



Roll No														
---------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**PRESIDENCY UNIVERSITY
BENGALURU**

School of Management

Mid-Term Examinations - March 2024

Odd Semester: I MBA BATCH 2023

Course Code: MBA1007

Course Name: Business Statistics

Department: SOM

Date: 11/03/2024

Time: 10:00am – 11:30am

Max Marks: 50

Weightage: 25%

Instructions:

- (i) Read the all questions carefully and answer accordingly.
- (ii) Do not write any information on the question paper other than roll number.
- (iii) Scientific and non-programmable calculators are permitted.
- (iv) Question paper consists of 3 parts.

PART A

Answer all the Questions. Each question carries 2 marks.

(6Qx 2M= 12M)

1. What is an inclusive type of class interval? Give an example (CO:1) [Knowledge]
2. Mention any two merits of median. (CO:1) [Knowledge]
3. Mention any two demerits of mean (CO:1) [Knowledge]
4. Define quartile deviation (CO:1) [Knowledge]
5. What is positive correlation? Give an example (CO:2) [Knowledge]
6. Define range and its coefficient (CO:1) [Knowledge]

PART B

Answer all the Questions. Each question carries 8 marks.

(3Qx 8M= 24M)

7. The National Association of Realtors provided data showing that home sales were the slowest in 10 years. Sample data with representative sales prices for existing homes are given as follows. 315.5 202.5 140.2 181.3 470.2 169.9 112.8 230.0 177.5. Compute mean and median.
(CO:1) [Application]

8. A sample of 12 small accounting firms reveals the following numbers of professionals per office. 7

10 9 14 11 8 5 12 8 3 13 6

Compute quartile deviation.

(CO:1)

[Application]

9. Is it possible to predict the annual number of business bankruptcies by the number of firm births (business starts) in the United States? The following data published by the U.S. Small Business Administration, Office of Advocacy, are pairs of the number of business bankruptcies (1000s) and the number of firm births (10,000s) for a six-year period. Use these data to develop the equation of the regression model to predict the number of business bankruptcies by the number of firm births.

Business Bankruptcies
(1000s) Y

34.3

35.0

38.5

40.1

35.5

37.9

Firm Births

(10,000s) X

58.1

55.4

57.0

58.5

57.4

58.0

(CO:2)

[Application]

PART C

Answer the following Questions.

(1Qx 14M= 14M)

9. The following times were recorded by the quarter-mile and mile runners of a university track team (times are in minutes).

Quarter-Mile Times: 0.92 0.98 1.04 0.90 0.99

Mile Times: 4.52 4.35 4.60 4.70 4.50

Using coefficient of variation determine the runners who are more consistent.

(CO:1)

[Application]