D 130679 (Pages : 2) Name...

Reg. No...................................

FIFTH SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2025

Data Science and Analytic

SDC5DS21—INTRODUCTION TO DATA ANALYTICS

(2021 Admissions)

Time : Two Hours and a Half   Maximum : 80 Marks

Section A

Answer **all** *questions.*
Each question carries 2 marks.

1. Define data analytics.

2. What is mean by data categorization ?

3. Write types of Data Analytics.

4. What is the use of chi-square test ?

5. Describe Analysis of Variance (ANOVA).

6. What is the use of Scatter Diagramin correlation coefficient ?

7. List out and explain benefits of MaximumLikelihood Estimation.

8. What is Hypothesis Testing in Statistics ?

9. Write association rule with the help of example transactions.

10. Which are the types of data classification ?

11. Briefly explain Density-based Clustering.

12. What are the clustering requirements ?

13. Which are the association rule learning algorithm ?

14. Explain two main tasks of Map Reduce.

15. Describe feature engineering and visualization.

(15 × 2 = 25 Marks)

Section B

Answer **all** *questions.*
Each question carries 5 marks

16. Explain different level of measurements in statistics?

17. Briefly explain types of data management.

18. Which are different categories of t-test ? Explain with example.

19. Describe different Steps of Hypothesis Testing.

20. Explain multiple linear regression with example.

21. List out and explain two classifiers in Machine Learning.

22. Explain Evaluation Metrics for Association Rule Mining.

23. Describe Hadoop Architecture briefly.

(8 × 5 = 35 marks)

Section C

Answer any **two** *questions.*
Each question carries 10 marks.

24. Explain Data analysis process.

25. Write about various types of Hypothesis Testing.

26. Explain Association Rule Mining.

27. Describe Sensitivity Analysis in detail.

(2 × 10 = 20 marks)