

**2024/TDC (CBCS)/EVEN/SEM/
ZOODSE-603T/025**

TDC (CBCS) Even Semester Exam., 2024

ZOOLOGY

(6th Semester)

Course No. : ZOODSE-603T

(Animal Behaviour and Chronobiology)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

UNIT-I

1. Answer any three of the following questions :

1×3=3

- (a) What is chronobiology?
- (b) Who is Ivan P. Pavlov?
- (c) What is ultimate behaviour?
- (d) Who got Nobel Prize in Physiology in 1973?

(2)

2. Answer any *one* of the following questions : 2
- (a) What is proximate behaviour? Give example.
- (b) Mention various methods of recording behaviour.
3. Answer any *one* of the following questions : 5
- (a) Write about the origin and history of ethology.
- (b) Mention brief profiles of Karl von Frisch and Ivan P. Pavlov.

UNIT—II

4. Answer any *three* of the following questions : 1×3=3
- (a) What is reflex behaviour?
- (b) Define orientation.
- (c) What is habituation?
- (d) What is imprinting?
5. Answer any *one* of the following questions : 2
- (a) Compare instinct and learnt behaviour.
- (b) Write a short note on associative learning.

(3)

6. Answer any *one* of the following questions : 5
- (a) Discuss stereotyped behaviour with special reference to orientation and reflexes.
- (b) Write about classical and operant conditioning.

UNIT—III

7. Answer any *three* of the following questions : 1×3=3
- (a) What do you mean by asymmetry of sex?
- (b) What is sexual dimorphism?
- (c) What is mate choice?
- (d) Define altruism.
8. Answer any *one* of the following questions : 2
- (a) Write a short note on communication in animals.
- (b) Mention the causes of intersexual selection.
9. Answer any *one* of the following questions : 5
- (a) Describe the social behaviour of honey bee with proper illustration.
- (b) Mention various components of sexual behaviour of animals.

(4)

UNIT—IV

10. Answer any *three* of the following questions :
1×3=3

- (a) What is biological oscillation?
- (b) What is amplitude?
- (c) What is chronomedicine?
- (d) What is chronotherapy?

11. Answer any *one* of the following questions : 2

- (a) Mention the role of melatonin.
- (b) Write a short note on chronopharmacology.

12. Answer any *one* of the following questions : 5

- (a) Write about historical developments in chronobiology.
- (b) Define biological clock. Mention the adaptive significance of biological clock.

UNIT—V

13. Answer any *three* of the following questions :
1×3=3

- (a) Define biological rhythm.
- (b) What is masking?
- (c) What is circadian rhythm?
- (d) What is photoperiod?

(5)

14. Answer any *one* of the following questions : 2

- (a) What are short- and long-term rhythms?
- (b) Write a short note on concept of synchronization.

15. Answer any *one* of the following questions : 5

- (a) Discuss various types of biological rhythms.
- (b) Describe the structure of biological clock.
