

**NRT/KS/19/2029**

**Bachelor of Science (B.Sc.) Semester—I Examination**  
**ENVIRONMENTAL SCIENCE (ENVIRONMENTAL ECOLOGY)**

**Optional Paper—2**

Time : Three Hours]

[Maximum Marks : 50

**N.B. :—** (1) **ALL** questions are compulsory and carry equal marks.

(2) Illustrate your answer with suitable example and diagrams.

1. Describe in detail light as an important abiotic factor. 10

**OR**

(a) Define Ecology. Add a note on scope and application of Ecology. 5

(b) Describe in brief how temperature affects the plants. 5

2. What do you mean by interspecific relationship ? Explain mutualism and commensalism with suitable example. 10

**OR**

(a) Write an informative note on parasitism. 5

(b) What are the morphological and anatomical adaptations found in hydrophytes ? 5

3. Describe characteristics of population in detail. 10

**OR**

(a) Give a brief account of physico-chemical characteristics of marine ecology. 5

(b) Describe in detail concept of carrying capacity. Add a note on environmental resistance. 5

4. Explain in detail characteristics of community. 10

**OR**

(a) What is ecological succession ? Give the process in detail. 5

(b) How density, frequency and abundance is calculated in plant community ? 5

5. Answer any *ten* :

(a) Define autecology.

(b) Give any two modern branches of ecology.

(c) What is edaphic factor ?

(d) What is neutralism ?

(e) What is predation ?

(f) What are mesophytes ?

(g) What is biotic potential ?

(h) Name two types of growth curves.

(i) Define thermal stratification ?

(j) Enlist the type of ecological succession.

(k) Define ecotone.

(l) What is ecological dominance ? 1×10=10