M.Sc. Examination, 2017
Semester-II
Zoology
Paper- MZCT-204
(Animal Behaviour and Evolution)

Time: 3 Hours **Full Marks: 40**

Questions are of value as indicated in the margin

Answer ***any four*** questions

1. Distinguish between non-associative and associative learning. Explain how 'Habituation' takes place in animals. What is dual process theory? 2+6+2=10

2. Discuss classical and operant conditioning with suitable examples. Cite illustrative experiment for each of them. 4+3+3=10

3. What are different types of mating systems? Give an account of various models of polygyny. State Batman's principle in mate selection. 2+4+4=10

4. Define genetic polymorphism. Distinguish between transient and balanced polymorphism. Give examples of each polymorphism. Add a note on heterosis and polymorphism. 2+4+2+2=10

5. What is random genetic drift? Give an example. How do you calculate the effect of random genetic drift on gene frequency? Comment on the effect of gene migration on evolution with example. 1+1+4+4=10

6. Write short notes on ***any four*** 2.5x4=10

a) Origin of biological molecules
b) Role of inbreeding in evolution
c) Stabilizing selection
d) Lactase persistence
e) Gene duplication
f) Sympatric speciation

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