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

BCACAC 212

Credit Based Third Semester B.C.A. Degree Examination, November/December 2018
DATA MINING
(Common to All Batches)

Time : 3 Hours Max. Marks : 80

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

PART – A **(10×2=20)**

1. a) Define Data Cube.
   b) Define data mining.
   c) What is supervised learning ?
   d) Define FP tree.
   e) Define slicing and dicing operations of OLAP.
   f) List the structures used in Dynamic Item set Counting algorithm.
   g) Define clustering.
   h) What is splitting criterion ?
   i) Define Index and Reference node.
   j) What is spatial data mining ?
   k) What is page rank ?
   l) What is neural network ?

PART – B

Unit – I

2. a) Explain fact constellation with an example.
   b) Explain different stages of KDD.
   c) Explain data warehouse back end process. **(5+5+5)**

3. a) What is summary measures ? Explain.
   b) Explain the data warehouse architecture with neat diagram.
   c) What is a data mart ? Describe its types. **(4+7+4)**

Unit – II

4. a) Explain Apriori algorithm with an example.
   b) Differentiate agglomerative and divisive clustering techniques.
   c) Write a note on DBSCAN. **(6+5+4)**

5. a) Explain Partition algorithm with an example.
   b) Compare categorical and numerical clustering.
   c) Write a note on CLARA. **(5+5+5)**

Unit – III

6. a) List advantages and drawbacks of decision trees.
   b) What is RBFN ? Explain with a neat sketch.
   c) Explain the mutation and crossover operations in genetic algorithm. **(5+4+6)**

7. a) Explain the structure of an Artificial Neuron with neat diagram.
   b) Explain SVM.
   c) What is rough set ? Explain with an example. **(4+5+6)**

Unit – IV

8. a) Write a note on Web Content Mining.
   b) What are the features of unstructured text ? Explain.
   c) List and explain various temporal data mining tasks. **(4+5+6)**

9. a) Write a note on Web Structure Mining.
   b) Write a note on GSP algorithm.
   c) Explain episode discovery. **(5+5+5)**
