EXERCISE-I

KINGDOM MONERA

1. Bacterial ribosomes are called
(A) Autosomes (B) Dictyosomes
(C) Centrosomes (D) Polyribosomes

2. What is the nuclear material of a bacterium
(A) Nucleic acid and histoxne protein
(B) Nucleic acid and cytoplasm
(C) Only nucleic acid
(D) All the above

3. Why surgical instruments are boiled in water before use
(A) For killing the pathogens present on them
(B) So that doctors can use them easily
(C) Provides pleasure to the patient
(D) All the saprophytes die on the operative surface

4. Bacterial photosynthesis is very peculiar because it takes place
(A) Without CO_2
(B) Without photosynthetic pigments
(C) Without light
(D) Without water

5. Which of the following compounds are decomposed during putrefaction
(A) Proteins (B) Fats
(C) Carbohydrates (D) None

6. The process of replication in plasmid DNA, other than initiation, is controlled by
(A) Plasmid gene
(B) Bacterial gene
(C) Cytoplasmic gene
(D) Mitochondrial gene

7. Bacteria reproduce sexually by
(A) Endospores (B) Transformation
(C) Conidia (D) Exospores

8. Transfer of DNA from one bacteria to another by contact is known as
(A) Conjugation (B) Transformation
(C) Transduction (D) Transcription

9. Transformation experiment was performed on which of the following bacteria
(A) *E. coli*
(B) *Salmonella*
(C) *Pasturella pestis*
(D) *Diplococcus pneumoniae*

10. Viral genome incorporated and integrates with bacterial genomes is refer to as
(A) Prophages (B) RNA
(C) DNA (D) Both (B) and (C)

11. Which of the following decompose the remanents of the plants into CO_2 and water
(A) Algae (B) Sunlight
(C) Virus (D) Bacteria

12. What is the cause of flavour of tea and tobacco leaves
(A) Mechanical method
(B) Different strains of bacteria
(C) Activity of fungi
(D) Action of viruses

13. Sugary solution is changed to vinegar by the action of
(A) *Azotobacter* (B) *Diplococcus*
(C) *Bacillus subtilis* (D) *Mycoderma aciti*

14. Tetanolysin is produced by
(A) *Mycobacterium laprae*
(B) *Clostridium botulinum*
(C) *Clostridium tetani*
(D) None of these

15. Which of the following red pigment is present in root nodules of bacteria
(A) Phycoerythrin
(B) Bacterio chlorophyll
(C) Leg haemoglobin
(D) Bacterio viridin

16. Which of the following is disease causing bacterium in human beings
(A) *Escherichia coli*
(B) *Xanthomonas citri*
(C) T.M.V.
(D) Pilobolus

17. Which of the following is *Xanthomonas* related
(A) Xanthophyceae
` (B) Causing disease in Xanthium
(C) A kind of Virus
(D) Causing Citrus canker disease

18. Leprosy is caused by
(A) *Spirillum* (B) *Flagellum*
(C) *Mycobacteria* (D) *Pseudomonas*

19. The poisonous substances commonly produced by bacteria are known as
(A) Toxin (Exotoxins) (B) Auxins
(C) Antibiotic (D) Antitoxins

20. Bacterial blight of rice is caused due to
(A) *Xanthomonas oryzae*
(B) *Helminthosporium oryzae*
(C) *Pseudomonas falcatum*
(D) *Xanthomonas falcatum*

21. Size of PPLO is
(A) 0.10μ to 0.15μ (B) 0.21μ to 0.25μ
(C) 0.01μ to 0.08μ (D) 0.05μ to 0.10μ

22. Prokaryota includes
(A) Mycoplasma
(B) *Ulothrix*
(C) Fungi
(D) Mycoplasma and blue-green algae

23. The membrane of which one of the following micro-organism is three layered
(A) *Nostoc* (B) *Mycoplasma*
(C) *E. coli* (D) *Rhodospirillum*

