Roll No. .....

F010102T(A)

B. B. A. (First Semester)
EXAMINATION, 2022-23
(NEP)
BUSINESS STATISTICS

Time : One Hour] [*Maximum Marks :* $37\frac{1}{2}$

Note : This paper consists of two Sections A and B. Carefully read the instructions of each Section in solving the question paper. Candidates have to write their answers in the given answer-copy only. No separate answer-copy **(B Copy)** will be provided.

Section—A
(Short Answer Type Questions)

Note : All questions are compulsory. Answer the following questions as short answer type

questions. Each question carries 3 marks, maximum 150 words each.

1. (A) Define probability. Write properties of Normal distribution.

   (B) What is hypothesis ? Discuss type I and Type II error.

   (C) Write short notes on Karl Pearson's coefficient of correlation. Discuss significance of correlation.

   (D) Differentiate between means, median and mode with suitable examples.

   (E) What do you understand by classification and tabulation of data ? Elaborate the types of classification.

   (F) Define Statistics. What are the characteristics of statistics ?

   (G) Write short notes on types of data.

Section—B
(Long Answer Type Questions)

Note : This section contains four questions from which *one* question is to be answered as long question. Each question carries $16\frac{1}{2}$ marks, maximum 500 words each.

2. What do you understand by sampling ? How is it different from census ? Briefly discuss

methods of sampling. What are sampling and non-sampling errors ?

Or

3. Give below is the distribution of marks obtained by BBA Ist Semester students in an examination :

Marks	No. of Students
10—20	7
20—30	15
30—40	18
40—50	25
50—60	30
60—70	20
70—80	16
80—90	7
90—100	2

Find :

(i) Mean

(ii) Median

(iii) Mode

(iv) Mean Deviation

(v) Standard Deviation

(vi) Coefficient of variation

Or

4. Discuss measures of variations. Write its significance. Briefly explain the properties of a good measure of variation. What do you understand by skewness and kurtosis.

Or

5. Obtain regression equation of Y on X and estimate Y when X = 35 from the following data :

X	Y
25	43
28	46
35	49
32	41
31	36
36	32
29	31
38	30
34	33
32	39

1700