Salesman	Intelligence test Score	Weekly Sales
A	50	30
В	60	60
С	50	40
D	60	50
Е	80	60
F	50	30
G	80	70
Н	40	50
I	70	60

- (a) Obtain the Regression equation of sales on Intelligence Test scores of the salesmen.
- (b) If the Intelligence test score of a salesman is 65, what would be his expected weekly sales?

Unit IV

7. What is a Statistical Hypothesis? Clearly differentiate between the null hypothesis and alternative hypothesis.

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M.B.A. EXAMINATION, Dec. 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.

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P.T.O.

Unit I

- 1. What is Statistics? How do you think that the knowledge of statistics is essential in managerial decision making?
- **2.** Calculate the Mean, Median and Mode of the following data :

Marks	No. of Students
10-20	4
10-30	16
10-40	56
10-50	97
10-60	124
10-70	137
10-80	146
10-90	150

Unit II

3. What is time series ? State its utility in business.

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4. Calculate Laspeyre's Paasche's, Marshall-Edgeworth, Fisher's Ideal Index for the data:

	2014		2015			
Commodity	Price (Rs.)	Expenditure	Price (Rs.)	Expenditure		
		on quantity		on quantity		
		consumed		consumed		
		(Rs.)		(Rs.)		
Α	8	200	10	120		
В	20	120	12	96		
С	5	40	5	50		
D	10	56	3	60		
E	27	100	25	150		

Unit III

- 5. What is Correlation? Explain the various types of correlation. Does it always signify cause and effect relationship between the two variables.
- 6. The following data relate to the scores obtained by a salesman of a company in an intelligence test and their weekly sales (in Rs. 1000's):

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P.T.O.

8. You are working as a purchase manager for a company. The following information has been supplied to you by two manufacturers of electric bulbs:

	Company A	Company B
Mean Life (in Hours)	1300	1248
Standard Deviation	82	93
Sample Size	100	100

Which brand of bulbs are you going to purchase if you desire to take a risk of 5%.

8. You are working as a purchase manager for a company. The following information has been supplied to you by two manufacturers of electric bulbs:

	Company A	Company B
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