K17U 0427

Reg. No. : .....

Name : .....

VI Semester B.C.A. Degree (CBCSS – Regular) Examination, May 2017
(2014 Admn.)
Core Course in BCA
6B18BCA : DATA MINING AND DATA WAREHOUSING

Time : 3 Hours Max. Marks : 40

SECTION – A

1. **One** word answer : **(8×0.5=4)**

   a) A _____ is a subject oriented, integrated, time-varying, non-volatile collection of data in support of the management's decision making process.

   b) The _____ operation performs a selection on one dimension of the given data cube, resulting in a subcube.

   c) The task of grouping set of objects in such a way that objects in the same group are more similar to each other than to those in other groups is called

   d) _____ and _____ are two commonly used measures to select interesting association rules.

   e) BIRCH is an example for a _____ type clustering algorithm.

   f) _____ clustering technique start with as many clusters as there are records, with each cluster having only one record.

   g) The set of data normally used to build the classifier model is termed as

   h) _____ provides an information-theoretic approach to measure the goodness of a split.

SECTION – B

Write short notes on **any seven** of the following questions : **(7×2=14)**

2. What do you mean by the term "Data Cube" ?
3. List out various OLAP operations.
4. What is machine learning ?

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5. What is sequence mining ?
6. Explain the concept behind a frequent itemset.
7. What is an FP tree ?
8. What are the two main approaches to clustering ?
9. Define the term "inter-attribute summary".
10. What is a decision tree ?
11. What is the use of count matrix in decision tree induction ?

SECTION – C

Answer **any four** of the following questions : **(4×3=12)**

12. Explain about the conceptual basic components of a multidimensional data model.
13. Distinguish between DBMS and Data Mining.
14. Describe the working of Partition Algorithm in association rule mining.
15. Describe the underlying principle behind DBSCAN clustering algorithm.
16. What are the advantages and disadvantages of decision tree approach over other classification approaches ?
17. Explain about any two decision tree construction algorithms.

SECTION – D

Write an essay on **any two** of the following questions. **(2×5=10)**

18. Briefly discuss about various data warehouse backend processes.
19. Explain different application areas where data mining is used.
20. Discuss the following data mining models :
    a) Genetic Algorithm
    b) Neural Networks
21. Write short notes on :
    a) Pincer-search Algorithm
    b) K-Medoid clustering algorithm.

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