

1M6113

Roll No. _____

Total No of Pages: 3

1M6113

MBA I - Sem. (Main / Back) Exam., Dec. 2019
M-103A Business Mathematics & Statistics

Time: 3 Hours

Maximum Marks: 70
Min. Passing Marks: 28

Instructions to Candidates:

- (i) *The question paper is divided in two sections.*
- (ii) *There are sections A & B. Section A contains 6 questions out of which the candidate is required to attempt any 4 questions. Section B contains short case study / application based question which is compulsory.*
- (iii) *All questions carry equal marks.*

1. NIL

2. NIL

SECTION - A

Q.1 Calculate the Karl Person's coefficient of skewness for the following data – [14]

Age: 20-25 25-30 30-35 35-40

Number of persons: 50 70 80 180

Age: 40-45 45-50 50-55 55-60

Number of persons: 150 120 70 50

Q.2 Write briefly – [7×2=14]

(a) What is a sample?

(b) Define Mode.

- (c) Define correlation.
- (d) What are the various ways to represent data graphically?
- (e) Define regression.
- (f) List criteria for good measurement of central tendency.
- (g) Define variance.

Q.3 Calculate the coefficient of correlation between x and y using the following data - [14]

x	1	2	3	4	5	6	7	8	9
y	9	8	10	12	11	13	14	16	15

Q.4 Find mean, variance and SD for the following distribution – [14]

Class	20-30	30-40	40-50	50-60	60-70	70-80	80-90
f	3	61	132	153	140	51	2

Q.5 (a) What is skewness? How it is different from dispersion? [7]

(b) Define probability and explain importance of this concept. [7]

Q.6 “All statistical data are numerical statement of facts, but all numerical statements of facts are not statistical data.” Explain this statement, state the characteristics of statistical data. [14]

SECTION - B

Case Study

Q.7 Find out the regression equation by least square method from the following data – [14]

x	1	3	4	6	8	9	11	14
y	1	2	4	4	5	7	8	9
