## Code :9EBS105

## M.B.A - I Semester Supplementary Examinations, August/September 2011 STATISTICAL METHODS FOR MANAGEMENT (For students admitted in 2009-10 & 2010-11 only) Max Marks: 60

## Time: 3 hours

## Answer any FIVE questions All questions carry equal marks \*\*\*\*\*

- 1. Explain various methods of data collection in statistics. State various methods of collecting the primary data.
- 2. Explain the method of construction of frequency waves and histogram.
- (a) Define arithmetic mean, geometric mean, harmonic mean and discuss their merits and 3. demerits.
  - (b) Calculate standard deviation to the following data:

Classes:	15-19	19-23	23-27	27-31	31-35	35-39
Frequency:	8	59	47	23	6	4

4. Explain with examples, different types of correlation and calculate correlation coefficient.

X:	10	9	8	7	6	5	4	3	2	1
Y:	25	23	20	16	12	12	10	8	5	4

- (a) What are regression lines? Explain why it is necessary to consider two regression lines. 5.
  - (b) Obtain the regression equations for the following.

X:	8	10	9	7	8	9	6	
Y:	2	3	4	2	5	4	6	ĺ

- (a) Explain Poisson distribution and write down their properties. 6.
  - (b) A die is thrown once find:
    - i. P(even number)
    - ii. P(a number  $\geq 3$ )
- (a) Explain basic laws of derivative. 7.
  - (b) Define the differential coefficient of a function.
- (a) Explain calculation of limits through derivative. 8.
  - (b) Explain elasticity.

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