

## B.Sc. (Part-III), Examination 2015 Model Paper A (Zoology) Paper -III (Applied Zoology, Ethology and Biostatistics)

Time Allowed: 3 Hours Max. Marks:

34

## Part -I

## All questions are compulsory :-

- 1. Answer briefly:
  - a) What is ericulture?
  - b) Give names of any four crustacean larvae.
  - c) What do you mean by 'mother of pearl'?
  - d) Name the scientist who proposed the concept of imprinting.
  - e) What is electroencephalogram (EEG)
  - f) What are pheromones?
  - g) What are pie charts?
  - h) Write the zoological name of lac insect.
  - i) Define frequency distribution.
  - i) What is the main food of silk moth?

### Part -II

# <u>Attempt 4 questions in all, selecting at least one from each section. All questions carry equal</u> marks:

## Section -A

- 2. Write short notes on:
  - i. Vermiculture ii. Coral reefs
  - 3. Write an essay on Lac culture.
- 4. Describe the role of protozoa in spreading disease with the help of suitable examples.

## Section -B

5. Write notes on:

- i. Flush toilet model ii. Concept of Fixed Action Pattern
- 6. Describe the neuro-anatomical technique of studying animal behavior.
- 7. Write short notes on:
  - i. Role of pheromones ii. Characteristics and advantages of societies

## Section –C

- 8. Define mean, median, standard deviation, standard error and class interval.
- 9. Calculate mean for given given data:

Blood sugar: 101 200 250 150 98 135 157 160 111 171

No. of patients: 2 3 5 5 3 5 2 5 10 10

10. Draw a suitable histogram for the given data:

Class intervals: 0-10 10-20 20-30 30-40 40-50 50-60 60-70 70-80

Frequency: 3 4 7 8 9 9 2 6



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Time Allowed: 3 Hours Max. Marks:

## Part -I

## All questions are compulsory :-

34

- 1. Answer briefly:
  - a) Write the names of products of Apiculture.
  - b) What is vermiculture?
  - c) Who is the father of pearl industry?
  - d) Define Fixed Action Pattern.
  - e) Write names of three social animals.

- f) Name the larval forms of crustaceans.
- g) Which centre is controlled by Broca's area?
- h) Define standard deviation.
- i) Write the full form of ASE.
- j) What is pisciculture?

## Part -II

# Attempt 4 questions in all, selecting at least one from each section. All questions carry equal marks:

## Section -A

- 2. Write short notes on:
  - i. Sericulture ii. Economic importance of Mollusca
  - 3. Define Apiculture. Discuss various methods of bee-keeping.
  - 4. Write an essay on larval stages of crustaceans.

#### Section –B

- 5. Write an essay on social organization in honeybees.
- 6. Write short notes on:

data:

- i. Innate Releasing Mechanism ii. Neurochemical techniques of studying behavior
  - 7. Write down a detail account on pheromones.

#### Section –C

- 8. Describe in detail, the graphical presentation of data.
- 9. Calculate mean by using short-cut method:

Marks (Out	0-10	10-20	20-30	30-40	40-50
of 50)					
No. of	10	12	18	15	5
students					

10. Define standard deviation. Calculate the standard deviation from the following

Class Interval	2-2.9	3-3.9	4-4.9	5-5.9	6-6.9
Frequency	6	13	11	8	12