



**2021/TDC (CBCS)/EVEN/SEM/
ZOODSE-602T/018**

**TDC (CBCS) Even Semester Exam.,
September—2021**

ZOOLOGY

(6th Semester)

Course No. : ZOODSE-602T

(Animal Behaviour and Chronobiology)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

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

SECTION—A

Answer any *fifteen* of the following questions :

1×15=15

1. Define ethology.
2. What is proximate behaviour?
3. What is Pavlov's classical experiment?
4. From which country Karl von Fisher belongs?



(2)

5. What is recording of behaviour?
6. Name one method of behavioral recording.
7. Define orientation.
8. What is reflex?
9. What is instinct behaviour?
10. Define habituation.
11. What is imprinting?
12. Define associative learning.
13. What is visual communication?
14. Give one example of insect showing social behaviour.
15. What is altruism?
16. What is sexual dimorphism?
17. Define asymmetry of sex.
18. What do you understand by mate choice?
19. Define biological rhythm.

22J/19

(Continued)

(3)

20. What is biological clock?
21. Mention one importance of melatonin in animals.
22. What do you understand by the concept of average?
23. What do you understand by chronobiology?
24. Define amplitude and phase as in chronobiology.
25. What are the types of biological rhythm?
26. Define circadian rhythm/cycle.
27. Give one example of lunar rhythm.
28. What is photoperiodism in animals?
29. What is masking?
30. Define circannual rhythm.

SECTION—B

Answer any *five* of the following questions : 2×5=10

31. What is the ultimate cause of behaviour?
Give example.
32. What are the aspects of ethology?

22J/19

(Turn Over)



(4)

33. Differentiate between instinct and learnt behaviour.
34. Explain operant conditioning.
35. Name the castes found in honeybee colony.
36. What is male rivalry?
37. How does melatonin help in survival?
38. State the evolutionary significance of biological clock.
39. State the characteristics of biological rhythm.
40. Differentiate between short- and long-term rhythm.

SECTION—C

Answer any *five* of the following questions : $5 \times 5 = 25$

41. How do proximate causes initiate ultimate cause of behaviour?
42. Differentiate between operant and classical conditioning.

22J/19

(Continued)

(5)

43. Stereotyped behaviours are inborn and not learnt. Discuss.
44. Differentiate between habituation and learnt behaviour.
45. How are the senses used by organism for effective communication? Give examples.
46. Discuss the different roles played by worker bees in their lifetime. Add a note on castes of honeybees.
47. What is disruption of biological clock? What are its impacts on organisms?
48. Define biological oscillation with examples.
49. Differentiate between tidal rhythm with lunar rhythm. Give examples.
50. How does synchronization help in adaptation and survival?

22J—300/19

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