Total No. of Pages: 2

Register Number: **6744**

Name of the Candidate:

M.B.A. DEGREE EXAMINATION - 2011
(THREE YEAR PROGRAMME)
(FIRST YEAR)
(PAPER – IV)
140. BUSINESS MATHEMATICS AND STATISTICS

December)   (*Time: 3 Hours*

Maximum: 75 Marks

SECTION - A   (5 × 3 = 15)
Answer any FIVE questions.

1. (a) Give illustration for symmetric and skew symmetric matrix.

   (b) Explain the role of poission distribution.

   (c) What is hypothesis? Describe the steps in testing hypothesis.

   (d) Write the multiplication rule of probability.

   (e) Discuss the different types of correlation.

   (f) Explain the uses of regression analysis.

   (g) Explain the historical analysis theory.

   (h) Name the control charts used for variables.

SECTION – B   (3 × 10 = 30)
Answer any THREE questions

2. Calculate Mean Deviation from the following data

Mid Value:	5	3	1	1	3	5	7	9
Frequency:	7	15	20	12	7	9	4	3

3. Explain the steps in testing of hypothesis.

4. Find the regression lines of the data :

X:	10	8	4	9	12	15
Y:	6	8	12	9	10	14

5. Explain any two non – parametric tests?

6. Explain moving average model of trend analysis with its advantages and limitations.

SECTION – C   **(2 × 15 = 30)**

Answer any TWO questions.

7. Income of employees in a particular colony is normally distributed with mean of 15,000 and standard deviation of Rs. 3,000. There are around 2,000 employees. What is the probability of employees getting salary below Rs. 10,000. Calculate how many employees get salary above Rs. 18,000 and what is the salary level of employees getting the top 100 salary.

8. Explain different methods of Business forecasting.

9. Two brands of tyres are tested with the following results.

Life	Tyres brand	
	x	y
20 – 25	1	0
25 – 30	22	24
30 - 35	64	76
35 – 40	10	0
40 – 45	3	0

(a) Which brand of tyres has greater average life?

(b) Compare the variability and state which brand of tyres you would use in your fleet of truks?

10. A bag contains 2 white and 3 black balls. Four persons A, B, C and D in the order named each draw one ball and do not replace it. The person to draw a white ball receives Rs.200. Determine their expectations.

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