



বঙ্গ বিহার

WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 5th Semester Examination, 2024-25

ZOOADSE01T-ZOOLOGY (DSE1/2)



Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

1. Answer any **eight** questions from the following: 2×8 = 16
 - (a) What is the difference between taxis and kinesis?
 - (b) What do you understand by Cultural transmission of behaviour? Give an example.
 - (c) What is trophallaxis in social insect?
 - (d) Define 'sign stimulus' with example.
 - (e) What is the primary function of grooming in social animal?
 - (f) What do you mean by intersexual selection?
 - (g) What do you mean by ad libitum observation?
 - (h) Who was the premier Ornithologist of India? What is his nickname in this field?
 - (i) What is orientation?
 - (j) Differentiate between round dance and waggle dance.
 - (k) Distinguish between instinctive behaviour and learning behaviour.
 - (l) Who is regarded as the founder of Indian Chronobiology? Name the English primatologist who is known for the research on Chimpanzees.
2. Answer any **three** questions from the following: 3×3 = 9
 - (a) What is imprinting? Explain it with example.
 - (b) Write a short note on tactile communication.
 - (c) Describe the social structure of honey bee.
 - (d) Briefly state the important contribution of the following scientist
 - (i) Niko Tinbergen and (ii) Karl von Frisch
 - (e) What is the Handicap Principle? Who proposed it? 2+1
3. Answer any **three** questions from the following: 5×3 = 15
 - (a) Differentiate between classical conditioning and operant conditioning. Define Habituation with example. 3+2
 - (b) What is FAP? Explain it with example. Add a note on the characteristics of stereotyped behaviour. 1+2+2
 - (c) Define an altruistic behaviour with example. How can altruism be explained by Hamilton's rule? 2+3
 - (d) What is intrasexual selection? Explain various tactics adopted by males in response to intrasexual selection. 1+4
 - (e) Describe the role of photoperiod and melatonin in seasonal reproduction of vertebrates. 5

—x—