

B.Sc. Semester - 5 (Remedial) (NEP-2020) Examination**March/April-2026****BOT: Ecology and Plant Systematics (Major-12)****Time: 2:00 Hours****Marks:50****Instructions:**

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

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- Que.1(A) Describe in detail: (Any One) (08)
1. Explain the physical properties of soil.
 2. Describe the hydrological cycle with a diagram.
- Que.1(B) Write a short note on: (Any One) (04)
1. Ecological pyramids of numbers and energy.
 2. Carbon cycle in nature.
- Que.2(A) Describe in detail: (Any One) (09)
1. Define symbiosis. Explain mutualism and commensalism with suitable examples.
 2. Describe any five quantitative analytical characters of plant communities with formulas.
- Que.2(B) Write a short note on: (Any One) (04)
1. Any two Phytogeographical regions of India.
 2. Morphological adaptations in hydrophytes.
- Que.3(A) Describe in detail: (Any One) (08)
1. Explain the taxonomic categories in plant classification. Differentiate between genus and species with examples.
 2. Give merits and demerits of the classification system of Bentham & Hooker.
- Que.3(B) Write a short note on: (Any One) (04)
1. Concept of families in plant taxonomy.
 2. How to write a floral formula and draw a floral diagram for a typical flower.
- Que.4(A) Describe in detail: (Any One) (09)
1. What is ICBN? Explain the principles and rules of ICBN.
 2. Describe the diagnostic features of the family Fabaceae with floral diagram and formula.
- Que.4(B) Write a short note on: (Any One) (04)
1. Economic importance of the family Poaceae.
 2. Distinguishing features of the family Euphorbiaceae.
