

3412

4

the advantages and drawbacks of each mode in terms of their functional relevance. (7)

6. Write short notes on **ANY THREE** of the following:
(3 x 5=15)

- a. Parental care
- b. Imprinting
- c. Courtship behaviour in 3-spine stickleback
- d. FAP

(1000)

[This question paper contains 4 printed pages.]

Your Roll No.....

आपका अनुक्रमांक.....

Sr. No. of Question Paper : 3412

I

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. All parts of a question should be answered together.

P.T.O.

1. (a) Define the following: (1x5=5)

- i. Proximate cause
- ii. Code breakers
- iii. Supernormal stimulus
- iv. Nuptial mating
- v. Habituation

(b) Differentiate between the following: (2x3= 6)

- i. Polytheism and Polyphenism
- ii. Intersexual and intrasexual selection
- iii. Kinesis and taxis

(c) Give the important contributions made by the following scientists (1x4= 4)

- i. Niko Tinbergen
- ii. Karl Von Frisch
- iii. Robert Trivers
- iv. W.D. Hamilton

2. (a) What are the characteristics of eusocial organisms? Describe social organization in honey bees. (8)

(b) Add a note on different methods of communication in honeybee. (7)

3. (a) Describe in detail the contribution of Ivan Pavlov in the field of modern ethology. Highlight the importance of his experiment with respect to acquisition of character. (8)

(b) What is learned behaviour? Explain the different types of learned behaviour with suitable examples. (7)

4. (a) What is altruism? With suitable example describe how Hamilton's rule supports the evolutionary significance of altruism. (8)

(b) What is orientation? Discuss with suitable example about different types of orientation behaviour in animals. (7)

5. (a) What do you understand about sexual dimorphism? Discuss the theories which explain the male ornamentation and female mating choice? (8)

(b) Enumerate the different modes of communication used by animals using suitable examples. Discuss