

(20518)

Roll No.

B. Sc. (Micro.)-II Year

3494**B. Sc. (Micro.) Examination, May 2018****CELL BIOLOGY****(B-201)***Time : Three Hours]**[Maximum Marks : 40*

Note : Answer any *Five* questions. All questions carry equal marks. Draw neat and well labelled diagrams wherever required.

1. Describe the ultrastructure of Mitochondria and its functions. 8
2. Write short notes on the following : 4×2=8
 - (a) Slime layer and capsule
 - (b) Microtubules and microfilaments.

3. Write a detailed account on Endoplasmic reticulum. 8
4. Write short notes on the following : 2×4=8
 - (a) Cilia
 - (b) Actin
 - (c) Nuclear pore
 - (d) Pilli.
5. Draw labelled diagrams of the following : 2×4=8
 - (a) Nucleus
 - (b) Chloroplast
 - (c) Prokaryotic cell
 - (d) Flagella of Gram positive bacteria.
6. Differentiate between the following : 4×2=8
 - (a) Active and passive transport
 - (b) Cell wall of Gram positive and Gram negative bacteria.
7. Write short notes on the following : 4×2=8
 - (a) Fluid mosaic model of plasma membrane
 - (b) Lysosomes.

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8. Write an essay on Golgi apparatus. 8
9. Write notes on the following : 4×2=8
- (a) Functions of cell wall
 - (b) Functions of plasma membrane.
10. (a) Explain the various levels of organization with examples. 4
- (b) Explain the structure of nuclear membrane. 4