

6. Describe structure and functions of Microtubules. 6
7. Explain the mitotic cell division with the help of labeled diagrams. 6
8. Discuss the gross structure of Nucleus and detailed account of Nuclear envelope. 3,3

SECTION—C

9. Write short notes on the following :
- (i) Cell Biology
- (ii) Electron microscope
- (iii) Facilitated transport
- (iv) Endocytosis
- (v) Nucleolus
- (vi) Tight Junctions
- (vii) Cell Cycle
- (viii) Ribosomes. 8×2=16

Roll No.

Total No. of Pages : 2

PC 11437-NH

**AS/2111
CELL BIOLOGY—I
Semester—I**

Time Allowed : Three Hours]

[Maximum Marks : 40

Note :- Attempt *five* questions in all. Select *two* questions from Section A and *two* questions from Section B. Section C is compulsory. Draw diagrams wherever necessary.

SECTION—A

1. (a) Write down difference between Prokaryotic and Eukaryotic cells. 3
- (b) Explain the mechanism of active transport. 3
2. Describe various models of plasma membrane structures in detail. 6
3. Discuss Cell-Cell Junction structures and functions. 6
4. Explain the structure and functions of endoplasmic Reticulum and Lysosomes. 3,3

SECTION—B

5. Give an account of :
- (a) Endosymbiotic hypothesis
- (b) Chemi-Osmotic Hypothesis. 3,3