

II Semester B.B.A. Degree Examination, June/July - 2025
(SEP Scheme Freshers 2024-25 Onwards)

BUSINESS ADMINISTRATION

Business Statistics and Logic

Paper - 2.6

Time : 3 Hours **Maximum Marks : 80**

Instructions :

Answers in English only.

SECTION - A

Answer any Five sub-questions. Each sub-question carries 2 marks. (5×2=10)

1. a) Define Statistics.
- b) Give the meaning of Time Series.
- c) What is Correlation.
- d) The mean of distribution is 69 and the Median is 70. Find Mode.
- e) If $r=0.75$ and $N=64$. Find Probable error.
- f) Write the next term of the series: 2, 5, 10, 17, 26.
- g) Give the meaning of Primary data with example.

SECTION - B

Answer any Three of the following questions. Each question carries 6 marks. (3×6=18)

2. In a sample study about coffee habits in two towns the following information was received. Present the above data in a tabular form.

Town A: Females were 40%, Total Coffee drinkers were 45% and Male non-Coffee drinkers were 20%

Town B: Males were 55%, Male non-coffee drinkers were 30% and Female Coffee drinkers were 15%.

3. Compute the Rank Correlation Coefficient for the following Data:

X	18	50	45	20	25	30
Y	10	30	40	50	32	60

4. Construct the Consumer Price Index Number for 2024 based on 2023 using the Simple Aggregate Method:

Commodity	Price (2023)	Price (2024)
A	16	24
B	40	50
C	8	12
D	25	35
E	8	12
F	18	20

5. From the following data calculate the standard deviation and coefficient of variation.

X	100	110	120	130	140
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6. a) Shiva starts from his house and goes 5 km in the East, then he turns to his left and goes 4kms. Finally, he turns to his left and goes 5 km. Now how far is he from his house and in what direction?
 b) A, P, R, X, S, and Z are sitting in a row. S and Z are in the center. A and P are at the ends. R is sitting to the left of A. Who is to the right of P?

SECTION - C

Answer any Three of the following questions. Each question carries 14 marks.
 $(3 \times 14 = 42)$

7. The following are the marks obtained by 10 students in Mathematics and Statistics. Calculate Karl Pearson's Coefficient of Correlation and Interpret the result.

Marks in Mathematics	30	40	45	50	60	65	70	75	85	90
Marks in Statistics	40	40	35	60	50	70	90	80	80	95

8. Calculate Mean, Median and Mode from the following data:

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. Of Students	3	3	6	19	20	20	18	6	3	2

9. From the following data compute Fisher's Index number and also show it satisfies TRT and FRT.

Commodity	Price (2024)	Quantity (2025)	Price (2025)	Quantity (2025)
A	20	8	30	10
B	50	10	40	8
C	40	5	50	12
D	60	20	60	16
E	10	6	40	10

10. Below are given the figures of production in thousands kgs. Fit a straight line by method of least squares and obtain the trend values. Also estimate the production for year 2025.

Year	2016	2017	2018	2019	2020	2021	2022
Production (000 kgs.)	80	90	92	83	94	99	92

11. The scores of two batsmen, Rohith Sharma and M.S. Dhoni, in 10 Matches are given below. Find out who is more consistent.

Dhoni	82	20	60	50	0	65	106	54	31	11
Rohith	21	77	0	50	126	3	18	26	88	70

**SECTION - D**

Answer any One of the following questions. Each question carries 10 marks.

(1×10=10)

12. a) The following data show the height of students and No. of students. Draw the give curves and locate Median graphically.

Wages	70-80	80-90	90-100	100-110	110-120	120-130	130-140	140-150
No. of Workers	12	18	35	42	50	45	20	8

(OR)

b) Draw a Histogram from the following data and Locate Mode Graphically.

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
No. Of Students	25	30	60	80	50	15	10	9	35