

Ph.D. Course work examination, July-2023

ZOOLOGY

Course: III. General Zoology

Time: 3 Hours

Maximum Marks: 70

Instructions to the candidates:

- i) Answer all the questions
- ii) Draw diagrams wherever necessary

1. What is ethology? Describe innate and learned behaviour with suitable examples. (14)

OR

Write a detailed note on neural mechanism of learning.

2. Describe the concept of evolution with an emphasis on Neo-Darwinism (14)

OR

Give an account on molecular phylogenetics.

3. Describe the values and ethics of biodiversity (14)

OR

Explain various strategies involved in wildlife conservation.

4. Illustrate the structure and function of different classes of immunoglobulins. (14)

OR

Describe the procedure involved in monoclonal antibody production

5. Explain in detail cell signaling pathways (14)

OR

Write a note on various signaling molecules, receptors and explain the role of second messengers.
