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**25-ZO-22**

**M.Sc. II SEMESTER [MAIN/ATKT] EXAMINATION  
MAY - JUNE 2025**

**ZOOLOGY**

Paper - II

**[Population Ecology and Environmental Physiology]**

*[Max. Marks : 75]*

*[Time : 3:00 Hrs.]*

*[Min. Marks : 26]*

**Note :** Candidate should write his/her Roll Number at the prescribed space on the question paper.  
Student should not write anything on question paper.  
Attempt all five questions. Each question carries an internal choice.  
Each question carries **15 marks**.

- Q. 1** What is Demography ? Discuss the concepts of life tables, generation time and reproductive value in the study of population dynamics.

**OR**

What is Population Growth ? Discuss the factors that influence population growth in animal species.

- Q. 2** Compare and contrast the eco-physiological adaptations of fresh water and marine animals.

**OR**

Write an essay on eco-physiological parasitic adaptation.

- Q. 3** Write a detailed note on inter and intra specific relationship ?

**OR**

Describe predatory - prey relationship.

- Q. 4** Examine the impact of human activities on the depletion of natural resources and suggest possible solutions.

**OR**

Explain the concept of sustainable development and analyze its importance for environmental conservation and economic growth.

- Q. 5** Explain the physiological mechanisms involved in the regulation of body temperature in endothermic animals.

**OR**

Describe physiological response to oxygen deficient stress.