AA354

M.B.A. EXAMINATION, May 2019

(First Semester)

(Old Scheme) (Re-appear)

MBA107

BUSINESS STATISTICS

Time : 3 *Hours*]   [*Maximum Marks :* 70

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit.

Unit I

1. Explain the concept of statistics. Differentiate between the descriptive and inferential statistics.

2. Calculate the Mean deviation (i) about mean (ii) about median for the following frequency distributions :

Class Interval	Frequency
0-10	6
10-20	18
20-30	20
30-40	36
40-50	20
50-60	10
60-70	7
70-80	2
80-90	1

Unit II

3. Distinguish between secular trend, seasonal variations and cyclical fluctuations.

4. Fit a straight line trend to the following data by the method of least square taking (i) 2010 as origin (ii) 2013 as origin. Estimate the sales for 2018. Plot the data on graph also.

Year   : 2011 2012 2013 2014 2015

Sales (Rs. Lakh) : 45   56   78   46   75

Unit III

5. Calculate coefficient of correlation by means of ranking method from the following data :

X : 40 50 60 60 80 50 70 60

Y : 80 120 160 170 130 200 210 130

6. Explain the following :

   (a) Standard Error of estimates

   (b) Properties of regression coefficients.

Unit IV

7. What is Chi-square test of goodness of fit ? What precautions are necessary while using this test ?

8. In a sample of 500 persons from a village in Punjab, 280 are found to be rice eaters and the rest wheat eaters. Can we assume that both food articles are equally popular ?