

2025

M.Sc. 1st Semester Examination

GEOGRAPHY

Paper : GEOC401X1

**(Foundation of Bio-geography
and Environmental Sustainability)**

Full Marks : 35

Time : One Hour Thirty Minutes

*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 *five* questions : 2×5=10

1. What is meant by ecosystem resilience?
2. What is gross primary productivity (GPP)?
3. Define eutrophication.
4. What is bioaccumulation?
5. What is eco-physiological adaptation?
6. Define ecological tolerance.
7. What is ecological amplitude?
8. What is a flagship species? Give example from India.

P.T.O.

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Group - B

Answer any *three* questions : $4 \times 3 = 12$

9. "Biogeographical patterns cannot be understood by isolated environmental factors" — Explain this statement in the light of the holistic approach to environment.
10. Briefly discuss xerophytic adaptations in plants with suitable examples.
11. Explain the role of the Protected Area Network in biodiversity conservation.
12. Discuss, in brief, the role of major environmental factors in controlling the distribution, abundance, and diversity of organisms.
13. Explain the importance of ecological niche in understanding species coexistence.

Group - C

Answer any *one* question : $8 \times 1 = 8$

14. Describe the biogeographic zones of India, with special reference to the status of biodiversity.
15. Critically analyze R- and K-selection strategies, patterns of survival, and migration in the context of changing environmental conditions.

Internal Assessment - 5 marks
