

Total No. of Questions : 6]

SEAT No. :

P168

[Total No. of Pages : 2

OCT/BE/Insem.-97

B.E. (Computer Engineering)

DATA MINING TECHNIQUES AND APPLICATIONS

(2012 Pattern) (Elective - I) (Semester - I)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume Suitable data if necessary.

**Q1)** a) What are the major steps in data preprocessing? Explain any three in brief. [6]

b) Compare OLTP with OLAP. [4]

OR

**Q2)** a) Explain any three methods to handle missing values. [6]

b) Explain the knowledge discovery in databases (KDD) with diagram. [4]

**Q3)** a) Explain generation of association rule using Apriori algorithm. [6]

b) What is Support and Confidence in association rule mining? Explain. [4]

OR

**Q4)** a) Explain Multilevel association rules and Uniform Support. [5]

b) What are applications of Market basket analysis? [5]

P.T.O.

- Q5)** a) Write and explain K-Nearest-Neighbor Classification Algorithm. [6]  
b) Differentiate between Supervised learning & Unsupervised learning. [4]

OR

- Q6)** a) Explain Accuracy, Precision and Recall performance metrics that are used to evaluate various classifiers. [6]  
b) Explain Bayes Theorem in short. [4]

