

Roll No.

Total No. of Sections : 4

Total No. of Printed Pages : 5

Code No. : B03/205

III Semester Examination

M.Sc.

ZOOLOGY

Paper II

[Biostatistics]

Time : Three Hours]

[Maximum Marks : 80

[Min. Passing Marks : 16

Note : Part A and B of each question in each unit consists of Very Short Answer Type Questions which are to be answered in one or two sentences. Part C (Short Answer Type) of each question will be answered 200-250 words. Part D (Long Answer Type) of each question should be answered within the word limit 400-450.

Unit-I

1. (A) Define Primary and Secondary data. 2
- (B) What is tabulation ? 2
- (C) Describe different parts of the table. 4

P. T. O.

Code No. : B03/205

Or

What is histogram ? Draw a histogram for the given data.

- (D) Explain the kinds of diagram with suitable examples. **12**

Or

Write an essay on different methods of graphical presentation of data.

Unit-II

2. (A) Define the Arithmetic mean. **2**
- (B) Write the merits and demerits of Medians. **2**
- (C) Hb % of an animal was recorded as 6, 7, 4, 5, 5, 3 and 4 gm/100 ml. Calculate the median. **4**

Or

Determine mode from the following data :

50	62	48	50	63	65	50	48	43	62	50	50
----	----	----	----	----	----	----	----	----	----	----	----

Code No. : B03/205

- (B) What is regression ? **2**
- (C) Explain equi-probable events with suitable example. **4**

Or

What is one way classification ? Write the principle and formula of one way ANOVA.

- (D) What is linear and non-linear correlation ? Explain with suitable example. **12**

Or

A card is drawn from a pack of playing cards and then another card is drawn without the first being replaced. Calculate the probability of drawing 2 spades ?



Code No. : B03/205

efficacy against typhoid. The result are given below. Find out the effectiveness of the drug against the disease. The total value of χ^2 for 1df at 5% level of significance is 3.84. **12**

Administering the drug	Typhoid	No typhoid	Total
	200	300	500
Without administering the drug	280	20	300

Or

Two diets are compared by conducting an experiment on two samples of 40 and 50 animals. The averages for the increase in weight due to the diets A and B are 10 and 12 lbs. with SD S_1 and 2.5 lbs respectively. Is the difference between the averages for the increase a weight significant.

Unit-IV

4. (A) Write the name of any two methods of studying correlation. **2**

Code No. : B03/205

- (D) From the following find out the mean : **12**

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of Students	10	18	20	26	30	28	18

Or

What do you understand by Central Tendency ? Explain it with their types and suitable examples.

Unit-III

3. (A) Write different types of Hypothesis. **2**
(B) Write the uses of standard error of mean. **2**
(C) Size of 5 fishes in cm are 2, 3, 5, 4, 1 respectively. Obtain standard error of standard deviation of the given ungrouped data. **4**

Or

What do you mean by student t test ? Mention formula to obtain t ratio.

- (D) A certain drug was administered to 500 people out of 800 included in the sample to test its