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5 SEM TDC DSE ZOO (CBCS) 1 (H)

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(Nov/Dec)

ZOOLOGY

(Discipline Specific Elective)

(For Honours)

Paper : DSE-1

(Animal Behaviour and Chronobiology)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

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

1. Fill in the blanks : 1×5=5

- (a) _____ is a temporary, phase-specific, innate form of behaviour.
- (b) The 24 hrs cycle found in organisms is called _____ cycle.
- (c) _____ stimulus elicits a particular behavioural response in animals.

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(Turn Over)

(2)

- (d) Running a maze by a rat to get food is a type of _____ behaviour.
- (e) Honeybee communicates the worker bees about the food source situated far apart by _____.
2. Write short notes on any *three* of the following : $3 \times 3 = 9$
- (a) Proximate causes of behaviour
- (b) Imprinting
- (c) Tidal rhythms
- (d) Chronotherapy
3. What is biological clock? Explain how circadian rhythm controls the activities of animals with suitable examples. $2 + 7 = 9$
4. What is orientation? Explain the types of orientation behaviour present in animals. $2 + 7 = 9$
5. Explain the foraging behaviour in honeybee and state the advantage of waggle dance. $4 + 5 = 9$

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(Continued)

(3)

6. Write briefly on : $4 \times 3 = 12$
- (a) Origin of ethology
- (b) Reflexes
- (c) Role of melatonin
- Or
- What is chronobiology? Describe the significance of biological oscillation. Explain sexual conflict in parental care. $2 + 4 + 6 = 12$

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