

FIRST SEMESTER FYUGP EXAMINATION NOVEMBER 2024**MINOR****ZOO1MN101 FOUNDATIONS OF ENVIRONMENTAL BIOLOGY & ANIMAL BEHAVIOUR**

Time : 2 Hrs

Maximum Marks : 70

BL : Bloom's Taxonomy Level (1 to 6)

CO : Course Outcome

| Section A | | | | | Ceiling Marks : 24 |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|-----|--------------------|
| Answer all questions. Each carries 3 marks. | | | | | |
| No. | Question | M | BL | CO | |
| 1. | Evaluate the importance of decomposition in maintaining ecosystem balance. | 3 | 5 | CO1 | |
| 2. | Discuss the need for conserving wetland ecosystem. | 3 | 3 | CO1 | |
| 3. | Create a comparative chart showing the differences of lentic & lotic ecosystems. | 3 | 6 | CO1 | |
| 4. | Differentiate between crude density & ecological density of a population with a suitable example. | 3 | 5 | CO2 | |
| 5. | How would you apply the principles of the National Water Policy to address water scarcity in a drought-prone region? | 3 | 3 | CO2 | |
| 6. | Identify the strengths and limitations of the National Environmental Policy, 2006. | 3 | 5 | CO2 | |
| 7. | Comment on Telotaxis with suitable example | 3 | 1 | CO3 | |
| 8. | Differentiate between tonic reflex and phasic reflex | 3 | 2 | CO3 | |
| 9. | What are the different castes of termites? | 3 | 1 | CO4 | |
| 10. | Write an account on advantages and disadvantages of being Social animal | 3 | 2 | CO4 | |
| Section B | | | | | Ceiling Marks : 36 |
| Answer all questions. Each question carries 6 marks. | | | | | |
| No. | Question | M | BL | CO | |
| 11. | Differentiate between a grazing food chain & detritus food by giving suitable examples. | 6 | 3 | CO1 | |
| 12. | Evaluate the importance of the second law of thermodynamics (entropy) in understanding energy losses in an ecosystem. How does this affect ecosystem productivity? | 6 | 5 | CO1 | |
| 13. | Compare and contrast the characteristics of tundra & taiga biome in terms of climate, vegetation, and animal adaptations. | 6 | 4 | CO1 | |
| 14. | Using examples, describe how invasive species have threatened native biodiversity in specific ecosystems. | 6 | 3 | CO2 | |
| 15. | Explain the differences between in situ and ex situ conservation strategies with relevant examples. | 6 | 5 | CO2 | |
| 16. | Assess the impact of herbivory on biodiversity in a community, considering both positive and negative aspects. | 6 | 5 | CO2 | |
| 17. | What are the innate behaviour? Explain with examples | 6 | 1 | CO3 | |
| 18. | Write short notes on social organization | 6 | 1 | CO4 | |
| Section C | | | | | |
| Answer any 1 question. Each carries 10 marks. (1x10=10 marks) | | | | | |
| No. | Question | M | BL | CO | |
| 19. | What is biogeochemical cycle? Differentiate a sedimentary cycle with gaseous cycle with an example. | 10 | 4 | CO1 | |
| 20. | Write an essay on population growth. Discuss r & k selected population and the growth curves depicted by them. | 10 | 2 | CO2 | |