

(20518)

Roll No.

B. Sc. (Micro.)-II

3495

B. Sc. (Micro.) Examination, May 2018

Cell Reproduction & Differentiation

(B-202)

[B. Sc. (Micro.)]

Time : Three Hours]

[Maximum Marks : 35

Note : Attempt any five questions. All questions carry equal marks.

1. What are the chemical components of chromosomes? 7
2. Describe the types of histones and their organization in a nucleosome. 7
3. Differentiate between the following : $3\frac{1}{2} \times 2 = 7$
 (a) Meiotic metaphase-I and mitotic metaphase
 (b) Tight junctions and gap junctions.

4. Comment on the following : $3\frac{1}{2} \times 2 = 7$
 (a) Desmosomes
 (b) Cell adhesion.
5. Write a note on organization of kinetochore. 7
6. Compare the steps of differentiation in plant and animals. 7
7. Describe the following : $3\frac{1}{2} \times 2 = 7$
 (a) Polytene chromosomes
 (b) Lampbrush chromosomes.
8. Describe the events during various phases of cell cycle. 7
9. Discuss cell division with respect to meiosis and its significance. 7
10. Comment on the following : $3\frac{1}{2} \times 2 = 7$
 (a) Intercellular recognition
 (b) Bacterial chemotaxis.