

**Rani Rashmoni Green University**  
**Environmental Science**  
**Semester I**  
**COURSE CODE GEST-12**  
**End Term Examination 2024**

**Full Marks: 40**

**Time: 02hr.**

**Answer at least three (3) questions from each unit and two (2) from any unit of your choice.**  
**All the questions carry equal marks (5)**

**Unit 1**  
**(Biodiversity)**

1. Define a biodiversity hotspot, explain the criteria used to identify them, and provide example. 2+2+1=5
2. What is community diversity in ecology? Differentiate alpha, beta, and gamma diversity. 2+3=5
3. Mention active component and use of the following plants:  
a. *Vinca rosea*                      b. *Rauwolfia serpentine* 2.5+2.5=5
4. Write down the full form of ICTV. Name the seven orders of viruses recognized by ICTV? 1+4=5
5. Name a virus with segmental genome. Mention one utility of viruses used as food additives as recommended by WHO and FAO. 2+3=5
6. Write short notes on any two 2.5+2.5=5
  - a) Endemism
  - b) Ecosystem services
  - c) Species richness
  - d) Capsid

**Unit 2**  
**(Conservation Biology)**

1. Write down the full form of IUCN. What are the different colour categories used to denote conservation status in IUCN red data book? 1+4=5
2. Define PBR. What is CITES, and why was it established? 1+4=5
3. What is CBD? Mention its role in conservation of biodiversity? 1+4=5

4. Describe the unique nesting behavior and the primary threats faced by Olive Ridley Turtles? What is the primary threat driving the decline of Himalayan Musk Deer? What conservation measures are in place for the Himalayan Musk Deer?

2+2+1=5

5. Give an account of Indian tundra biomes and alpine biomes.

2.5+2.5=5

6. Write short notes on any two

2.5+2.5=5

a) TRAFFIC

b) Gangetic dolphin (on the conservation status, habit & habitat, behavioral biology)

c) Fishing Cat (on the threats, and conservation management)

d) Captive Breeding