

2025

**M.Sc. 1st Semester Examination
ENVIRONMENTAL SCIENCE**

Paper : EVSC403X0

(Ecology and Ecosystem Dynamics)

Full Marks : 50

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *four* questions : 2×4=8

1. What is the role of decomposers in ecosystem?
2. What is carrying capacity?
3. Make a difference between food chain and food web.
4. What is Lindeman 10% law?
5. Define Gross primary productivity.
6. What is climax community?

P.T.O.

(2)

Group - B

Answer any *four* questions : $4 \times 4 = 16$

7. Discuss survivorship curve with example.
8. Describe the double channel energy flow model with diagram.
9. Differentiate species and speciation by citing examples of each.
10. Describe the significance of Biogeochemical cycle.
11. Write a note on nitrogen cycle.
12. Describe different population dispersion pattern.

Group - C

Answer any *two* questions : $8 \times 2 = 16$

13. Discuss the structure and function of forest ecosystem. $4+4$
14. Discuss the biotic and abiotic factors of an aquatic ecosystem. What is are pyramid? Describe the different types of age pyramid in a population. $3+2+3$
15. What is Ecological pyramid? Describe different kinds of ecological pyramid with diagram. $2+6$
16. What is succession? Write the different stages of succession. $2+6$

Internal Assessment : 10 marks
