# BACHELORS WITH ZOOLOGY AS MAJOR (CT – I) 6<sup>th</sup> SEMESTER

# ZOL622J1 ZOOLOGY \_ ANIMAL BEHAVIOUR

#### COURSE OBJECTIVE:

## **CREDITS: THEORY: 03; PRACTICAL: 01**

To develop a deeper understanding of how animals interact with each other and their environment *LEARNING OUTCOME*:

The learner will understand the behaviour of different animal groups, their communication pattern and their social structure. The knowledge will be utilized to promote animal conservation and improve their well-being.

# **THEORY (03 CREDITS)**

### **UNIT I: BEHAVIOUR DEVELOPMENT**

- 1.1 Home range, territoriality, dispersal & habitat selection
- 1.2 Food selection and optimal foraging theory
- 1.3 Genetic and environmental components in the development of behaviour
- 1.4 Neural basis of behaviour: stimulus filtering & biological rhythms

#### UNIT II: SOCIAL AND PARENTAL BEHAVIOUR

- 2.1 Social organization in insects
- 2.2 Social behaviour in primates
- 2.3 Parental care in vertebrates
- 2.4 Communication in animals: auditory, visual, chemical and tactile.

#### UNIT III: REPRODUCTIVE AND LEARNING BEHAVIOUR

- 3.1 Courtship and mating systems
- 3.2 Learning behaviour in vertebrates
- 3.3 Migration in fishes
- 3.4 Migration in birds

### PRACTICALS/ FIELD SURVEYS: (1 CREDIT)

- 1. Study of various types of bird nests
- 2. Investigation of hydrotaxis, chemotaxis and phototaxis in earthworm
- 3. Conducting the field surveys for studying various types of behaviours in animals
- 4. Study of social organisation in bees/ants
- 5. Collection and identification of various social insects
- **6.** Study of parental care & social behaviour through audio-visual aids

#### SUGGESTED BOOKS / READING MATERIAL

- 1. An introduction to Animal Behaviour by Manning and Dawkins, Cambridge University Press
- 2. Animal Behaviour- an evolutionary Approach by John Alcock Sinauer Associates, Inc Publishers Sunderland, Massachusetts
- **3.** Animal Behaviour by Anbery
- 4. Animal Behaviour by Reena Mathur
- 5. Animal Behaviour by M.P. Arora Himalaya Publishing House
- 6. Essential Animal Behavior by Graham Scott
- 7. Mechanism of Animal Behaviour by Peter Marker and J. Hamilton, Jhon Wiley & Sons USA
- 8. Principles and Animal Development by S.C. Goel