

M.Sc. DEGREE EXAMINATION, APRIL 2015.

SECOND SEMESTER

Botany

Paper I — PLANT ECOLOGY

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — ($5 \times 3 = 15$ marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Effect of solar radiation in the depletion of Insulation.
2. Carbon Reserves in the earth and atmosphere.
3. Quadrat Analysis of plant community.
4. Species diversity indices.
5. Mortality or Death of population.
6. Seed population dynamics in soil.
7. Synthetic fuels.
8. Acid Rains.

PART B — ($4 \times 15 = 60$ marks)

Answer ALL essay questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. (a) Explain in detail about the methods to overcome extreme temperature in plants and animals.

Or

- (b) Give an account of Sulphur reservoir, biological and local cycling systems with special reference to pond ecosystem and factors affecting the sulphur cycle.

10. (a) Write an account of qualitative studies of density and frequency of plant communities.

Or

(b) Discuss on the account of succession process and concept of climax.

11. (a) Explain in detail about the Prey – Predation relationship in species interaction.

Or

(b) Give an account of population density and factors affecting on the regulation of population.

12. (a) What are the factors affecting water pollution? Discuss the remedies.

Or

(b) Discuss on non conventional energy sources and effective implementation.

