

P.G. ENTRANCE EXAMINATION, APRIL 2022**MICROBIOLOGY**

Time : Two Hours

Maximum : 200 Marks

*Each question carries 4 marks.**1 mark will be deducted for each wrong answer.*

1. BCG vaccination is used against :
 - (a) Cholera.
 - (b) Syphilis.
 - (c) Dysentery.
 - (d) Tuberculosis.
2. H1N1 related to :
 - (a) Influenza.
 - (b) Yellow fever.
 - (c) Cancer.
 - (d) Dengue fever.
3. Part of an antigen that is recognized by the immune system is :
 - (a) Paratope.
 - (b) Epitope.
 - (c) Agrotype.
 - (d) Hapten.
4. Gram stain technique is a :
 - (a) Differential staining.
 - (b) Simple staining.
 - (c) Flagellar staining.
 - (d) Spore staining.
5. The Bacterial start codon is :
 - (a) AUG.
 - (b) UCC.
 - (c) UAG.
 - (d) UGA.
6. DNA replication is not :
 - (a) Discontinuous.
 - (b) Conservative.
 - (c) Bidirectional.
 - (d) Primer dependent.

Turn over

7. Rho factor is involved in :
- (a) Transcription termination. (b) Transcription initiation.
(c) Translation termination. (d) Translation initiation.
8. Which of the following is a sequence alignment tool ?
- (a) BLAST. (b) PRINT.
(c) PROSITE. (d) PIR.
9. Antibodies are produced by :
- (a) A cells. (b) B cells.
(c) C cells. (d) T cells.
10. Which type of spores are produced sexually ?
- (a) Conidia. (b) Sporangiospores.
(c) Ascospores. (d) None of these.
11. The antiseptic method was first demonstrated by :
- (a) Lewandowsky. (b) Lord Lister.
(c) Edward Jenner. (d) Beijerinck.
12. Screening test for AIDS is :
- (a) Western blot test. (b) ELISA test.
(c) Both (a) and (b). (d) VDRL test.
13. Example of anaerobic medium :
- (a) Wilson Blair medium.
(b) MacConkey broth.
(c) Robertson's cooked meat medium.
(d) EMB agar.

14. Which of the following is ionizing radiation ?
- (a) U. V. Rays. (b) IR.
(c) γ -rays. (d) None of these.
15. An algae which produce hydrogen gas :
- (a) Chlorella. (b) Spirogyra.
(c) Chlamydomonas. (d) Spirulina.
16. Which among is a flagellate protozoon ?
- (a) Naegleria. (b) Trichomonas.
(c) Toxoplasma. (d) Balantidium.
17. Immunoglobulins are :
- (a) Proteins. (b) Lipids.
(c) Carbohydrates. (d) Glycoproteins.
18. 28th February is :
- (a) World Health Day. (b) World women's day.
(c) World Science day. (d) World forest day.
19. Anaerobic bacteria fix nitrogen non-symbiotically :
- (a) Rhizobium. (b) Desulfovibrio.
(c) Azotobacter. (d) Bacillus.
20. A naturally occurring anticoagulant :
- (a) EDTA. (b) Sodium citrate.
(c) Heparin. (d) Calcium Oxalate.

21. The immunoglobulin class with secretory component is :
- (a) Ig A. (b) Ig D.
(c) Ig M. (d) Ig E.
22. The bacteria used as test organism for gamma sterilization :
- (a) *Bacillus pumilus*. (b) *Bacillus stercorophilus*.
(c) *Bacillus cereus*. (d) *Bacillus subtilis*.
23. The causative organism of Ergot disease :
- (a) Puccinia. (b) Rhizopus.
(c) Claviceps. (d) Penicillium.
24. Congenital diseases are :
- (a) Diseases present at birth. (b) Occur during life.
(c) Deficiency disease. (d) An eye disease.
25. Which is a starter culture in dairying :
- (a) Rhizobium. (b) E. coli.
(c) Lactobacillus. (d) Acetobacter.
26. Staining dye of gram-positive bacterium is :
- (a) Malachite green. (b) Hematoxylin.
(c) Crystal violet. (d) Safranin.
27. Rancidity in spoiled food is due to :
- (a) Lipolytic organisms. (b) Saccharolytic microbes.
(c) Proteolytic organisms. (d) Toxigenic microbes.

