

MMSR/D-13

BUSINESS STATISTICS

Paper—CP-102

Time allowed : 3 hours]

[Maximum marks : 70

Note : Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

1. Compulsory Question. Explain Briefly: 14

- (a) Coefficient of Determination
- (b) Census Vs. Sample
- (c) Three properties of Binomial distribution.
- (d) Skewness
- (e) Hypothesis testing
- (f) Splicing
- (g) Acceptance sampling

2. (a) Define conditional Probability.

- (b) The incidence of disease in an industry is such that the workers have 20% chances of suffering from it. What is the probability that out of six workers four or more will contract disease? 14

3. Discuss various Non-Random sampling methods along with their merits and demerits.

14

4. 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	1288
Std. Deviation (in hours)	82	93
Sample size	100	100

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

5. Differentiate the following: 14

- (a) Correlation and Regression Analysis.
- (b) Parametric tests and Non-Parametric test.

6. Write a detailed note on statistical quality control. 14

7. (a) What is an index number ? Discuss its importance in Business and Industry. 14

(b) Explain 2

- (i) Time Reversal test
- (ii) Factor Reversal test
- (iii) Circular test

8. Write notes on following: 14

- (a) Time series Analysis.
- (b) Projection of Trend.