

FACULTY OF SCIENCE**B.Sc. III Year Examination March / April 2015****Subject: Botany****Paper- III: Cell Biology, Genetics, Ecology and Biodiversity****Time: 3 hours****Max. Marks: 100****Section: A (5 x 8=40)
(Short answer Questions)****Note: Answer any FIVE Questions. Attempt at Least ONE Question from each unit.
Answer should not exceed 20 Lines for each question. Draw well labeled
diagrams wherever necessary.****Unit-I**

- 1 Nucleus.
- 2 Lamp Brush Chromosome.

Unit-II

- 3 Law of Independent Assortment.
- 4 Coupling & Repulsion.

Unit-III

- 5 Carbon Cycle.
- 6 Life Forms.

Unit-IV

- 7 Value of Biodiversity.
- 8 UNEP.

**Section: B (4 x 15=60)
(Essay Type Questions)****Note: Answer All Questions. Answer should not Exceed 80 lines for each question.
Draw well labelled diagrams wherever necessary.**

- 9 (a) Describe the ultra structure of Cell wall.
OR
(b) Write an essay on the types and functions of RNA.
- 10 (a) Give a General Account on Linkage and Mention its Significance.
OR
(b) What is mutation? Explain in detail about induced mutations.
- 11 (a) Define Ecological Pyramid? Discuss in detail the ecological Pyramids in an Ecosystem
OR
(b) Write a general account on Hydrophytes.
- 12 (a) Explain the different methods of Biodiversity conservation.
OR
(b) Write an essay on Hot-Spots of India.
