

Roll No.

57516

**BBA 2nd Semester (N. S.) 2014-17
Examination – July, 2022**

BUSINESS STATISTICS

Paper : BBAN-206

Time : Three Hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *compulsory* Question No. 1 from Section-A and *four* questions from Section-B (*one* question from each Unit). All questions carry equal marks.

SECTION – A

1. Write brief notes on :

(a) Histogram

(b) Advantages of diagrams

(c) Co-efficient of range

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P. T. O.

(d) Harmonic mean

(e) Equation of Y on X

(f) Co-efficient of determination

(g) Unweighted price index numbers

(h) Time reversal test

SECTION – B

UNIT – I

2. Discuss the scope, limitations and applications of statistics.

3. Differentiate between classification and tabulation. Discuss the objectives and types of classification.

UNIT – II

4. Explain the meaning and objectives of an average. Discuss the calculation, merits and demerits of arithmetic mean, median and mode.

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5. Find the values of quartile deviation, mean average deviation (from median) and standard deviation from the following data showing the money spent every date by 15 students :

56, 48, 43, 65, 78, 72, 46, 38, 82, 39, 57, 63, 75, 62, 49

UNIT – III

6. Discuss the meaning, types and significance of correlation. What are the differences between Karl Pearson's correlation co-efficient and spearman's correlation co-efficient ?

7. From 10 observations of price (X) and supply (Y) of a commodity, the following figures were obtained :

$$\sum X = 130, \sum Y = 220, \sum X^2 = 2288, \sum Y^2 = 5506 \quad \text{and} \\ \sum XY = 3467.$$

Obtain the two regression equations from the above figures.

57516-5000-(P-4)(Q-9)(22) (3)

P. T. O.

UNIT – IV

8. Obtain the Laspeyre's, Fisher's and Marshall-Edgeworth price index number from the following data :

Commodity	p_0	q_0	p_1	q_1
A	8	25	65	30
B	20	70	30	55
C	5	16	20	45
D	10	36	15	20
E	27	80	10	60

Also show that Fisher's index satisfies factor reversal test.

9. Explain the use of time series in business forecasting and its limitations. Describe the components of a time series.

57516-5000-(P-4)(Q-9)(22) (4)