

M.Sc. (Botany) Semester - 3 (CBCS) Examination
OCT/NOV-2025 (AS PER SYLLABUS YEAR JUNE-2024)
Plant Ecology (Core (New-23))

Time: 2:30 Hours**Marks:70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1 Do as direct (any seven out of eight questions, each of two marks) (14)
- 1) Enlist phytosociological methods used for vegetation sampling.
 - 2) Write a full form and purpose of the PBR.
 - 3) What is the saltation in soil erosion?
 - 4) What are the humic and non-humic substances?
 - 5) Give the objective of the EIA.
 - 6) Explain population density.
 - 7) What are the two major types of remote sensing based on energy source?
 - 8) Define desertification
- Que.2 Answer the following (Any Two Questions) (14)
- 1) Describe the major models of ecological succession
 - 2) Define a plant community and discuss its analytical characteristics.
 - 3) Explain the criteria used to identify biodiversity hotspots and give a detailed account of the biodiversity hotspot of India
- Que.3 Answer the following (Any Two Questions) (14)
- 1) Describe the soil profile with labelled diagrams.
 - 2) Write a detailed note on the food chain.
 - 3) Explain the ecological pyramids.
- Que.4 Answer the following (Any Two Questions) (14)
- 1) What is phytoremediation, and describe various mechanisms of its.
 - 2) Define the law of limiting factors and discuss in detail.
 - 3) Explain ecological adaptation in hydrophytes.
- Que.5 Answer the following (Any Two Questions) (14)
- 1) Explain the principles of remote sensing. Describe its major components with a diagram.
 - 2) Describe the impacts of desertification on the environment, economy, and society.
 - 3) Describe the applications of remote sensing and GIS in natural resource management and environmental studies.
