**D** 22416

Name.....

Reg. No.....

# FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2012

## (CUCSS)

## General Biotechnology

## GBT 101—CELL BIOLOGY

## (2010 Admissions)

Time : Three Hours

Maximum Weightage : 36

## Section A

#### Answer all questions.

- 1. Name the organism comes under prokaryotes.
- 2. Define Golgi apparatus.
- 3. What is the role of mitochondria in a cell?
- 4. What is the fate of apoptosis in a cancer tissue (or) ogan?
- 5. What is meant by environmental signal?
- 6. Define Tight junction.
- 7. Define Translocation.
- 8. Define Co-translation.
- 9. What are the organelles present in the extra cellular matrix of a cell ?
- 10. How a protein can be targeted in to a nucleus?

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

### Section **B**

#### Answer any seven questions.

- 11. How cells are classified based on its theory ?
- 12. Define Prions.
- 13. Differentiate the cell wall of Prokaryotes and Eukaryotes.
- 14. What is meant by model system ? What is its use ?
- 15. How membrane trafficking is achieved by plasma membrane?
- 16. How many ATP's produced by mitochondria during cellular energy transaction ?
- 17. What is the role of mitochondria in post-translational modification?
- 18. Define Chaperons.

- 19. Classify sub cellular organelles.
- 20. What is the difference between Cilia and Flagella.

(7 X 2 = 14 weightage)

## Section C

## Answer any two questions.

- 21. Explain cell cycle and its regulation.
- 22. Explain the mechanism of signal transduction.
- 23. Explain protein biosynthesis in prokaryotes.

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