



1212-11-572-001

Code No. : 8085

FACULTY OF SCIENCE
B.Sc. I Year Examination, March/April 2012
BIO-TECHNOLOGY (General)
(Paper – I) (Cell Biology and Genetics)

Time: 3 Hours]

[Max. Marks : 100

Note : Answer all questions. All questions carry equal marks.

1. a) Write an essay on cell division in the Eukaryotic organism.

OR

b) Discuss about the Eukaryotic cell and briefly differentiate with the prokaryotic cell.

2. a) Discuss the sex determining mechanism of Drosophila and Human.

OR

b) What is linkage ? Explain the steps of recombination taking example of Eukaryotic chromosome.

3. a) How DNA Damage occur in the Eukaryotic cell and explain the types of repair mechanism ?

OR

b) Explain Hershey-chase experiments and RNA as a genetic material.

4. a) Explain briefly on Binomial and Poisson distribution and their application to biology.

OR

b) What is test of hypothesis ? Explain briefly on application in biology and give an account on Nucleotide databases.

5. Write short notes on **any three** of the following :

- a) Polytene chromosome
- b) Pleiotropism
- c) Topoisomerases
- d) T-test
- e) NCBI.