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.

[Turn over

(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 of 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

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