Name.....

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2015

(CUCSS)

General Biotechnology

GB 1C 1- CELL BIOLOGY

Time : Three Hours

Maximum : 36 Weightage

Section A (Very Short Answer)

Answer **all** questions.

Each question carries a weightage of 1.

- 1. Prions.
- 2. Peroxisomes.
- 3. Plasmodesmata.
- 4. Second Messenger.
- 5. Cytochrome C.
- 6. Molecular Chaperons.
- 7. Capsomeres.
- 8. Liposomes.
- 9. Glycoproteins.
- 10. Poly A tailing.

(10 x 1 = 10 weightage)

Section B (Short Answer Type Questions)

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

- 11. Explain Cell cycle and Cell cycle regulation.
- 12. Explain flagellar organisation and functions.
- 13. Explain the molecular mechanism of ATP formation.
- 14. Give an account on protein targetting.
- 15. Describe post translational modifications in eukaryotes.
- 16. Explain the structure and function of plasma membrane.
- 17. Discuss about molecular chaperons and protein folding.

Turn over

- 18. Explain structure, organization and functions of ribosome.
- 19. Give an account on ABC transporters.
- 20. Explain Cell-cell communication at synapse.

(7 x 2 = 14 weightage)

Section C (Essay Type Questions)

Answer any **two** questions.

Each question carries a weightage of 6.

- 21. Describe two apoptosis pathways and explain the specific role of mitochondria and caspases.
- 22. Describe the different mechanisms for the transport of molecules across the membrane.
- 23. Explain the Biosynthesis of protein in eukaryotes.

 $(2 \times 6 = 12 \text{ weightage})$