

A-0819

Total Pages : 4

Roll No. -----

BBA-302

Business Statistics

Bachelor of Business Administration (BBA)

3rd Semester Examination 2024(Dec.)

Time: 2:00 hrs

Max. Marks: 70

Note : This paper is of Seventy (70) marks divided into Two (02) Section 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.

P.T.O.

A-0819

Section-A

(Long-Answer-Type Questions)

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.

[2x19=38]

- Q.1. Explain the process of data classification, tabulation and presentation. Discuss the types and objectives of classification with examples.
- Q.2. Discuss the properties of the correlation coefficient and the lines of regression. Solve a numerical problem to illustrate these concepts.
- Q.3. Define measures of variation. Calculate the range, quartile deviation, mean deviation, and standard deviation for a given dataset. Explain the significance of each measure.
- Q.4. Calculate the rank correlation coefficient for the following data:
- X: 10, 20, 30, 40, 50
- Y: 50, 40, 30, 20, 10

Q.5. The yearly production of a company (in tons) is given as follows:

Year: 2015, 2016, 2017, 2018, 2019

Production: 100, 120, 140, 160, 180

Use the least squares method to calculate the secular trend and predict the production for 2022.

Section-B

(Short-Answer-Type Questions)

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.

[4x8=32]

Q.1. Find the regression equation for the following data:

X: 1, 2, 3, 4

Y: 2, 4, 6, 8.

Q.2. Calculate the growth rate for the following time series data:

Year: 2015, 2016, 2017, 2018;

Sales: 100, 150, 200, 250.

P.T.O.

- Q.3. Create a frequency distribution for the following dataset: 12, 15, 17, 15, 20, 22, 20, 15, 18, 19.
- Q.4. Calculate the standard deviation for the data: 4, 8, 6, 10, 12, 14.
- Q.5. Define irregular variations in time series and provide examples of their occurrence in business.
- Q.6. Define the coefficient of determination and its significance in regression analysis.
- Q.7. Calculate seasonal indices using the ratio-to-trend method and interpret the results.
- Q.8. Define data classification and discuss its objectives with examples.
