

Roll No.

(12/24)

5245

B. Sc. EXAMINATION

(Fifth Semester)

(For Batch 2011 & Onwards)

BOTANY

Paper-II

Ecology

Time : Three Hours

Maximum Marks : 40

Note : Attempt *Five* questions in all, selecting *two* questions from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Define the following : $8 \times 1 = 8$

- (a) Who coin the term ecology ?
- (b) Synecology
- (c) Secondary pollutants
- (d) Edaphic factor

(5-41/7) B-5245

P.T.O.

- (e) Perfect cycle
- (f) Ephemerals
- (g) Primary succession
- (h) Phenology.

Unit I

2. (a) How the physiology of plants is affected by environmental temperature ? Explain.
(b) Describe the adaptations of the plants to extreme temperature. $4+4=8$
3. Describe the effect of topography on composition of vegetation in an area. 8
4. Write notes on the following : $4+4=8$
 - (a) Commensalism
 - (b) Categories of xerophytes.

5. Write notes on the following : $3+2+3=8$

- (a) Growth curve in population
- (b) Predation
- (c) Mutualism.

Unit II

6. Describe the following : $2+3+3=8$
 - (a) Dominance
 - (b) Association index
 - (c) Fresh water pond as an ecosystem.
7. Define ecological pyramids. Give its various types. 8
8. Write notes on the following : $2+2+4=8$
 - (a) Phosphorus cycle

- (b) Carbon dioxide fertilization effect
- (c) Climax vegetation in a succession process.

9. What is Phytogeography ? Describe the major phytogeographical regions of India. 8