25093

M.Sc. DEGREE EXAMINATION, APRIL 2018.

Computer Science

SECOND SEMESTER

Paper III — DATA MINING

Time : Three hours | Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

1. Compare data mining with knowledge discovery.

2. Discuss the issues and metrics in data mining in detail.

3. Describe the purpose of rule-based algorithms.

4. Give a note on various classification methods.

5. Define hierarchical clustering.

6. What is outlier analysis?

7. What are the Spatial Data mining primitives?

8. Give an overview on the spatial data.

PART B — (4 × 15 = 60 marks)

Answer ONE question from each Unit.

Each question carries 15 marks.

9. With a neat diagram explain the architectural components of data warehouse.

Or

10. Differentiate and explain OLTP system and OLAP system.

11. Write and explain about the decision tree-based algorithm.

Or

12. Write and explain about the neural network-based algorithm.

13. Explain the Apriori algorithm. Also explain how the association rules are generated from frequent item sets.

Or

14. Discuss the following clustering algorithms using examples.
    (a) Hierarchical Clustering
    (b) Partitional Clustering.

15. Explain the following with art example :
    (a) Web content mining
    (b) Web structure mining
    (c) Web sage mining.

Or

16. List and explain the various spatial classification and clustering algorithms.