2023

B.A./B.Sc.

Fifth Semester

DISCIPLINE SPECIFIC ELECTIVE - 1

ZOOLOGY

Course Code: ZOD 5.11 (Animal Behaviour & Chronobiology)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT_I

- 1. Give a brief profile of Karl Von Frish and Ivan Pavlov. Add a note on proximate causes of animal behaviour. 8+6=14
- 2. Give an account on the methods and recording of an animal behaviour.

14

UNIT-II

3. Write short notes on the following:

 $7 \times 2 = 14$

- (a) Imprinting
- (b) Orientation
- 4. Discuss the individual behavioural pattern of individual animals. Add a note on habitation. 9+5=14

UNIT-III

- 5. What is sexual dimorphism and mate choice? Explain the sexual conflict in parental care. 9+5=14
- 6. Write short notes on the following:

 $7 \times 2 = 14$

- (a) Altruism
- (b) Concept of society

UNIT-IV

7. Explain the concept of average and phase. 7+7=14

8. Write notes on the following:

 $7 \times 2 = 14$

- (a) Adaptive significance of biological clocks
- (b) Biological oscillation with special emphasis on amplitude

UNIT-V

- 9. Explain in detail about the circadian rhythms. Add a note on circannual rhythms. 10+4=14
- 10. Write notes on the following:

 $7 \times 2 = 14$

- (a) Chronomedicine
- (b) Photoperiod and its regulation in seasonal reproduction of vertebrates

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