

(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.

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