

- N.B. : (1) All question are compulsory.
(2) All questions carry equal marks.
(3) Draw diagrams wherever necessary.

1. Do as directed (any fifteen) :

15

Fill in the blanks :

1. _____ are the prokaryotes which appear to have diverged from true bacteria very early in evolution.
2. Scoliodon is a _____ fish.
3. Mollusc have _____ as a respiratory pigment.
4. The walls of many Gram positive bacteria can be easily destroyed by treating with an enzyme called _____.
5. The cell shape determining part of the cell wall is largely composed of _____.
6. The granular consistency of the cytoplasm is because of the presence of _____.
7. Volutin granules are reserve source for _____.
8. Ribosomes are associated with _____ ER.
9. _____ provide buoyancy to the cell.
10. _____ coined the term bacteriophage.
11. Give one example of a virus with icosahedral symmetry.
12. Give one function of capsule in Bryophyte.
13. Give example of any one bacteria with chemotropic mode of nutrition.
14. Name any one threat to biodiversity.
15. Name any one Eumycota.
16. Name the first virus that was studied under electron microscope.
17. Define : Taxonomical diversity.
18. Define : Alternation of generation.
19. Define : Burst size.
20. State the role of carborundum for the cultivation of plant viruses.

2. (a) Write a note on Miller's Experiment. 8
(b) Describe the salient features of Chordate. 7
OR
(c) Give salient features of Gymnosperms. 8
(d) Discuss the general characteristics of Eubacteria. 7
3. (a) Describe the structure of Gram negative bacterial cell wall. 8
(b) Describe the Fluid mosaic model of plasma membrane. 7
OR
(c) Explain the process of Endospore formation. 8
(d) Describe the structure of microtubule. 7
4. (a) With the help of a diagram elaborate on viral multiplication cycle. 8
(b) Describe in detail any two methods for cultivation of animal viruses. 7
OR
(c) Discuss classification of animal viruses on the basis of their transcription process. 8
(d) Elaborate on classification & types based on morphology of Bacteria. 7
5. Write Short Notes on (any three) : 15
(a) General characters of Arthropoda
(b) Economic importance of Fungi
(c) Capsule
(d) Mitochondria
(e) Nutritional requirements of bacteria
-