

This question paper contains 3 printed pages]

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S. No. of Question Paper : 1392

Unique Paper Code : 2231501

F-7

Name of the Paper : Animal Behaviour

Name of the Course : B.Sc. (Hons.) Zoology-Erstwhile FYUP

Semester : V

Duration : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt five questions in all including

Question No. 1 which is compulsory.

1. (a) Define the following terms :

5×1=5

(i) Reflex

(ii) Zeitgeber

(iii) Polyphenism

(iv) Sign stimuli

(v) Circadian rhythm.

(b) Differentiate between the following :

5×2=10

(i) Primary and Secondary orientation

P.T.O.

- (ii) Focused learning and Generalized learning
- (iii) Kinesis and Taxis
- (iv) Altricial and Precocial
- (v) Habituation and Sensitization.
- (c) Briefly state the important contribution of the following scientists : 3×2=6
- (i) Niko Tinbergen
- (ii) Karl Von Frisch
- (iii) Ivan Pavlov.
- (d) Match the items given in column A with the items in column B : 6×1=6

Column A	Column B
(i) Physogastry	(a) B. F. Skinner
(ii) Queen substance	(b) Orthokinesis
(iii) Fixed Action Pattern	(c) Hamilton
(iv) Operant conditioning	(d) 9-oxydecanoic acid
(v) Woodlice	(e) Termite
(vi) Inclusive fitness	(f) Greylag goose.

2. With suitable examples, describe altruism. Explain evolutionary significance of altruistic behaviour in animals.

3. (a) With suitable examples, describe infanticide behaviour of males and add a note on its significance. Discuss the tactics adopted by the females to check infanticide by the males.
- (b) Explain different types of sensory stimuli used in courtship behaviour by the males.
- 8+4=12
4. Describe the Pavlov's experiment on classical conditioning. Add a note on acquisition and extinction.
- 12
5. Describe intrasexual selection. Explain various tactics adopted by males in response to intrasexual selection.
- 12
6. Describe social organization in honeybee.
- 12
7. Write short notes on any *three* of the following :
- 3×4=12
- (i) Entrainment
- (ii) Tail wagging dance
- (iii) Innate behaviour
- (iv) Supernormal stimuli.