24. PPLO reproduce (multiply) by
(A) Gametic fusion (B) Binary fission
(C) Akinetes (D) Endospore

25. Organisms without any specific shape are
(A) Mycoplasmas (B) Bacteria
(C) Viruses (D) Cyanobacteria

26. Which of the following algae is symbiotic and nitrogen fixing
(A) *Spirogyra* (B) *Cladophora*
(C) *Anabaena* (D) *Oedogonium*

27. Blue-green algae and bacteria show similarity in
(A) Both show anaerobic respiration
(B) Both show the presence of chlorophyll
(C) Both are devoid of true nucleus
(D) None of the above

28. Prokaryotes are characterized by
(A) A true nucleus with double layered nuclear membrane is absent
(B) Well developed nucleus with double layered nuclear membrane present
(C) Presence of cell wall made of chitins, mucopolysaccharides and absence of cell organelles like mitochondria and chloroplasts
(D) Autotrophic in nature and only DNA is present

29. The cells of cyanobacteria and bacteria exhibit similarity in having
(A) Plastids (B) Nuclei (True)
(C) Centrosome (D) DNA

30. The name cyanobacteria refers to
(A) Bacteria (B) Blue–green algae
(C) Yeast (D) Fungi

KINGDOM PROTISTA

31. Which one is not a protozoan protist
(A) *Plasmodium vivax*
(B) *Paramecium caudatum*
(C) *Enterobius vermiclaris*
(D) *Trypanosoma gambiense*

32. Unicellularity is characteristic of
(A) Cyanobacteria (B) Monera
(C) Protista (D) All of these

33. *Euglena* is a
(A) Ciliate (B) Sporozoan
(C) Flagellate (D) Sarcodine

34. Protozoans are able to live efficiently due to their
(A) Motility
(B) Rapid reproduction
(C) Ability to manufacture food
(D) Specialised organelles

35. Characteristic spores of diatoms are
(A) Ascospores (B) Basidiospores
(C) Auxospores (D) Zoospores

36. Who discovered malaria parasite
(A) Sir Ronald Ross (B) Charles Laveran
(C) Patrick Manson (D) Grassi

37. Sporogony of malarial parasite occurs in
(A) Liver of man
(B) RBCs of man
(C) Stomach wall of mosquito
(D) Salivary glands of mosquito

38. *Nosema* belongs to which phylum
(A) Protozoa (B) Porifera
(C) Chordata (D) Coelenterata

39. Which is filter feeder
(A) *Amoeba* (B) *Leech*
(C) *Spider* (D) *Paramecium*

40. Proterospongia is a connecting link between
(A) Protozoa and porifera
(B) Porifera and coelenterata
(C) Protozoa and annelida
(D) Porifera and annelida

KINGDOM FUNGI

41. Wart disease caused by *Synchytrium endobioticum* is found in
(A) Cabbage (B) Potato
(C) Pea (D) Groundnut

42. Septum in eumycota fungi, bearing a complex pore is designated as a
(A) Coenocyte
(B) Septate hypha
(C) Dolipore septum
(D) Secondary simple pore

43. Which of the following secretes toxins during storage conditions of crop plants
(A) *Fusarium* (B) *Pencillium*
(C) *Aspergillus* (D) *Colletotrichum*

44. Which of the following produces spores, but lacks vascular structure
(A) Pteridophytes (B) Gymnosperms
(C) Fungi (D) Dicots

45. The hyphae of *Aspergillus* are
(A) Aseptate and multinucleate
(B) Septate and multinucleate
(C) Aseptate and uninucleate
(D) Septate and uninucleate

46. The zygospore in *Rhizopus* develops into
(A) Zygospore
(B) Promycelium
(C) Progametangium
(D) Gametangium

47. In *Mucor* and *Rhizopus* there occurs a phenomenon known as heterothallism which means
(A) Fusion of two gametes from two thalli of opposite strains
(B) Fusion of two gametes from thalli of similar stain
(C) Formation of a zygospore partheno-genetically
(D) Torula stage

