Roll No. ....

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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 Bionomial 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 alongwith 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

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(2)

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 :
      (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.

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