

Roll No. ....

Total Pages : 3

757302

December 2023

**M.Sc. (Zoology) - III SEMESTER**  
**Animal Behaviour and Applied Zoology**  
**(MZO-302)**

Time : 3 Hours]

[Max. Marks : 75

*Instructions :*

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

**PART-A**

1. (a) Primary and secondary orientation. (1.5)  
(b) Muga silk is produced by ..... (1.5)  
(c) Open and closed IRM. (1.5)  
(d) What do you understand by classical conditioning? (1.5)  
(e) Give importance of Honey bee. (1.5)

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- (f) Give the name of three National Parks of Uttarakhand. (1.5)
- (g) The stony soil is not suitable for fowls why? (1.5)
- (h) Define Altruistic behaviour. (1.5)
- (i) What is Kinesis and taxis? (1.5)
- (j) Define the following terms : Nerve nets and Nerve cords? (1.5)

### PART-B

2. (a) Explain sensory processing in Animals. Classify different sensory receptor cells. (10)
- (b) What is the significance of waggle and round dance in bee communication? (5)
3. (a) How motivational conflict different from decision making? (5)
- (b) Discuss Life cycle of Lac and silk moth in detail. (10)
4. (a) Differentiate between classical conditioning and operant conditioning. (5)
- (b) Explain beekeeping and pearl culture as industry. (10)
5. (a) Discuss fish culture breeding pond, Nursery ponds and fish seed. (5)

- (b) Write note on Centralisation, Differentiation and Cephalization. (10)

6. (a) How many types of diseases are present in poultry? Explain all elaborately. (10)
- (b) Discuss all the measures taken by Government for conservation of wildlife. (5)
7. Illustrate in detail Mimicry, mimetic releaser and code breakers with examples. (15)