48. Which of the following plant and its mode of nutrition is not correctly matched
(A) *Cuscuta* – Stem parasite
(B) *Mucor* – Autotroph
(C) *Orobanche* – Root parasite
(D) *Drosera* – Insectivorous

49. Which one of the following fungus shows heterothallism
(A) *Erisyphe* (B) *Peziza*
(C) *Rhizopus* (D) *Peronospora*

50. Common bread mould is
(A) *Rhizopus oryzae*
(B) *Rhizobium* species
(C) *Rhizopus nedosus*
(D) *Rhizopus stolonifer*

51. The antibiotic obtained from the yeast is
(A) Ephedrin (B) Saccharin
(C) Campestrin (D) Polymixin

52. Yeast differs from *Rhizopus* in being
(A) Multicellular and coenocytic
(B) Unicellular and uninucleate
(C) Unicellular and coenocytic
(D) Filamentous

53. Pseudomycelium is formed in
(A) Yeast (B) *Rhizophora*
(C) *Aspergillus* (D) *Synchytrium*

54. In manufacture of bread, it becomes porous due to release of CO_2 by the action of
(A) Virus (B) Yeast
(C) Bacteria (D) Protozoans

55. Yeast is divided under the class
(A) Basidiomycetes (B) Deuteromycetes
(C) Ascomycetes (D) Zygomycetes

56. 'Mycorrhizae' are useful for plants mainly due to their following attribute
(A) Fixing atmospheric nitrogen
(B) Enhanced absorption of nutrients from soil
(C) Killing insects and pathogens
(D) Providing resistance against abiotic stresses

57. In lichens, sexual reproduction belongs to
(A) Fungal partner only
(B) Algal partner only
(C) Fungal and algal partners (both)
(D) Either fungal partner or algal partner (not both)

58. Which one of the following pairs is correctly matched
(A) Rhizobium – Parasite in the roots of leguminous plants
(B) Mycorrhizae – Mineral uptake from soil
(C) Yeast – Production of biogas
(D) Myxomycetes – The disease ring worm

59. Mycorrhiza is a
(A) Long thin root
(B) Association of root and fungus
(C) Root like underground stem
(D) Parasitic root

60. The symbiotic association of fungi and algae is called
(A) Lichen (B) Mycorrhiza
(C) Both (A) and (B) (D) Mycoplasma

Viruses

61. Helper virus is called
(A) Perfect phage of virus
(B) A defective phage which helps another defective phage
(C) A latent phage
(D) None of these

62. Who discovered interferons
(A) Issacs and Lindmann
(B) Holmes and Knight
(C) Harshey and Chase
(D) Enders

63. Absence of respiration is what type of character of a virus
(A) Living (B) Non-living
(C) Intermediate (D) None of these

64. Which of the following may produce the mutants
(A) Bacteria (B) Virus
(C) Fungi (D) All the above

65. Which of the following is called "filterable agent"
(A) Bacteria (B) Virus
(C) Fungi (D) All the above

66. Gray matter of brain is affected by
(A) Measel virus (B) Varicella virus
(C) Dengue fever virus (D) Encephalitis virus

67. X–bodies are formed during infection of
(A) Bacteria (B) Mycoplasma
(C) Virus (D) All the above

68. Hydrophobia is caused by a
(A) Bacterium (B) Fungus
(C) Virus (D) Protozoan

69. Our crops suffer from many diseases. Indicate the disease caused by virus
(A) Potato mosaic
(B) Citrus canker
(C) Brown rot of potato
(D) Leaf spot of cotton

70. Banana bunchy top is caused by
(A) Mycoplasma (B) Deutromycetes
(C) Xanthomonas (D) Virus

71. Rugose mosaic of potato is caused by
(A) Potato virus–A (B) Potato virus–Y
(C) Potato virus–X (D) (B) and (C) both

72. From infected cells of .... interferon was invented
(A) Influenza virus (B) Rabies virus
(C) Polio virus (D) None of the above

