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| **QP Code:** D 112768 | **Total Pages:1** | **Name:** |
| | | **Register No.** |

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

**(CUFYUGP)**

**ZOO1MN101 Foundations of Environmental Biology and Animal Behaviour**

**2024 Admission onwards**

**Maximum Time :2 Hours** **Maximum Marks :70**

**Section A**

**All Questions can be answered. Each Question carries 3 marks (Ceiling : 24 Marks)**

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| 1 | Explain the differences between autoecology and synecology. |
| 2 | What are the biotic and abiotic components of an ecosystem? Provide examples of each. |
| 3 | What is decomposition, and why is it crucial for nutrient cycling? |
| 4 | What are the key characteristics of the tundra biome? |
| 5 | Describe how animals are adapted to live in freshwater habitats. |
| 6 | What are the key features of the National Water Policy, 2002? |
| 7 | Explain biotic potential and its significance in population ecology. |
| 8 | Discuss orientation in animal behavior. |
| 9 | List three scientists who were awarded the Nobel Prize in 1972-73 for their contributions to the study of animal behavior. |
| 10 | Write on social organization of elephants. |

**Section B**

**All Questions can be answered. Each Question carries 6 marks (Ceiling : 36 Marks)**

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| 11 | Discuss energy flow in ecosystems and how the laws of thermodynamics are connected to it. |
| 12 | Give an account of deep sea fauna with special reference to their adaptations. |
| 13 | What are the characteristics of freshwater habitats, and how do they differ from marine habitats? |
| 14 | Analyze the impact of predation and herbivory on community structure. |
| 15 | Discuss the Solid Waste Management Rules, 2016 in India and assess their effectiveness in addressing solid waste pollution. |
| 16 | Compare different types of population growth curves and their effects on population size and sustainability. |
| 17 | How can conditioned reflexes be used to train domestic animals? Provide two specific examples. |
| 18 | 'Fixed action patterns are elicited by sign stimuli.' Substantiate the statement giving examples. |

**Section C**

**Answer any ONE. Each Question carries 10 marks (1x10=10 Marks)**

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| 19 | Explain the major steps involved in the nitrogen cycle and include a note on the impact of human activities on it. |
| 20 | Discuss various communication methods in animal interactions. |