24P363 (Pages: 2) Name: .....

Reg.No: .....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19PCSS3E02F - DATA WAREHOUSING AND DATA MINING

(Computer Science)

(2019 Admission onwards)

Time : 3 Hours Maximum : 30 Weightage

Part-A

Answer any ***four*** questions. Each question carries 2 weightage.

1. What types of data are typically stored in a data warehouse, and how are they structured?
2. How does data integration differ from data transformation in the context of data pre-processing?
3. Explain how to select attributes for creating a decision tree index.
4. How would you differentiate between clustering numerical and categorical data in terms of the algorithms and distance measures used?
5. Examine the challenges of integrating domain knowledge through constraints in high-dimensional data.
6. Analyze the challenges type of data presents for mining algorithms.
7. What are the techniques of spatial data mining?

(4 × 2 = 8 Weightage)

Part-B

Answer any ***four*** questions. Each question carries 3 weightage.

8. Explain various schemas of a data warehouse.
9. Can you explain the key components of a data warehouse architecture?
10. How would you evaluate the effectiveness of constraint-based association mining compared to traditional association rule mining in a specific use case?
11. Explain classifier accuracy measures.
12. Elaborate the clustering method with an algorithm for each category.
13. Analyze the challenges of using hierarchical clustering for large datasets.
14. Critically evaluate the role of feature extraction in both multimedia and text mining.

(4 × 3 = 12 Weightage)

Part-C

Answer any ***two*** questions. Each question carries 5 weightage.

15. Explain the data mining functionalities.with neat diagram explain in detail the knowledge discovery process

16. Explain the data pre-processing techniques in detail.

17. What is Backpropagation in neural networks?

18. Explain how the K-Nearest Neighbors (KNN) algorithm works in data mining.

(2 × 5 = 10 Weightage)

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