the following is a primary standard chemical?
- (A) NaOH (B) KOH  
(C)  $\text{Na}_2\text{CO}_3$  (D) All the above
58. Glycosidic linkage in maltose is :
- (A) Alpha 1-4 linkage (B) Beta 1-4 linkage  
(C) Alpha 1-6 linkage (D) Alpha 1-2 linkage

59. Pyruvate is converted to Acetyl CoA by :
- (A) Pyruvate dehydrogenase (B) Pyruvate carboxylase  
(C) Pyruvate kinase (D) Lactate Dehydrogenase
60. The main apoprotein present in LDL :
- (A) Apo D (B) Apo 48  
(C) Apo B 100 (D) None
61. Wavelength selector in spectrophotometer is either :
- (A) Filters (B) Prisms  
(C) Diffraction gratings (D) Both (B) and (C)
62. Bence Johns protein is seen in :
- (A) Nephrotic syndrome (B) Multiple myeloma  
(C) Cirrhosis of liver (D) Hepatitis
63. Amino acids involved in creatinine synthesis :
- (A) Glycine (B) Arginine  
(C) Methionine (D) All the above
64. Which among the following is both ketogenic and glucogenic?
- (A) Glycine (B) Valine  
(C) Leucine (D) Isoleucine
65. Cocci arranged in packets of eight :
- (A) Micrococci (B) Gonococci  
(C) Sarcina (D) Pneumococci
66. Co enzyme involved in transamination reactions :
- (A) FMN (B) PLP  
(C) Thiamine (D) Vit B<sub>12</sub>

67. Bacteria which have lost their cell wall is referred to as :
- (A) Spheroplast (B) Protoplast  
(C) L forms (D) None of these
68. Organ of adhesion in bacteria :
- (A) Pili (B) Flagella  
(C) Capsule (D) Plasmid
69. Metachromatic granules can be demonstrated by :
- (A) AFB staining (B) Gram staining  
(C) Negative staining (D) Ponder's staining
70. Selective medium for corynebacterium diphtheriae :
- (A) Carey-Blair medium (B) Mac-Conkey Agar  
(C) Tellurite Blood Agar (D) Stuart medium
71. Antibiotic having anti DNA gyrase action :
- (A) Tetracyclin (B) Polymyxin  
(C) Quinolones (D) Rifampin
72. The control strain of bacteria for antibiotic sensitivity test in case of gram negative bacilli is :
- (A) NCTC 10418 E. Coli (B) NCTC 6571 staph aureus  
(C) NCTC 10662 pseudomonas (D) NCTC 9343 bacteroids
73. Picric acid should be stored :
- (A) in kerosine (B) in dry state  
(C) metal container (D) under water
74. Tube length of compound microscope is :
- (A) 140 mm (B) 160 mm  
(C) 100 mm (D) 180 mm