



Data Analytics

Maximum Marks: 70

Date:07.02.2025 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(5X4M=20 Marks)

- 1 Write about data analytics?
- 2 Discuss about Data modeling.
- 3 Write about Simple & Multiple regression?
- 4 Define Partition Data.
- 5 Write the Steps in Monte-Carlo simulation model?

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 6 Discuss business analytics, objectives, role & functions of data analytics. [10]

OR

- 7 What is Data Visualization? What are different Data Visualization tools? [10]

- 8 Differentiate Mean & Median and compute mean for the following data: [10]

Class Interval	0-20	20-40	40-60	60-80	80-100
Frequency	30	45	40	50	60

OR

- 9 What is the need of probability distributions and discuss its types and limitations? [10]

- 10 Differentiate correlation, regression and rank correlation? [10]

OR

- 11 Fit regression lines for the following data: [10]

Output (In Thousands of Nos.)	4	6	8	10	12	14	16	18
Cost (Rs. Lakhs)	30	40	50	55	60	65	70	75

- 12 Discuss cluster analysis, its rules, objectives & limitations. [10]

OR

- 13 Differentiate Classification & Regression Trees? [10]

- 14 How random numbers are generated and list out various steps in Monte-Carlo Simulations along with its limitations. [10]

OR

- 15 What is Decision Tree Analysis? Formulate hypothetical Decision Tree Problem of your own & Identify Joint Probability for it? [10]