Duration : Three Hours

M.Sc. DEGREE END SEMESTER EXAMINATION - NOVEMBER 2024

SEMESTER 1 : BOTANY

COURSE : 24P1BOTT03 : ECOLOGY, ENVIRONMENTAL BIOLOGY AND PHYTOGEOGRAPHY

(For Regular - 2024 Admission)

Max. Weights: 30

| | PART A | |
|-----|---|-------------|
| | Answer any 8 questions | Weight: 1 |
| 1. | Explain climax community. | (U) |
| 2. | Explain the factors affecting phytogeography. | (A) |
| 3. | Write a note onFood chain. | (U) |
| 4. | Differentiate between autogenic and allogenic succession. | (U) |
| 5. | Write the significance of biodiversity hotspots. | (U) |
| 6. | Explain Ecological amplitude. | () |
| 7. | What are bioindicators? | (An) |
| 8. | Explain the dynamic community characteristics. | (U) |
| 9. | What are bioscrubbers? | (U) |
| 10. | Explain RET species. | (A) |
| | | (1 x 8 = 8) |

PART B Answer any 6 questions

Weights: 2

| 11. | Write a note on the environmental safety provisions in Indian constitution. | (U) |
|-----|--|--------------------|
| 12. | Explain Sorenson's index of similarity. Discuss how you use the similarity index in community ecology. | (An) |
| 13. | Explain the significance of Ecological Restoration. | () |
| 14. | Explain the characteristics of K - selection and R selection. | (U) |
| 15. | Explain the reasons for biodiversity loss. Suggest appropriate measures to prevent biodiversity loss. | (U) |
| 16. | Discuss the differences and similarities between geometric and exponential growth. | (An) |
| 17. | Explain the applications of succession in restoration ecology. | (U) |
| 18. | Discuss the applications of ecology in different fields. | () (2 x 6 = 12) |
| | PART C | |
| | Answer any 2 questions | Weights: 5 |
| 19. | Write an essay on the mangrove ecosystems and its conservation in Kerala. | () |
| 20. | Write an essay on the functional aspects with an emphasis on inter-specific interactions of a community. | (U) |
| 21. | Explain the different aquatic and terrestrial ecosystem. | () |

22. Discuss on climate change and other global environmental issues. Suggest some measures to be taken to effectively manage climate change related issues.

(5 x 2 = 10)

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OBE: Questions to Course Outcome Mapping

| CO Course Outcome Description CL Questions Total | Nt. |
|--|-----|
|--|-----|

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;