Name	•••••
Reg. No	•••••

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2014

(CUCSS)

General Biotechnology

GB 1C 1—CELL BIOLOGY

Time : Three Hours

Maximum: 36 Weightage

Section A

Answer **all** questions. Each question carries 1 weightage.

- 1. What are signal peptides ?
- 2. What is smooth endoplasmic reticulum?
- 3. Which organelle is most directly involved in cellular aerobic respiration ?
- 4. What is chromosome ?
- 5. What is the function of chaperons?
- 6. Define tight junctions.
- 7. What is cilia ?
- 8. What is passive transport ?
- 9. Define prions.
- **10.** What is microtubule ?

 $(10 \times 1 = 10 \text{ weightage})$

Section B

Answer any **seven** questions. Each question carries 2 weightage.

- 11. Explain the biosynthesis of proteins in Prokaryotes.
- 12. Explain about membrane trafficking.
- 13. Explain the structure of viruses.
- 14. Explain the post translational uptake of proteins by mitochondria.
- 15. Explain cell cycle checkpoints.
- 16. Discuss about diversity in internal organization of cell.
- 17. Explain about folding of polypeptides.
- 18. Explain about cytoskeleton and its importance.

- 19. Briefly explain the meiosis and its importance.
- 20. What is extra cellular matrix.

(7 x 2 = 14 w rhtage)

Section C

Answer any **two** questions. Each question carries 6 weightage.

- 21. Discuss about signal transduction.
- 22. Describe the molecular events in Cancer.
- 23. Describe the role of mitochondria and chloroplast.

(2 x 6 = 12 wei