

Q.P. Code : 780301

(2½ Hours)

[Total Marks : 75

- 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. In Eukaryotic plant cell, a prominent organelle is _____.
2. Myxine is an example of _____.
3. Spicules as endoskeleton is a characteristic feature of _____.
4. The group of bacteriophages which infect the nonmotile strain B of *E-coli* are termed as _____.
5. The portion of bacterial cell consisting of cytoplasmic membrane and the cell material bound by it is called _____.
6. Many bacteria possess membrane invagination in the form of system of convoluted tubules and vesicles termed as _____.
7. The _____ complex may play a role in the heat resistance of endospore.
8. Light reaction of photosynthesis takes place in _____ of the chloroplast.
9. Oxidative phosphorylation takes places in _____ organelle.
10. The semisolid, granular and slightly acidophilic ground substance in the nucleus is known as _____.
11. Give one significance of Biodiversity.
12. State one example of Gymnosperm.
13. Give one example of anaerobic microorganism.
14. Give one economic importance of Algae.
15. Define : Abiogenesis
16. Define : Viropexis
17. Give one example of single stranded DNA virus.
18. What are negri bodies?
19. Name any one pleomorphic virus.
20. Give one example of any one bacteria with phototrophic mode of nutrition.

TURN OVER

2. (a) Describe the Theory of Spontaneous generation. 8
 (b) Explain the characteristics of Angiosperms giving one example. 7
- OR
- (c) Explain the salient features of Class mammalia. 8
 (d) Give an account of Blue green algae & give its applications. 7
3. (a) Describe the structure of prokaryotic cell membrane. 8
 (b) What are lysosomes? Describe their functions. 7
- OR
- (c) Give detailed account of storage bodies. 8
 (d) Describe the structure of Endoplasmic reticulum. 7
4. (a) How to cultivate animal viruses? Elaborate any two methods. 8
 (b) Elaborate on classification of bacteriophages on the basis of structure & morphology. 7
- OR
- (c) Describe mechanism of lysogeny in bacteriophages. 8
 (d) Give an account of bacteria on the basis of their morphology. 7
5. Write Short Notes on any three of the following : 15
 (a) General characters of Coelenterate
 (b) Genetic diversity
 (c) Slime layer
 (d) Golgi apparatus
 (e) Classification of bacteria on the basis of nutritional requirements
-