

Roll No. 

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Total No. of Pages : 02

Total No. of Questions : 06

**MBA (Campus) (Sem.-1)**  
**QUANTITATIVE TECHNIQUES**

Subject Code : MBA-104

M.Code : 51184

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A contains SIX questions carrying TWO marks each and students have to attempt ALL questions.
2. SECTION-B consists of FOUR questions each carrying TEN marks each and student has to attempt ALL questions.
3. SECTION-C is consist of ONE Question carrying EIGHT marks.
4. All Questions are Compulsory.

**SECTION-A****1) Write a short notes on the following :**

- a. Discuss the applications of inferential statistics in managerial decision making.
- b. Explain the relationship between sample size and errors.
- c. Describe the significance of formulation of Hypothesis.
- d. Explain the concept of Standard Error.
- e. What is the significance of Time Series Analysis?
- f. Explain the 2 laws of Probability.

**SECTION-B**

- 2) What is meant by Sampling? Discuss and differentiate between probability and non-probability sampling.

- 3) Find the correlation coefficient between the following 2 variables :

|   |     |     |     |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| X | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 |
| Y | 85  | 74  | 89  | 79  | 93  | 102 | 110 | 96  | 115 |

- 4) What are Index Numbers? Discuss the various methods of its Construction.
- 5) Discuss and differentiate between Poisson, Normal and Binomial Distribution.

### SECTION-C

- 6) In a survey of young executives of a company, data was collected regarding their monthly incomes and monthly expenditure habits. Following figures were noted and tabulated.

|                                   |    |    |    |    |    |     |     |
|-----------------------------------|----|----|----|----|----|-----|-----|
| Income (in, 000 Rs)               | 50 | 60 | 70 | 80 | 90 | 100 | 110 |
| Average Expenditure (in, 000 Rs.) | 27 | 32 | 41 | 64 | 78 | 81  | 93  |

*Using regressional analysis, find out the average monthly expenditure of an executive who earns Rs. 150,000 p.m.?*

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**