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RNLKWC/B.Sc.-CBCS/VS/ZOO./H/DSE1T/22

2022

Zoology

[HONOURS]

(CBCS)

(B.Sc. Fifth Semester End Examination-2022)

PAPER-DSE1T

Full Marks: 40

Time: 02 Hrs

*The figures in the right hand margin indicate marks
Candidates are required to give their answers in their own words as
far as practicable*

Illustrate the answers wherever necessary

1. Answer any five questions of the following: **5x2=10**
- What are sign stimulus and releaser?
 - What do you mean by motivation?
 - Define reflex. Give example.
 - What is inclusive fitness?
 - Define Altruism. What is reciprocal altruism.
 - Explain social dominance
 - What does 'R', 'B' and 'C' represents in Hamilton Rule?
 - Write down the adaptive significance of biological clock.

(2)

2. Answer any four questions of the following: **4x5 = 20**

a) What is communication? Write down the advantages of virtual communication. **1+4**

b) Elaborate the proximate and ultimate cause of behaviour.

$$2\frac{1}{2} + 2\frac{1}{2}$$

c) Mention the differences between instinctive behaviour and learned behaviour. **5**

d) Describe the purpose and advantages of the waggle dance with proper diagram.

e) Distinguish between habituation and imprinting. **2 $\frac{1}{2}$ + 2 $\frac{1}{2}$**

f) Complete the process underlying classical and operant conditioning.

3. Answer any one question: **1x10 = 10**

a) Write a short note on

i) Lunar rhythms

ii) Sexual dimorphism

iii) stereotyped behaviour

iv) Pavlov's action.

$$2\frac{1}{2} \times 4 = 10$$

b) What is chronobiology? Describe the types and characteristics of biological rhythms. What is tidal and lunar rhythms. **2+6+2**
