

**D 143406**

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Name.....

Reg. No.....

**SECOND SEMESTER B.Voc. DEGREE EXAMINATION, APRIL 2026**

Data Science and Analytics

SDC 2D S07—DATA MINING TECHNIQUES

(2021 Syllabus)

Time : Two Hours

Maximum : 60 Marks

**Section A***Answer all questions.**Each question carries 2 marks. (Ceiling : 20 marks)*

1. Define a Data Warehouse.
2. State two differences between Operational databases and Data warehouses.
3. Define fact table with example.
4. What is drill-down operation in OLAP ?
5. Define data mining and mention one real-world application.
6. What is data cleaning ?
7. Define frequent itemset.
8. What is confidence in association rules ?
9. Define decision tree.
10. Define Data Cube with an example.
11. What is text mining ?
12. What is Naïve Bayes classifier.

(Ceiling : 20 marks)

**Section B (Short Essay Type Questions)***Answer all questions.**Each question carries 5 marks. (Ceiling : 30 marks)*

13. Compare operational database and data warehouse.
14. Explain star schema with suitable example.
15. Describe data preprocessing steps involved before mining.
16. Explain Apriori algorithm for frequent itemset generation.

**Turn over**

17. Explain classification using decision tree with example.
18. Describe hierarchical clustering method.
19. Explain web mining and its applications.

(Ceiling : 30 marks)

**Section C (Essay Type Questions)**

*Answer any **one** question.  
The question carries 10 marks.*

20. Explain data warehouse architecture with neat diagram and describe each component.
21. Explain Support Vector Machine classification technique. Compare it with Bayesian classification.

(1 × 10 = 10 marks)