

7. Define the word "extracellular matrix". What are different membrane receptors present for extracellular matrix ? 11
8. What is carcinogenesis ? Discuss various agents responsible for causing cancer. 11

### SECTION—C

9. Explain the following :
- (i) Cytosol
  - (ii) Intrinsic proteins
  - (iii) Svedberg unit
  - (iv) Vacuoles
  - (v) Intermediate filaments
  - (vi) Collagin
  - (vii) Membrane receptors
  - (viii) Translation
  - (ix) Secretary vesicle
  - (x) Tonoplast
  - (xi) Thylakoids
  - (xii) Power house of cell
  - (xiii) Nucleolus
  - (xiv) Plasmodesmata
  - (xv) Receptor-Ligand interaction 15×2=30

Roll No. ....

Total No. of Pages : 2

**PC 11692-NH**

AS/2111

**CELL BIOLOGY—BTHB-1102T**

**Semester-I**

Time Allowed : Three Hours]

[Maximum Marks : 74

**Note :-** Attempt *two* questions from each Section A & B and Section C is compulsory.

### SECTION—A

1. (a) Differentiate between eukaryotic and prokaryotic cells. 6
- (b) Write a brief note on cell fractionation. 5
2. Define cell membrane and enlist its characteristic. Draw well labelled diagram of Fluid Mosaic Model. 11
3. Explain with the help of neat and labelled diagram, structure and function of microtubules and microfilaments. 11
4. (a) Differentiate between SER and RER. 5
- (b) Give a brief note on Biogenesis. 6

### SECTION—B

5. (a) What are lysosomes ? Explain their role as suicidal bags. 5
- (b) Discuss the role of ribosomes in protein synthesis. 6
6. Draw labelled diagrams of chloroplast and mitochondria. Explain their structural components with functions. 11