

**M.Sc. Part-I Semester-I (CBCS Scheme) Examination**  
**ENVIRONMENTAL SCIENCE**  
**CONCEPTS OF ECOLOGY AND BIODIVERSITY**  
**Paper-II**

Time : Three Hours]

[Maximum Marks : 80

**N.B.:**—All questions are compulsory and carry equal marks.

1. Describe the subdivisions of Ecology with suitable examples. 16

**OR**

Describe the synecological characters with examples. 16

2. Explain in brief :

- (a) Concept of population ecology 5
- (b) Population dynamics and its ecological importance 5
- (c) Population distribution in ecosystem. 6

**OR**

- (d) Age distribution 5
- (e) Biotic potential 5
- (f) Prey-predator relationship 6

3. Describe the mechanism of succession with reference to course and trends of ecological succession. 16

**OR**

Describe the positive and negative interspecific competition with example. 16

4. Describe in brief :

- (g) Values of biodiversity 5
- (h) Reasons for loss of biodiversity 5
- (i) Strategies for conservation of Biodiversity 6

**OR**

- (j) Types of biodiversity 5
- (k) Hotspots of biodiversity 5
- (l) Importance of biodiversity. 6

5. (m) Explain the methods of in-situ conservation. 5
- (n) Measurement of biodiversity 5
  - (o) Silent features of Biological Diversity Rules 2004. 6

**OR**

- (p) Describe the methods of ex-situ conservation. 5
- (q) Sustainable utilization of Natural Resources. 5
- (r) Silent features of Biodiversity Act, 2002. 6

