

GUJARAT TECHNOLOGICAL UNIVERSITY**B.E. Sem-III Remedial Examination May 2011****Subject code: 130402****Subject Name: Cell Biology****Date: 25-05-2011****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) Describe ultra structure of Mitochondria. 07
(b) Why is the bacterial cell wall called peptidoglycan? What are the chemical reasons for its rigidity? 07
- Q.2** (a) Write a short note on Nucleoplasm. 07
(b) Discuss physical nature of cytoplasm. 07
- OR**
- (b) Explain the process of endospore formation with a neat diagram. 07
- Q.3** (a) Write a short note on Light Reaction. 10
(b) Explain different flagellar arrangements with diagram of each. 04
- OR**
- Q.3** (a) Discuss Dark reaction. 10
(b) What is function of gas vesicle? Why is rigidity of gas vesicle essential? 04
- Q.4** (a) Write a short note on function of Golgi body. 07
(b) Give an account on morphology of eukaryotic chromosome. 07
- OR**
- Q.4** (a) Describe types of lysosome. 07
Q.4 (b) What are intermediate filaments? Describe their types. 07
- Q.5** (a) Discuss in detail various functions of plasma membrane. 05
(b) Explain types of ribosome. 05
(c) Write common functions of endoplasmic reticulum. 04
- OR**
- Q.5** (a) Write a short note on nuclear pore. 05
(b) Draw a neat diagram of animal cell. 05
(c) Differentiate between eukaryotic and prokaryotic cell. 04
