

**B.Tech. – VIEP – COMPUTER SCIENCE AND
ENGINEERING (BTCSVI)**

Term-End Examination

00786

June, 2016

BICS-020 : DATA WAREHOUSING AND MINING

Time : 3 hours

Maximum Marks : 70

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

1. (a) What is data mining ? Describe the steps involved in data mining when viewed as a process of knowledge discovery. 5
- (b) Draw and explain the architecture of a typical data mining system. 5

2. List out various data mining techniques. Explain in detail about any two data mining techniques with one example each. 10

3. (a) Explain data scrubbing tools and data auditing tools with examples. 5
- (b) List the types of data used in cluster analysis. 5
4. (a) Define 'Aggregation' and 'Approximation' with respect to spatial data. 5
- (b) Differentiate between OLTP and OLAP. 5
5. (a) Explain in brief about ETL (Extraction/Transformation/Loading) process. 5
- (b) Write and explain the characteristics of metadata. 5
6. (a) Explain in brief about 'data mart'. How is it different from a 'database'? 5
- (b) Explain KDD process. 5
7. What do you mean by data reduction? What are the strategies of data reduction? 10
8. (a) What do you mean by subject-oriented, integrated, time-variant and non-volatile collection of data in data warehouse? 5
- (b) Differentiate between star schema and snowflake schema with examples. 5

9. (a) Explain Market Basket Analysis. 5

(b) Explain the concept of classification. 5

10. Write short notes on any *two* of the following: $2 \times 5 = 10$

(a) Cluster Analysis

(b) World Wide Web

(c) Hypercubes
