

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Subject code: 130402**Date: 10-01-2013****Subject Name: Cell Biology****Time: 10.30 am – 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Write a short note on the structure of mitochondria. **08**
(b) List out functions of Golgi apparatus. **06**
- Q.2** (a) What is difference in the cell wall of Gram positive and Gram negative cells? **07**
(b) Write a short note on Rough Endoplasmic Reticulum. **07**
OR
(b) Discuss types of lysosomes. **07**
- Q.3** (a) Explain the structure of LPS layer with a neat diagram. **07**
(b) Write a short note on physical nature of cytoplasm. **05**
(c) Explain akaryotic cell with a neat diagram. **02**
OR
- Q.3** (a) Explain the structure of endospore with its germination process. **07**
(b) Discuss types of ribosomes. **05**
(c) Explain any two storage granules found in bacterial cell. **02**
- Q.4** (a) Explain mode of passive transport across plasma membrane with a neat diagram. **07**
(b) Write a short note on structure of gas vesicle. **04**
(c) Draw a neat diagram of plant cell. **03**
OR
- Q.4** (a) Explain structure and arrangement of flagella. **07**
(b) Write a short note on slime layer. **04**
(c) Draw a neat diagram of animal cell. **03**
- Q.5** (a) Give brief description about light reaction **10**
(b) Write a short note on Nucleoplasm. **04**
OR
- Q.5** (a) Give detail account on Dark reaction. **10**
(b) Describe chromatin fibers. **04**
