Total number of printed pages–3

44 (6) BCA–6·1·2 (EL)

2023

DATA MINING AND WAREHOUSING

Paper : BCA–6·1·2

Full Marks : 80

Time : Three hours

The figures in the margin indicate full marks for the questions.

1. Answer the following questions : 1×5=5

   (a) What is data-mining ?

   (b) Define clustering.

   (c) Define promoted border set.

   (d) What do you mean by OLAP operation ?

   (e) What is frequent set ?

2. Answer the following questions :

   (a) Explain data warehouse architecture and its components. 8

Contd.

Or

What is OLAP ? Explain different OLAP operation.

(b) What is data warehouse ? Why data warehouse is said to be subject oriented and time variant ? 1+4=5

3. Answer the following questions : ***(any four)*** 5×4=20

(a) Explain KDD process.

(b) Explain the different technique of data-mining.

(c) What are the main differences between partitional and hierarchical clustering ?

(d) Explain the tree construction principle.

(e) What are the different types of data in clustering ? Explain with examples.

(f) Explain PAM.

4. *(a)* Explain the following terms : 5

Border set, promoted border set, core object, support, Euclidean distance.

(b) Explain the differences between database systems and data warehouse. 3

(c) Write the different steps of Apriori algorithm. 10

Or

Explain pincer search algorithm.

5. (a) What is cluster feature in CF tree ? How can we design CF tree in BIRCH algorithm ? 4+6=10

Or

Explain DBSCAN algorithm.

(b) What are the strength and weakness of K-means in comparison with K-medoids ? 4

6. Write short notes on : ***(any two)*** 5×2=10

(a) CART

(b) Temporal mining

(c) Web mining

(d) Decision tree