73. Which of the following is a viral disease
(A) Small pox or polio
(B) Malaria
(C) Diphtheria
(D) Tuberculosis

74. On the basis of host attacked viruses are classified into
(A) Two types (B) Three types
(C) Four types (D) Five types

75. Potato leaf-roll disease is caused by
(A) Mycoplasma (B) Virus
(C) Microspores (D) Bacterium

76. Cotton stenosis is caused by
(A) Virus (B) Mycoplasma
(C) Bacteria (D) Fungi

77. Bacteriophage is made up of
(A) Carbon and nitrogen
(B) DNA
(C) Nucleoprotein (Nucleic acid + protein)
(D) Protein only

78. Which one is the smallest among the following
(A) Bacteriophage (B) TMV
(C) E. coli (D) Neurospora

79. Which of the virus has tadpole like shape
(A) TMV (B) DMV
(C) Human polio virus (D) Bacteriophage

80. The spread of AIDS disease is promoted by
(A) Homosexuality
(B) Immoral way of life
(C) Use of infected needles in blood transfusion
(D) All the above

81. The phage which does not destroy the host cell but infects it, is called
(A) Cyanophage (B) T_2 phage
(C) Virulent phage (D) λ phage

82. Which of the following was used by Hershey and Chase to prove that DNA is the chemical basis of heredity
(A) TMV
(B) Cauliflower mosaic virus
(C) Dahlia mosaic virus
(D) T_2 bacteriophage

83. Genetic mapping of bacteriophage $\phi \times 174$ has been done by
(A) Pirie and Bawden (B) F. Sanger
(C) R.L. Sinsheimer (D) Salk and Sabin

84. Coliphage T_2 has
(A) ssRNA (B) ssDNA
(C) dsRNA (D) dsDNA

85. Number of capsomeres in a T_4 phage is
(A) 2000 (B) 1000
(C) 2100 (D) 2144

86. Ultrastructure of bacteriophage–T was studied by
(A) R.L. Sinsheimer (B) S. Brenner
(C) M. Schlesinger (D) None of the above

87. Tail of bacteriophage is
(A) 1000 × 200 Å in size
(B) 1000 × 250 Å in size
(C) 1000 × 230 Å in size
(D) 1000 × 300 Å in size

88. Cyanophages attack
(A) Cyanobacteria (B) Bacteria
(C) Fungi (D) Lichens

89. The water of Holy Ganga, river is pure due to the presence of
(A) Cyanophages (B) Hydrophytes
(C) Bacteria (D) Bacteriophages

90. Satellite virus is a
(A) Independent virus
(B) Associated with an activator virus
(C) Both (A) and (B)
(D) None of these

91. A provirus is
(A) Precursor of a viral particle
(B) Prolonged viral infection
(C) A symbiotic viral nucleic acid within the host genome
(D) A dormant viral protein

92. Sometimes when a virus attacks a bacterium, neither the virus multiplies nor the bacterium dies. This phenomenon is called as
(A) Adsorption (B) Assimilation
(C) Lysogeny (D) Viral stability

93. Which one of the following is the cause of yellow fever
(A) Virus (B) Bacteria
(C) Protozoa (D) None of these

94. Which of the following is a pandemic disease
(A) Amoebic dysentry (B) Hepatitis
(C) Filariasis (D) Influenza

95. M_{12} phage is
(A) Avirulent (B) Intermediate
(C) Virulent (D) None of these

96. The genetic material of $\phi \times 174$ is
(A) ss DNA (B) ds DNA
(C) ss RNA (D) ds RNA

97. Virus that infects bacteria is called
(A) Bacteriophage (B) Cyanophage
(C) Telophase (D) Prophase

98. Interferon is
(A) Bacteria (B) Anti-Viral
(C) Anti-algal (D) Anti-bacterial

99. Influenza is caused by
(A) Bacterium (B) Virus
(C) Fungus (D) Cyanobacterium

100. Interferons are produced in response to
(A) Virus (B) Bacteria
(C) Helminthes (D) Malarial parasite