

M.Sc. (Micro) Semester - 3 (CBCS) Examination
OCT/NOV-2025 (AS PER SYLLABUS YEAR JUNE-2024)
Ecology and Environmental Microbiology (Ele-1 (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 (Attempt any seven out of eight questions each of one mark) (14)
- 1) How does primary production differ from decomposition in an ecosystem?
 - 2) What is the primary cause of global environmental change?
 - 3) What is the main purpose of tertiary wastewater treatment?
 - 4) Name two major types of environmental pollution.
 - 5) What is biodegradation?
 - 6) What is the primary challenge in treating pharmaceutical effluent?
 - 7) What are biosurfactants?
 - 8) How can biomass be used as a source of energy?
- Que.2 Answer the following (Two short Questions) (14)
- A) Write a short note on biosphere reserves.
 - B) Explain biodiversity management approaches.
 - C) Describe in detail the structure and function of aquatic ecosystems in India
- Que.3 Answer the following (Two short Questions) (14)
- A) Write a note on ozone depletion.
 - B) Explain the environmental monitoring techniques.
 - C) Describe in detail water pollution.
- Que.4 Answer the following (Two short Questions) (14)
- A) Write a short note on the bioremediation of pesticides and heavy metals.
 - B) Explain the management of municipal waste.
 - C) Describe the bioremediation of xenobiotics.
- Que.5 Answer the following (Two short Questions) (14)
- A) Write a note on environmental impact assessment.
 - B) Explain integrated waste management.
 - C) Describe biofertilizers and biopesticides.
