

6. Write short notes on any three of the following:

(3x5 = 15)

- (i) Stimulus filtering
- (ii) Communication by means of chemical signals
- (iii) Intersexual sexual selection
- (iv) Significance of studying animal behaviour.
- (v) Stereotyped behaviour

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5170

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Unique Paper Code : 2234000009

Name of the Paper : GE-13, Concepts of Animal Behaviour

Name of the Course : **B.Sc. (H) Zoology (NEP-UGCF)**

Semester : V

Duration : 2 Hours Maximum Marks : 60

Instructions for Candidates

1. Write your Roll. No. on the top immediately on receipt of this question paper.
2. Attempt **four questions** in all including **Question No.1 which is compulsory.**
3. All questions carry equal marks.
4. All parts of a question should be answered together.

1. (a) Define the following (1x4= 4)
- (i) Territorial behavior
 - (ii) Reciprocal altruism
 - (iii) Latent learning
 - (iv) Inclusive fitness
- (b) Differentiate between the following (2x4= 8)
- (i) Allomones and kairomones
 - (ii) Polyethism and Polyphenism
 - (iii) Tropotaxis and klinotaxis
 - (iv) Imprinting and Instinct
- (c) Give the important contributions made by the following scientists (1x3= 3)
- (i) W.D. Hamilton
 - (ii) Karl von Frisch
 - (iii) Niko Tinbergen
2. (a) What do you understand about sexual dimorphism? Explain the theories which explains the male ornamentation and female mating choice? (8)

- (b) Elaborate the different methods of studying animal behaviour in wild. (7)
3. (a) How Instrumental conditioning is different from classical conditioning. Describe briefly the Pavlov's experiment and its importance in acquisition of character. (8)
- (b) What are the four Questions on ethology? Explain in detail by giving one relevant case study of each question. (7)
4. (a) How do honeybees communicate among themselves? Illustrate with suitable diagram about the dances performed by honey bees and also explain their significances. (8)
- (b) Discuss in detail that honeybee is a eusocial animal? (7)
5. (a) Discuss the steps involve in the courtship rituals and their relevances by giving appropriate examples? Describe the courtship rituals in three spined stickle back fishes. (8)
- (b) What is altruism? How is this behavior assessed by the Kin Selection theory? (7)