Unit III

5. For a set of 8 pair reading on X and Y, the coefficient of correlation is 0.65 and the standard deviation of Y series is 4.2. Find the standard error of Y on X.

6. "If two variables are independent, the correlation between them is zero, but the converse is not always true." Comment.

Unit IV

7. A group of 5 patients treated with medicine A weights : 42, 39, 48, 60 and 41 kg. In the light of the above data, discuss the suggestion that mean weight of the population is 48 kg. Test at 5% level of significance. (Given the table value of *t* for 4 d.f. at 5% level is 2.776).

AA-354

M.B.A. EXAMINATION, May 2017

(First Semester)

(Re-appear Only)

MBA-107

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. All questions carry equal marks.

Unit I

1. (a) Calculate the value of mode from the following data :

Marks	No. of Students
10-20	4
20-30	6
30-40	20
40-50	32
50-60	33
60-70	17
70-80	8
80-90	2

(b) Differentiate between descriptive statistics and inferential statistics.

2. Give the following frequency distribution for a department store, compute the following measures : (i) the quartile deviation (ii) the average deviation from the mean, (iii) the standard deviation and the coefficient of skewness.

Rupee Sales	No. of Sales Slip
0-100	9
100-200	21
200-300	42
300-400	17
400-500	6
500-600	5

Unit II

3. What do you mean by time series analysis ? Explain its uses in business decision making.

4. Construct the consumer price index number for 2014 on the basis of 2013 from the following data (i) Family Budget Method and (ii) Aggregate Expenditure Method.

Commodity	Rice	Wheat	Pulses	Ghee	Oil
Weights :	40	20	15	20	5
Price (Per Unit)					
2013 (Rs.)	16.00	40.00	0.50	5.12	2.00
Price (Per Unit)					
2014 (Rs.)	20.00	60.00	0.50	6.25	1.50

8. The following table gives the yields of four varieties of wheat grown in the following plots :

Plots	Varieties			
	A	B	C	D
1	200	230	250	300
2	190	270	300	270
3	240	150	145	180

Is there any significant difference in the production of these varieties ?