

B.Tech III Year II Semester (R09) Supplementary Examinations January/February 2014

DATA WAREHOUSING AND DATA MINING

(Information Technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) List and describe the primitives of data mining task.
(b) Explain data cleaning, data integration and transformation.
- 2 (a) Differentiate between OLAP and OLTP.
(b) Draw and explain the star schema for the data warehouse.
- 3 List and explain the five techniques to improve the efficiency of apriori algorithm with an example.
- 4 Can we get classification rules from decision tree? If so how? What are the enhancements to the basic decision tree?
- 5 Describe each of the following clustering algorithms in terms of the following criteria:
(a) Shapes of clusters that can be determined.
(b) Input parameters that must be specified.
(c) Limitations:
 (i) K-means
 (ii) K-medoids
 (iii) BIRCH
 (iv) DBSCAN.
- 6 (a) In mining sequence data define:
 (i) Time series.
 (ii) Symbolic sequence.
 (iii) Biological sequence.
(b) Explain sequential pattern in symbolic sequence.
- 7 What is spatial data mining? Explain construction of spatial data cube and spatial OLAP.
- 8 (a) What are the differences between visual data mining and data visualization?
(b) Propose visualization method that will help users to see network topology of social network.
