

Jan. 2010

Roll No.

Subject Code—3168-X

M.B.A. EXAMINATION

(Second Semester)

(Re-appear)

CP-205

STATISTICAL ANALYSIS

Time : 3 Hours

Maximum Marks : 100

Note : Attempt any *Five* questions. All questions carry equal marks.

1. Explain the role of measures of central tendency and measures of variability. Give briefly the different measures of variability indicating the importance of each as also their relative merits.

2. It is known that 20 per cent of the males and 5 per cent of the females are unemployed in a certain town consisting of an equal number of males and females. A person is selected at random and is found to be unemployed. What is the probability that he is (i) male (ii) female ?
3. What do you understand by Sampling Distribution ? Explain the properties of sampling distribution of mean. Also discuss role of sampling distribution in hypothesis testing.
4. Explain the concept of statistical decision theory. Discuss the elements of decision-making and various methods of decision-making under uncertainty with suitable examples.
5. What is meant by statistical estimation ? Distinguish between point and interval estimation. Explain the construction of 95 percent confidence interval.

6. Distinguish between Parametric and Non-parametric Tests. Also explain important uses of Chi-square test with suitable examples.
7. Calculate Spearman's rank correlation coefficient for the following data :
- | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|----|
| X : | 74 | 67 | 90 | 72 | 55 | 75 | 80 | 50 |
| Y : | 118 | 130 | 145 | 120 | 100 | 140 | 143 | 90 |
8. Write notes on any *two* of the following :
- (a) Problems in construction of index number
 - (b) Components of time series
 - (c) Control charts for attributes.