

**Q. P. Code: 20662****2 ½ Hours****Total Marks: 75****Note:**

1. Attempt **all** questions.
2. **All** questions carry **equal** marks.
3. Draw **neat labelled diagrams** wherever necessary.
4. For **Q 2, Q 3 and Q 4** attempt A and B **OR** C and D.

**Q.1 Do as directed: (Any fifteen)****15**

1. Define: abiogenesis.
2. Give one significance of biodiversity.
3. In Eukaryotic, plant cell a prominent organelle is the \_\_\_\_\_.
4. Name any one purine.
5. Give the function of capsule in bryophyte.
6. Presence of mammary gland is a characteristic feature of \_\_\_\_\_.
7. Bacteria reproduce by a mechanism called \_\_\_\_\_.
8. The portion of bacterial cell consisting of cytoplasmic membrane and the cell material bounded by it is called \_\_\_\_\_.
9. The walls of many gram positive bacteria can be easily destroyed by treating with an enzyme called \_\_\_\_\_.
10. The cell shape determining part of the cell wall is largely composed of \_\_\_\_\_.
11. The granular consistency of the cytoplasm is because of the presence of \_\_\_\_\_.
12. Oxidative phosphorylation takes place in \_\_\_\_\_.
13. The semisolid, granular and slightly acidophilic ground substance or the matrix in nucleus is known as \_\_\_\_\_.
14. Give one example of a Plant virus.
15. Define: Capsomeres.
16. Give an example of pigment producing microorganism.
17. Define : Lysogeny.
18. \_\_\_\_\_ is the causative agent for Anthrax.
19. Give an example of an acid-fast organism.
20. What are coliphages?

**Q 2 A Explain the theory of Spontaneous generation.****08**

**Q. P. Code: 20662****Q 2 B** Describe the general characteristics of class Reptilia. **07****OR****Q 2 C** Give an account of Blue green algae and give its applications. **08****Q 2 D** Discuss the salient features of Angiosperms. **07****Q 3 A** Describe the cell wall of Gram negative bacteria. **08****Q 3 B** With a neat labeled diagram describe Mitochondria and add a note on its functions. **07****OR****Q 3 C** Discuss the structure and functions of Chloroplast. **08****Q 3 D** Elaborate on Inclusions and storage bodies in a prokaryotic cell. **07****Q 4 A** With the help of a suitable diagram, discuss Transcription, Assembly and Release events during phage lytic cycle. **08****Q 4 B** Explain in detail the morphology and structure of phages. **07****OR****Q 4 C** Explain One-step growth curve of plaque forming units. **08****Q 4 D** Give the Medical uses or aspects of lytic and lysogenic phage. **07****Q.5 Write Short notes on: (Any three)** **15**

- Economic importance of Fungi.
- General Characteristics of class Pteridophytes.
- Bacterial Flagella and its types.
- Microtubules.
- Characteristic features of viruses.