

## M.Sc(Environmental Sci.) Semester - 1 (CBCS) Examination

OCT/NOV-2024

## Environmental Biology(Ecology) (Core)

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

1. What are the scopes of ecology?
2. Explain in very short: laws of thermodynamics.
3. Describe concept of productivity.
4. List out fauna of pond.
5. Explain ecological pyramids.
6. Which species interactions you have studied?
7. Describe concept of limiting factors.
8. Make a list of protected species.
9. What is Red Data Book?
10. Explain Azolla.

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

1. Describe biogeochemical cycles.
2. Explain role of microbes in nutrient cycles.
3. Write about laws of thermodynamics.

**Que. 3      Answer the Following.      (14)**

1. Write about estuaries. (05)
2. Describe with examples: Edge effect, ecades and ecotypes. (05)
3. Make a note on population dynamics. (04)

OR

**Que. 3      Answer the Following.      (14)**

1. Write note on Ecological Pyramicl.
2. Describe the Development and Evaluation of Ecosystem.

**Que. 4 (A)      Answer the Following. (Any two out of three).      (10)**

1. Explain ecological role of biodiversity.
2. Write about rare and endangered species and their IUCN status.
3. Conservation of biodiversity (Forest & Wildlife): Conservation theory, conservation practices.

**Que. 4 (B)      Answer the Following. (Any One out of Two).      (04)**

1. Write note on beta and gamma diversity.
2. Write note on Causes of Biodiversity loss.

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

1. How microbes interact with animals?
2. Describe Natural environment of microorganism.
3. Write about: Rhizobium, Azotobacter, Azospirillum, Cyanobacteria.

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