

24U126

(Pages: 2)

Name : .....

Reg. No : .....

**FIRST SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2024**

(FYUGP)

**CC24U BOT1 MN101 - PLANT ECOLOGY, CONSERVATION AND PLANT INTERACTIONS**

(B.Sc. Botany - Minor Course)

(2024 Admission - Regular)

Time: 2.0 Hours

Maximum: 70 Marks

Credit: 4

**Part A** (Short answer questions)

Answer *all* questions. Each question carries 3 marks.

1. Explain the difference between Parasitism and Predation. [Level:2] [CO1]
2. Explain biodiversity. [Level:2] [CO2]
3. Clarify why biodiversity hotspots are prioritized for conservation. [Level:2] [CO2]
4. Report two major causes of habitat fragmentation. [Level:2] [CO2]
5. Report one benefit and one limitation of cryopreservation. [Level:2] [CO3]
6. Describe seed banks and give one example. [Level:2] [CO3]
7. Explain how herbivory can affect ecosystem structure and function. [Level:2] [CO4]
8. Explain Beltian bodies. [Level:2] [CO4]
9. Report two examples of structural defenses in plants. [Level:2] [CO4]
10. Explain the concept of plant-microbe interactions with reference to mycorrhizae. [Level:2] [CO4]

**(Ceiling: 24 Marks)**

**Part B** (Paragraph questions/Problem)

Answer *all* questions. Each question carries 6 marks.

11. Discuss the morphological and anatomical modifications of parasites. [Level:2] [CO1]
12. Explain the causes of succession. [Level:2] [CO1]
13. Illustrate the impact of loss of livelihood on biodiversity. [Level:2] [CO2]
14. Discuss the different pathways of introduction of invasive species. [Level:2] [CO2]
15. Interpret the conservation status of any two plant species from the Western Ghats listed by the IUCN. [Level:2] [CO2]

16. Illustrate the role of forests in providing both economic and aesthetic benefits. [Level:2] [CO2]
17. Discuss how sacred groves help in mitigating the effects of deforestation. [Level:2] [CO3]
18. Illustrate the adaptations of flowers specialized for insects in general. [Level:2] [CO4]
- (Ceiling: 36 Marks)**

**Part C** (Essay questions)

Answer any *one* question. The question carries 10 marks.

19. Explain how Vallisneria and Opuntia exhibit different anatomical and morphological strategies through their structural adaptations, ensuring their survival in contrasting environments. [Level:2] [CO1]
20. Explain the various in-situ and ex-situ conservation strategies, and explain their roles in biodiversity conservation. [Level:2] [CO3]

**(1 × 10 = 10 Marks)**

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