A-749

Total Pages: 3 Roll No.

BBA-302

BUSINESS STATISTICS

Bachelor of Business Administration (BBA)

3rd Semester Examination, 2024 (June)

Time: 2:00 Hrs. Max. Marks: 70

Note:— This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A

Long Answer Type Questions $2 \times 19 = 38$

Note: Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each.

Learners are required to answer any two (02) questions only.

- Discuss the importance of data classification, tabulation, and presentation in statistical analysis. Explain the different types of tables and the significance of using diagrams and graphs for data interpretation.
- 2. Given are the Test scores of a class:

52, 56, 61, 65, 70, 75, 80, 85, 90, 95.

Calculate the Arithmetic Mean, Median, and Mode for these scores. Discuss the implications of these measures in understanding the performance of the class

- 3. Explain the concept of correlation and regression.

 Discuss the differences between positive and negative correlation, and simple, partial, and multiple correlation.
- 4. What do you mean by Harmonic Mean and Geometric mean? Explain their characteristics and limitations.
- 5. What is the significance of standard error of estimate? Explain using suitable examples.

Section-B

Short Answer Type Questions $4 \times 8 = 32$

Note: Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any four (04) questions only.

1. What is the role of frequency distribution in statistical analysis ?

2. Data:

Heights (in cm): 150, 152, 155, 157, 160, 162, 165. Compute the Range and Standard Deviation.

- 3. Discuss the methods of studying correlation and their applications in business statistics.
- 4. Explain the concept of seasonal indices and their application in business forecasting.

5. Data:

Sales Data (Units): Mon—30, Tue—45, Wed—40, Thu—50, Fri—55.

Task: Create a bar chart to represent this data and calculate the average sales for the week.

- 6. Discuss the characteristics and limitations of the geometric mean and harmonic mean in data analysis.
- 7. Calculate the Pearson correlation coefficient between the sales of Product A and B.

Product A Sales: 10, 15, 20, 25, 30

Product B Sales: 12, 18, 24, 30, 36

8. What is Time Series? Explain its uses in business.