28. Prion caused disease in Humans is :
- (a) Minamata disease. (b) Kura disease.
(c) Heat shock syndrome. (d) Mastitis.
29. The suitable medium used for culturing Hemophilus :
- (a) Chocolate agar. (b) Mac Conkey agar.
(c) Sabourads agar. (d) Muller agar.
30. Lowensten-Jensen medium used for cultivation of :
- (a) Rickettsia. (b) Mycoplasma.
(c) Tubercle bacilli. (d) Spirochete.
31. The microorganism used for large scale production of citric acid :
- (a) *Trichoderma reesei*. (b) *Bacillus subtilis*.
(c) *Aspergillus niger*. (d) *Penicillium noctatum*.
32. The byproduct of dairy industry used as a carbon source in fermentation media :
- (a) Whey. (b) Molasses.
(c) Dextrin. (d) Com steep.
33. The Catalytic RNA is called :
- (a) SnRNA. (b) micro RNA.
(c) Ribozyme. (d) Antisense RNA.
34. Sauerkraut is fermented food of :
- (a) Cauliflower. (b) Cabbage.
(c) Fish. (d) Rice.

35. Disease that affects a particular environment or region of people is termed :

- (a) Sporadic.
- (b) Pandemic.
- (c) Epidemic.
- (d) Endemic.

36. The largest protozoa is :

- (a) *Balantidium coli*.
- (b) *Entamoeba coli*.
- (c) *Trichomonas vaginalis*.
- (d) *Toxoplasma gondii*.

37. Nagler reaction is used to detects :

- (a) *Corynebacterium diphtheriae*.
- (b) *Clostridium perfringens*.
- (c) *Clostridium tetani*.
- (d) *Clostridium botulinum*.

38. Histones are found in :

- (a) Prokaryotes.
- (b) Eukaryotes.
- (c) Viruses.
- (d) None of these.

39. The stain used to demonstrate fungus :

- (a) Albert.
- (b) Nigrosine.
- (c) Lactophenol cotton blue.
- (d) None of these.

40. Mesosomes are also known as :

- (a) Globules.
- (b) Chloroplasts.
- (c) Golgi complex.
- (d) Chondroids.

41. What type of agent is Lysol :

- (a) Sterilant.
- (b) Disinfectant.
- (c) Antiseptic.
- (d) Antifungal agent.

42. Poly A tail is frequently occurred in :

- (a) Histone in DNA.
- (b) Bacterial RNA.
- (c) Eukaryotic RNA.
- (d) TRNA.

43. DNA replicates during :

- (a) G1 - phase.
- (b) S - phase.
- (c) G2 - phase.
- (d) M - phase.

44. The enzyme required for DNA from RNA template :

- (a) RNA polymerase.
- (b) Reverse transcriptase.
- (c) DNA polymerase.
- (d) Terminal transferase.

45. The length of each coil in DNA strand is :

- (a) 15 A°.
- (b) 34 A°.
- (c) 30 A°.
- (d) 5 A°.

46. The cellular immune response is mediated by :

- (a) B cells.
- (b) BT cells.
- (c) T cell.
- (d) Endothelial cells.

47. Septicemia is a condition :

- (a) Bacteria in blood.
- (b) Toxin in blood.
- (c) Pus in blood.
- (d) Pus in wound.

48. β -lactum ring is present in :

- (a) Erythromycin.
- (b) Penicillin.
- (c) Tetracycline.
- (d) Chromphenical.

49. Mantoux test is used to detects :

- (a) M. Tuberculosis.
- (b) Cyanobacteria.
- (c) Clostridia.
- (d) Syphilis.

50. The causative agent of conjunctivitis :

- (a) Adeno virus.
- (b) Corona virus.
- (c) Paramyxo virus.
- (d) Papilloma Virus.