MCA DEGREE V SEMESTER EXAMINATION NOVEMBER 2015

CAS 2503/2504/2505 DATA MINING

(Regular and Supplementary)

Time: 3 Hours

Maximum Marks: 50

PART A

(Answer ALL questions)

 $(15 \times 2 = 30)$

- I. (a) Mention the strategies of data mining.
 - (b) Reveal the theories that portray the basis of the data mining.
 - (c) Differentiate descriptive and predictive tasks.
- II. (a) Illustrate stem and leaf plots with an example.
 - (b) Explain the terms slicing and dicing.
 - (c) What do you understand by the term 'data cube'?
- III. (a) What is meant model over fitting?
 - (b) Define classification. Give an example of a classification problem.
 - (c) Illustrate the use of a decision tree with an example.
- IV. (a) Explain the Apriori principle.
 - (b) Give any one approach for evaluating association patterns.
 - (c) Distinguish between support and confidence.
- V. (a) Distinguish between complete and partial clustering.
 - (b) Give the basic k-means algorithm.
 - (c) What are the applications of anomaly detection?

PART B

 $(5 \times 4 = 20)$

VI. Explain the architecture of data mining.

OR

- VII. Explain different types of data pre processing methods.
- VIII. What do you understand by the term 'data visualization'? Discuss methods to visualize higher dimensional data.

OR

- IX. Discuss different ways to analyze multi dimensional data.
- X. Write a note on decision tree induction.

OR

- XI. Give the k-nearest neighbor classification method. Outline the major characteristics of nearest neighbour classifies.
- XII. Explain Apriori method for frequent item set generation.

OP

- XIII. Discuss different methods for evaluating association patterns.
- XIV. Explain different types of clusterings.

OR

XV. Give a detailed description of the DBSCAN algorithm.