

B.Sc. Semester-III Examination, 2022-23**ENVIRONMENTAL SCIENCE [Honours]**

Course ID : 31811

Course Code : SH/ENV/301/C-5

Course Title : Ecology and Ecosystem

Time : 1 Hour 15 Minutes

Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** of the following questions:

1×5=5

- What is population dispersion?
- What are the five stages of succession?
- State the importance of nutrient budget.
- What are the steps of nutrient cycle?
- What does a survivorship curve represent?
- Is edge effect good or bad?
- What does Autecology mean?
- What is an Ecocline?

2. Answer any **two** of the following questions:

5×2=10

- What is nutrient management? How can you reduce nutrient losses? 2+3

- What are the four stages of biological invasions? How is biological invasion threat to biodiversity? 2+3

- Define symbiotic relationship with example. How do protocooperation and mutualism resembles and differ? 2+3

- What does the law of minimum state? What are the differences between R and K strategists? 2+3

3. Answer any **one** of the following questions:

10×1=10

- What are the two types of mycorrhizae? What role does mycorrhizae play in a forest ecosystem? What is meant by nutrient efficiency? How can we improve nutrient efficiency? 2+3+2+3

- What is the law of tolerance in Environmental Science? What are the three types of tolerances? What is the difference between acclimatization and acclimation? Describe the process of acclimation. 2+3+2+3