

I. Multiple Choice Questions

- Which of this bacteria is resistant to pencillin as it lacks a cell wall? (C)
a) Spirochaetes b) Cyanobacteria
c) Mycoplasma d) Bdellovibrios
- What is a cluster of polar flagella called (D)
a) Petritrichous b) Monotrichous
c) Amphitrichous d) Kophotrichous
- Which microorganisms among the following perform photosynthesis by utilizing light (C)

a) Cyanobacteria, fungi, and viruses b) Viruses
c) Cyanobacteria d) Fungi
- The respiratory chain of bacteria is associated with the (A)
a) Cytoplasmic membrane b) Cell wall
c) Cytoplasm d) Mitochondrial membrane
- What does a viral DNA becomes after being associated with the bacterial chromosome (C)

a) Plasmid b) Plaque c) Provirus d) Gene
- The protein coat of viruses that encloses the genetic material is called (B)
a) Vision b) Capsid c) Peploners d) Capsomers
- Which of the following is the genome of the virus (C)
a) DNA b) RNA c) DNA (or) RNA d) DNA and RNA
- Which of the following is the largest virus (A)
a) Megavirus b) Arbo virus c) Herpesvirus d) Mumps virus
- The viral envelope is made up of (D)
a) Proteins b) Glycoproteins c) Lipids and protein d) All the above
- Which of the following is a helical virus (A)
a) TMV b) T₄ phage c) Poxvirus d) Herpes virus
- Bacteriophages that induce bacterial cell lysis are called (C)
a) Viroids b) Lysogenic phages c) Virulent phages d) Temperate phges

12. The spike- like projections on the viral capsid are known as (C)
 a) Viriod b) Proteomes c) Peplomers d) Capsomeres
13. Who is the father of virology (A)
 a) Martinus Beijerinck b) Omitri Ivanosky
 c) Omitri Ivanosky d) Martinus Beijerink
14. Who is discovered viruses (C)
 a) John ellerman b) Frederick twort
 c) Omitri Ivanosky d) Martinus Beijerink
15. Viruses outside their host cells survive as (A)
 a) Virions b) algar c) Protocoa d) Bacteria
16. Which of the following virus effects the liver (C)
 a) HSV b) EBV c) HPV d) HIV
17. The cocci which mostly occurs in single (or) pairs are (B)
 a) Streptococci b) Diplococci c) Tetracocci d) None of these
18. The common word for bacteria which are straight rod in shape is (B)
 a) Cocci b) Bacilli c) Spirilla d) Pleomorphic
19. A single polar flagella is known as (A)
 a) Monotrichous b) Lophotrichous c) Amphitrichous d) None of these
20. In eukaryotic cells, ribosomes are (C)
 a) 70s b) 60s c) 80c d) Not specific
21. Heterocysts are found in (A)
 a) Nostoc b) Cystopus c) Volvox d) Aspergillus
22. What is the storage product of most of the algae (C)
 a) Cellulose b) Glycogen c) Starch and Oil d) Fat
23. Red colour of the red algae is due to (D)
 a) Y- Phycocyanin b) Xanthophyll c) Carotene d) Y-phycoerythrin
24. Cyanobacteria name has been given to (B)
 a) Mycoplasma b) Myxophyceae c) Myxomycetes d) Schizomycetes
25. Parasitic algae is (A)
 a) Cephaleuros b) Ulothrix c) Spirogyra d) Chlamydomonas
26. Agar – Agar is obtained from (A)
 a) Gelidium b) Polysiphonia c) Fucus d) Laminaria

27. Which of the most primitive group of algae (A)
- | | |
|---------------------|----------------|
| a) Blue green algae | b) Red algae |
| c) Brown algae | d) Green algae |

II. FILL IN THE BLANKS

1. Glycolysis can occurs in aerobic & anaerobic
2. Cryptococcosis is a disease of Mycotic infection
3. Crysolaminarin is the reserved food of Xanthophycophyta
4. Vaccination was invented by Jenner
5. A fully formed infectious viral particles is called virion
6. The shape of the TMV is Rod – shaped
7. Viruses that attack bacteria are called Bacterio phages
8. The reproduction of alga occurs by vegetative, sexual, Asexual
9. Simplest type of reproduction in plants is found in Chlamydomonas
10. The thallus is the vegetative body of alga
11. Plants which are not differentiated into roots, stem, and leaves are grouped under Thallophytes
12. Origin and evolution of sex in alga is best seen in Green alga
13. Zygotic meiosis is a characteristic feature of Alga
14. Food storage in pheophyceae Starch
15. Cell wall of diatoms are impregnated with Silica
16. The alga found in still fresh water is Spirogyra
17. RNA is present in most of the plant viruses ssRNA
18. The most common capsid shape of the virus Icosahedron
19. The bacterium staphylococcus aureus is which type of bacteria Mesophile
20. Which is a pathogenic alga of or human Prototheca
21. Cellulose is degraded to cellobiose by the enzyme Cellulase
22. Bacterial cell grown on hydrocarbon wastes from the petroleum industry are a source of Proteins
23. Acridine orange is which type of mutagen Intercalating agents
24. Lipopolysaccharide in cell wall is characteristic of Gram – negative bacteria
25. The principal microorganism for yogurt is Streptococcus thermophilus

III. Descriptive Questions

1. Write about asexual and sexual reproduction of bacteria?
2. Explain about the bacteria cell structure
3. Write the replication of viruses
4. Write about the plant viral diseases and transmission
5. Explain reproduction in polysiphonia
6. Describe the sexual reproduction of chara
7. Explain about the cyanobacteria general characters and cell structure.