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**Paper Code : DSE 3-E2**

**(Introduction to Data Science)**

**Group - A**

1. Answer any *six* questions :

2×6=12

- (a) What is Variance?
- (b) What are the different measures of central tendency?
- (c) How to create a data frame from an n-d array?
- (d) What is Sensitivity?
- (e) Differentiate between model underfitting and overfitting.
- (f) Explain Histogram.
- (g) Explain z-score briefly.

**Group - B**

Answer any *two* questions.

10×2=20

- 2. (a) Explain performance metrics for binary classification problem.
- (b) Explain the advantages of decision tree. 7+3=10

P.T.O.

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3. (a) Fit a Simple Linear Regression model for the following dataset.

X	Y
2	10
2	6
11	11
6	9
6	4
1	2
5	10
4	9

(b) Explain confusion matrix.

7+3=10

4. (a) Explain Data-preprocessing for supervised learning.

(b) Explain heatmap.

7+3=10

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