Reg. No. | | | | | | | | | |

BCACAC 212

Credit Based Third Semester B.C.A. Degree Examination, October/November 2017
(Common to all Batches)
DATA MINING

Time : 3 Hours Max. Marks : 80

***Note** : Answer **any ten** questions from Part – **A** and **one full** question from **each** Unit in Part – **B**.*

PART – A **(10×2=20)**

1. a) Define data mining.
   b) What is dimension modeling ?
   c) Define slicing and dicing operations of OLAP.
   d) List different types of frequent episodes.
   e) List the structures used in Dynamic Itemset Counting Algorithm.
   f) Define FP-tree.
   g) Define clustering.
   h) What is splitting criterion ?
   i) Define index node and reference node.
   j) What is page rank ?
   k) Define temporal data mining.
   l) What is spatial data mining ?

PART – B

Unit – I

2. a) Explain any five application areas of data mining.
   b) Explain fact constellation schema with a diagram.
   c) Explain the different stages of KDD. **(5+5+5)**

3. a) With a diagram, explain the data warehouse architecture.
   b) Explain various issues and challenges of data mining.
   c) With a neat diagram, explain snowflake schema. (5+5+5)

Unit – II

4. a) Explain Apriori algorithm.
   b) Differentiate agglomerative and divisive clustering.
   c) Write a note on DBSCAN. (6+5+4)
5. a) Explain partition algorithm.
   b) Compare categorical and numerical clustering.
   c) Write a note on PAM. (6+4+5)

Unit – III

6. a) Explain decision trees with suitable example.
   b) Describe the learning technique in Multi Layer Perceptron.
   c) Explain support vector machine. (5+5+5)
7. a) Explain how RBF networks are trained.
   b) Write a note on Rough Set Theory.
   c) Explain the genetic algorithm. (5+5+5)

Unit – IV

8. a) What are the features of unstructured text ? Explain.
   b) Explain the different types of temporal data mining tasks.
   c) Write a note on web structure mining. (6+5+4)
9. a) Write a note on GSP algorithm.
   b) Write a note on web usage mining.
   c) Explain episode discovery. (5+5+5)