Reg. No. ☐☐☐☐☐☐☐☐

BCACAC 283

Choice Based Credit System Fourth Semester B.C.A. Degree Examination, September 2022

(2020-21 Batch Onwards)

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) What is Data Mining ?
   b) What is Data Cube ?
   c) What is Operational Data ?
   d) Define Support and Confidence.
   e) Define Rough Set.
   f) Write the features of efficient algorithm.
   g) What is Tournament selection ?
   h) Define Noise.
   i) Mention two application of genetic algorithm in data mining.
   j) What is Stemming ?
   k) What is Co-citation ?
   l) Define Stop-words.

PART – B

Unit – I

2. a) Explain the stages of KDD.
   b) Explain the related areas in which data mining is widely used.
   c) Explain the three-level architecture of data warehouse.   (5+5+5)

3. a) State the differences between KDD and data mining.
   b) Describe with example any two warehouse schema.
   c) Explain briefly any five application areas of data mining.   (5+5+5)

P.T.O.

Unit – II

4. a) Explain Apriori algorithm with an example.
   b) Write advantage and disadvantages of decision tree.
   c) Describe the application areas of neural networking. (5+5+5)

5. a) What is unsupervised learning ? Explain.
   b) Explain support vector machine.
   c) Define rough sets and information system. (5+5+5)

Unit – III

6. a) Differentiate agglomerative and divisive clustering.
   b) Write a note on PAM.
   c) Explain cross over operation in genetic algorithm. (5+5+5)

7. a) Describe the technique of Genetic algorithm.
   b) Explain categorical clustering algorithms.
   c) Explain roulette wheel selection and rank based selection. (5+5+5)

Unit – IV

8. a) Write a note on web text mining.
   b) Explain the two main approaches in web usage mining.
   c) Explain GSP algorithm. (5+5+5)

9. a) Explain the relationship between information retrieval and information extraction in text data mining.
   b) Write a note on web usage mining.
   c) Explain the types of temporal data. (5+5+5)

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