

M.Sc. (Botany) Semester - 3 (CBCS) Examination
OCT/NOV-2025 (AS PER SYLLABUS YEAR JUNE-2019)
Plant Ecology (Core (New))

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

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

SECTION- I

- Que.1 Answer the following (Two short Questions)
- (A) Describe the role of biodiversity in ecosystem function and stability. (07)
 - (B) Explain the models of ecological succession. (07)
- OR
- Que.1 Give a detailed account of speciation and extinction. (14)
- Que.2 Answer the following (Two short Questions)
- (A) Explain the three types of ecological pyramids with examples. (07)
 - (B) Define the soil and discuss its composition. (07)
- OR
- Que.2 Write a detailed note of the consequences of climate change. (14)
- Que.3 Do as direct (any seven out of eight questions each of one mark) (07)
- (A) State the names of qualitative characteristics of a plant community.
 - (B) Define vegetation.
 - (C) Give names of Indian biodiversity hotspots.
 - (D) What is an ecological niche?
 - (E) Explain riparian erosion of soil.
 - (F) What are the sources of CH₄?
 - (G) What is ecological balance?
 - (H) What is eluviation?

SECTION- II

- Que.1 Discuss the population ecology with its characteristics. (14)
- OR
- Que.1 Answer the following (Two short Questions)
- (A) Discuss the ecological adaptation of xerophytes. (07)
 - (B) Explain the principles of limiting factors. (07)
- Que.2 Explain the process and impacts of desertification. (14)
- OR
- Que.2 Answer the following (Two short Questions)
- (A) Describe the principles and components of remote sensing. (07)
 - (B) Discuss the applications of GIS in forest and environmental management (07)
- Que.3 Do as direct (any seven out of eight questions each of one mark) (07)
- (A) What is population regulation?
 - (B) Explain the significance of the ozone layer.
 - (C) Give the effects of global warming on biodiversity.
 - (D) Enlist the process of EIA.
 - (E) Write the disadvantages of remote sensing.
 - (F) What are the causes of desertification?
 - (G) What is passive remote sensing?
 - (H) Write names of GIS's components.
