

5. Write two differences between innate behaviour and acquired behaviour. Illustrate instinct as a fascinating component of innate behaviour. Add note on the advantages of instinct in animals.

2+6+2=10

Or

Define learning. Explain with example the latent learning and discrimination type of learning in animals.

1+5+4=10

6. What are the advantages of social organisations of animals ? Discuss about the social behaviour of ants.

5+5=10

Or

Write the common characteristics of visual signals. Explain how the visual signals are useful to animals in aggregation and dispersal.

5+5=10

Total No. of printed pages = 4

3 (Sem 6) ZOO M1

2015

ZOOLOGY

(Major)

Theory Paper : M-6.1

Full Marks – 60

Time – Three hours

The figures in the margin indicate full marks for the questions.

1. Answer the following questions as directed :

1×7=7

- (a) Fill in the blanks :

_____ is the investigation of sound production in animals with the help of high quality recording equipment and tape recorders.

- (b) Name the author of the book “Molecular Ethology”.

- (c) Define homing behaviour in animals.

- (d) Find out the correct answer :
Hippocampus of brain is associated with
(i) Hunger (ii) Memory
(iii) Aggression (iv) Pleasure.
- (e) Which one of the members of a typical group of Gorillas is called 'Silver back' ?
- (f) What term is used to represent dropping out of 'insignificant' responses and strengthening of 'significant' responses in the life of animals ?
- (g) Write true or false :
Reproductive rate of r-selected species is high, which is low in k-selected species.
2. Give short answers to the following : 2×4=8
- (a) What are the advantages of group feeding behaviour ?
- (b) Distinguish between conditioned and unconditioned reflexes.
- (c) What are the different component members of a unimale bisexual group of monkey ?
- (d) Define imprinting with an example.

3. Answer any *three* questions from the following :
5×3=15
- (a) Write note on the Waggle Dance of Bees. 5
- (b) Briefly discuss the role of Pheromones in Vertebrates. 5
- (c) Illustrate circadian rhythm taking the activity of Bee as an example. 5
- (d) Write how the hormones are related with aggressive behaviour of animals. 5
- (e) What is the usefulness of motivational model in Ethology ? Write briefly the Psycho-hydraulic model of motivation developed by Lorenz. 2+3=5
4. Write about the common methods in Ethology that are adopted in the study of animal behaviour
- (i) in laboratory and
- (ii) in wild. 5+5=10

Or

What is meant by stimulus filtering ? Explain peripheral and central filtering processes citing suitable examples. 2+4+4=10