

M.Sc(Environmental Sci.) Semester - 1 (CBCS) Examination**OCT/NOV-2025****Environmental Biology(Ecology) (Core)****Time: 2:30 Hours****Marks:70****Instructions:**

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

Que.1 Answer the Following. (Any seven out of ten question). (14)

- 1) Describe basic concepts of ecology.
- 2) Which are the laws of thermodynamics?
- 3) Draw marine food web.
- 4) List out fauna of grassland.
- 5) Explain role of microbes in nutrient cycles.
- 6) Give examples of edge effect.
- 7) Describe concept ecotypes.
- 8) Make a list of protected species.
- 9) What is function of IUCN?
- 10) Explain cyanobacteria.

Que.2 Answer the Following. (Any two out of three). (14)

- 1) Describe concept of productivity, food web and trophic levels.
- 2) Explain Biogeochemical cycles.
- 3) Write about laws of thermodynamics.

Que.3 Answer the Following. (Any two out of three). (14)

- 1) Write about population dynamics and communities.
- 2) Describe with examples: Ecotypes, Ecades and limiting factors.
- 3) Make a note on species interaction with examples.

Que.4 Answer the Following. (Any two out of three). (14)

- 1) Explain speciation, extinction and ecological role of biodiversity.
- 2) Write about types of biodiversity.
- 3) Describe red data book and causes of biodiversity loss.

Que.5 Answer the Following. (Any two out of three). (14)

- 1) How microbes interact with other life forms?
- 2) Describe microorganism: terrestrial, aquatic and extreme environments.
- 3) Write about: Microbial flora of soil.
