

3 MJ 20108

THREE YEAR B.B.A. (CBCS) DEGREE EXAMINATION, NOVEMBER/DECEMBER 2024

THIRD SEMESTER

BUSINESS STATISTICS AND MATHEMATICS

(w.e.f-2023-24)

(Major)

Time : Three hours

Maximum : 70 marks

(No additional sheet will be supplied)

SECTION A — (5 × 4 = 20 marks)

Answer any FIVE of the following questions.

1. Define statistics and explain its importance in a business context.
2. What are the limitations of statistics when applied to business decisions?
3. Differentiate between primary and secondary data with suitable examples.
4. What is a frequency distribution? Explain its importance.
5. Describe the various methods used for presenting data graphically.
6. Define arithmetic mean and list its advantages.
7. What is the coefficient of variation, and why is it used?
8. Explain Karl Pearson's measure of skewness.
9. Define correlation and describe its types.
10. What is a subset? Provide an example to illustrate.

SECTION B — (5 × 10 = 50 marks)

Answer ALL the following questions.

11. Discuss the various methods of data collection and explain the tools used for collecting primary data.

Or

12. Describe the tabulation of data and its significance in business statistics.
13. Explain the objectives and characteristics of the median and mode.

Or

14. Discuss the calculation and interpretation of the standard deviation in data analysis.

15. Explain Spearman's rank correlation and its application in business analysis.

Or

16. Compare correlation and regression, explaining their differences and use cases.

17. Illustrate De Morgan's laws with examples using Venn diagrams.

Or

18. Describe the Laws of indices and their application in solving mathematical problems.

19. Discuss the types of matrices and the operations of matrix addition and multiplication.

Or

20. Explain how matrix inversion is performed and its importance in solving equations.
