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

BCACAC 212

III Semester B.C.A. Degree Examination, October/November 2019

(Credit Based Semester Scheme)

(Common to All Batches)

DATA MINING

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

1. Answer **any ten** of the following : **(10 × 2 = 20)**

   (a) Define Data Mining.

   (b) What is Supervised Learning?

   (c) Define Border Set and Maximal Frequent Set.

   (d) What is FP tree?

   (e) List the structures used in Dynamic Itemset Counting Algorithm.

   (f) Write the two advantages of Decision Trees.

   (g) Define Clustering.

   (h) What is Splitting Criterion?

   (i) Define Rough Set.

   (j) What is Neural Network?

   (k) What is Spatial Data Mining?

   (l) List the types of Temporal Data.

PART – B

UNIT – I

2. (a) Explain any five application areas of data mining.

   (b) With a diagram, explain the Data Warehouse Architecture.

   (c) Compare Data Mining and DBMS. **(5 + 7 + 3)**

3. (a) Explain the different stages of KDD.
   (b) Explain the following OLAP operations with neat diagrams.
      (i) Drill Up
      (ii) Dicing
   (c) With a neat diagram explain Star Schema. **(5 + 5 + 5)**

UNIT – II

4. (a) Explain Apriori Algorithm.
   (b) Write a note on CLARA.
   (c) Differentiate agglomerative and divisive clustering. **(5 + 5 + 5)**

5. (a) Write a note on decision tree construction principle.
   (b) Explain Partition Algorithm.
   (c) Write a note on DBSCAN. **(5 + 5 + 5)**

UNIT – III

6. (a) Write a note on Best Split.
   (b) Explain the Support Vector Machines.
   (c) Describe the Learning Technique in Multi Layer Perception. **(5 + 5 + 5)**

7. (a) Write a note on Rough Set Theory.
   (b) Explain Decision Tree with suitable example.
   (c) Explain Genetic Algorithm. **(5 + 5 + 5)**

UNIT – IV

8. (a) Explain the features of Unstructured Text.
   (b) Explain the types of Web Usage Mining.
   (c) Explain Episode Discovery. **(5 + 5 + 5)**

9. (a) Write a note on Web Mining.
   (b) Explain various Temporal Data Mining Tasks.
   (c) Explain Sequence Mining with suitable example. **(5 + 5 + 5)**