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Fifth Semester MCA Degree Examination, June/July 2011
Data Mining and Warehousing

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1
 - a. What is datamining? Explain the process of knowledge discovery in databases (KDD) in detail. (10 Marks)
 - b. Explain data mining functionalities in brief. (10 Marks)
- 2
 - a. Briefly explain about various data models for data warehouse. (10 Marks)
 - b. Briefly explain 3 – tier architecture of data warehouse. (10 Marks)
- 3
 - a. Why to preprocess data? Explain various techniques of data preprocessing. (08 Marks)
 - b. Explain data mining primitives in brief. (06 Marks)
 - c. What is back ground knowledge? How concept hierarchies allow discovering knowledge at multiple levels of abstraction? (06 Marks)
- 4
 - a. Demonstrate apriori algorithm for finding frequent itemsets using candidate generation. (12 Marks)
 - b. Explain various methods for improving efficiency of Apriori algorithm. (08 Marks)
- 5
 - a. What is classification and prediction? Explain issues regarding classification and prediction. (10 Marks)
 - b. What is decision tree? Explain classification by decision tree induction. (10 Marks)
- 6
 - a. What are Bayesian classifiers? Explain Bayes theorem. (08 Marks)
 - b. Explain Naïve Bayesian classification. (06 Marks)
 - c. What is back propagation? How does it work? (06 Marks)
- 7
 - a. What is cluster analysis? Explain centroid – based technique (K – means method) for clustering n objects given in a database. (08 Marks)
 - b. Explain about COBWEB in brief. (06 Marks)
 - c. Explain data mining applications in brief. (06 Marks)
- 8 Explain the following :
 - a. Architecture of typical data mining system. (05 Marks)
 - b. Concept Hierarchy. (05 Marks)
 - c. DMQL. (05 Marks)
 - d. CURE algorithm. (05 Marks)