

**M. Sc. DEGREE END SEMESTER EXAMINATION - APRIL 2025****SEMESTER 2 : ZOOLOGY****COURSE : 24P2ZOOT05 : FIELD ECOLOGY***(For Regular - 2024 Admission)*

Duration : Three Hours

Max. Weights: 30

**PART A****Answer any 8 questions****Weight: 1**

1. What are abiotic components? How are they interconnected with biotic components in an ecosystem? (E)
2. Differentiate fundamental and realized niche. (A)
3. Comment on ecological pyramids. (A)
4. Differentiate between biotic and abiotic natural resources. (U)
5. Briefly describe the finite nature of natural resources. (U)
6. Differentiate between crude and specific population density with suitable examples. (U)
7. Comment on biological nitrogen fixation. (U)
8. Differentiate between habitat and ecological niche. (A)
9. Comment on sere and seral stages. (U)
10. Comment on population regulation. (U)

**(1 x 8 = 8)****PART B****Answer any 6 questions****Weights: 2**

11. Give an account on the population dispersal mechanisms. (U)
12. Discuss the mechanism of violent oscillatory type of population fluctuations. (U)
13. Give a brief account on ecological succession. (U)
14. Differentiate between resistance and resilience stability. (An)
15. Comment on the significance of soil fertility. (A)
16. Differentiate between GPP, NPP and NCP. (A)
17. Describe the basic practices towards sustainable development. (U)
18. Write a short note on niche overlap. (U)

**(2 x 6 = 12)****PART C****Answer any 2 questions****Weights: 5**

19. Discuss on the various metapopulation models. (An)
20. Give an account of the cybernetic nature and stability of ecosystems. (U)
21. Give an account of the laws of thermodynamics. Add a note on energy flow in the ecosystem. (An)
22. Write an essay on the Conventional and non-conventional Energy resources (U)

**(5 x 2 = 10)**

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
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Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;