

**B. TECH. IN COMPUTER SCIENCE
ENGINEERING (BTCSVI)**

Term-End Examination

December, 2013

BICS-020 : DATA WAREHOUSING AND MINING

Time : 3 Hours

Maximum Marks : 70

Note : Attempt any seven questions. All questions carry equal marks. Assume suitable missing data, if any.

1. (a) Define data mining. Give some alternative terms for it. 5
- (b) What is KDD (Knowledge Discovery in Database) ? What are the steps involved in KDD process ? 5
2. (a) What is the use of knowledge base ? 5
- (b) Define predictive model. Explain briefly the data mining tasks that belong to predictive model. 5
3. (a) How are association rules mined from large data bases ? 5
- (b) What is the classification of association rules based on various criteria? 5
4. What do you mean by cluster Analysis ? What are the different types of data used for it and what are the typical requirements of clustering in data mining ? 10

5. (a) Describe Data classification. 5
(b) Write the preprocessing steps that may be applied to the data for classification and prediction. 5
6. (a) What is data mart ? When is data mart appropriate ? 5
(b) What are various forms of data processing ? 5
7. (a) Explain briefly the significance of tuning the data warehouse. 5
(b) Explain the basic levels of testing a data warehouse. 5
8. (a) How are dimension tables designed ? 5
(b) Discuss spatial data mining. 5
9. (a) Differentiate between the star schema and the snowflake schema. Which is popular in data warehouse design ? 5
(b) What is meant by pattern ? 5
10. Write short notes on **any two** : 5x2=10
(a) Data mining applications.
(b) Hyper cubes.
(c) Smoothing techniques.
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