

Answered

Code No. : 6745

FACULTY OF SCIENCE

M.Sc. IV Semester Examination

April - 2006

Computer Science

Paper-4.1 Data Warehousing and Data Mining

9/10
282

Time : 3 Hours]

[Max. Marks : 100

Note : Answer All questions.

SECTION- A

(8 × 5 = 40)

1. ✓ What are the steps used for data warehouse design process ?
2. What kinds of OLAP servers exist ? Explain them briefly. 2)
3. Where aggregation operations are applied to the data in the construction of a data cube ?
4. Write the Back room services of a warehouse.
5. The princer search algorithm finds only maximal frequent sets – Comment.
6. What is the incremental discovery of an association rule ? Discuss the important features of the algorithm.
7. What are the different tasks of time series mining ?
8. Explain briefly the concept of support vector machines.



SECTION-B

(4 × 15 = 60)

9. (a) Explain the Star schema, Snowflake schema and Constellation schemas with suitable examples and diagrams.
- (b) How data marts differ from data warehouses ?

OR

- (c) What are the steps used for constructing data warehouse ? Explain with a suitable example.
- (d) Why do we need data warehouse ? How it is different from a database ?

10. (a) Explain the front room services.
- (b) How can the data be pre-processed so as to improve the efficiency and ease of the mining process ?

OR

- (c) Compare and contrast ROLAP with MOLAP.
- (d) Explain the Fact table and Dimension tables with suitable examples.

11. (a) Define a core object. Define density reachability. Why is density reachability not a symmetric function ?
- (b) Describe the salient features of CURE clustering techniques.

OR

- (c) Compare PAM algorithm performance with CLARA and CLARANS.
- (d) Explain the Dynamic Item Set Counting Algorithm.

12. (a) Explain the following terminologies with suitable examples.
- (i) Sequence and Frequent Sequence
- (ii) Rough sets.
- (iii) Kohonen's SOM.

OR

- (b) Describe different pruning strategies.
- (c) "Decision tree classification is a supervised classification." – Justify.