

U.G. 6th Semester Class test (NEP)
Department of Zoology
Raghunathpur College
Course Title: Adaptation and Animal Behaviour
Course code –BZOOMAJ10C (Major)

Full Marks: 60

Time: 3 hours

1. Answer any ten questions from the following: 2×10=20

- a) Name two primates involved in the study of language evolution
- b) Differentiate between learning and instinct.
- c) What is conditioning? Give one example of conditioned behavior
- d) Differentiate between anadromous and catadromous migration.
- e) What is FAP?
- f) What is Wallace's line?
- g) What is 'Darwinian fitness'?
- h) What do you mean by reciprocal altruism?
- i) What do you mean by parent-offspring conflict?
- j) What is Zeitgeber?
- k) What is nuptial flight?
- l) Mention two differences between kinesis and taxis.
- m) What is selfishness? Give one example of selfishness in animal kingdom.
- n) What is the "dilution effect" in social defenses?
- o) What is Harem and Lekking polygyny?

2. Answer any six questions from the following: 5×6= 30

- a) Explain different types of anti-predation defence mechanism in animals.
- b) What is dispersal? Explain the types.
- c) What is haplodiploidy? Explain with example.
- d) Difference between group selection and kin selection.
- e) Write down different types of learning with example.
- f) What is relatedness? Explain Hamilton's theory for inclusive fitness.
- g) Differentiate between classical and operant conditioning.
- h) What are the causes of bird migration? How sun, stars and earth helps the birds to navigate during migration?
- i) Explain handicap principle with example.
- j) Distinguish between Batesian and Müllerian mimicry.
- k) Explain different types of mating system with example.
- l) Describe different types of colouration with examples. Write down evolutionary significance of colouration.

3. Answer any one question from the following: 1×10=10

- a) Difference between courtship and mating. Explain different types of courtship behavior in animals with examples.

- b) Explain chemical, visual, and audio communication in animals
- c) Explain monogamy, polygamy, polyandry and promiscuity with example. Explain Lottery principle, tangled bank hypothesis and Red queen hypothesis.