SW-109

Seat
No.

B.C.A. (COMM) (CBCS) Part-III (Sem.-V)
Examination, March 2024.
Data Warehousing And Data Mining
Sub. Code : 88233
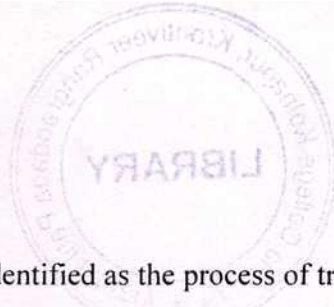
Day and Date: Wednesday, 27-03-2024
Time: 10.30 a.m. to 01.30 p.m.

Total Marks: 70

Instructions:
1) Q.1 and Q.6 are compulsory and attempt ANY THREE questions from Q.2 to Q.5.
2) Figures to the right indicate full marks.

Q.1 a) Choose the correct options. **(10)**

1) Where is data warehousing used?
   - (A) Transaction system
   - (B) Logical system
   - (C) Decision support system
   - (D) None of these

2) Data Warehouse is needed for ....
   - (A) to store historical data.
   - (B) to make strategic decisions.
   - (C) data consistency and quality.
   - (D) All of these.

3) Data mining is also called ....
   - (A) Online Transactional Processing
   - (B) Knowledge Discovery in Database
   - (C) Knowledge Detect from Database
   - (D) None of these

4) Identify the type of relationship between fact and dimension table in a star schema.
   - (A) One to one
   - (B) Many to many
   - (C) One to many
   - (D) Many to one

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5) .... is identified as the process of transforming data into the appropriate required form required by the mining procedure.

   (A) Selection   (B) Extraction

   (C) Transformation   (D) None of these

6) From where are classification rules extracted?

   (A) Branches

   (B) Decision tree

   (C) Siblings

   (D) Root node

7) What are the functions of Data Mining?

   (A) Association and correctional analysis classification

   (B) Prediction and characterization

   (C) Cluster analysis and Evolution analysis

   (D) All of these

8) Which of the following is also used as the first step in the knowledge discovery process?

   (A) Data selection   (B) Data cleaning

   (C) Data transformation   (D) Data integration

9) Which one of the following can be considered as the final output of the hierarchal type of clustering?

   (A) A tree which displays how close the things are to each other.

   (B) Assignment of each point to clusters

   (C) Finalize estimation of cluster centroids

   (D) None of these

10) DSS in data warehouse stands for ....

   (A) Decision single system

   (B) Decision support system

   (C) Data support system

   (D) Data storable system

Q.1 b) **Write short answers. (Any two)** **(10)**

    1)   Differentiate between database system and data warehouse.

    2)   Discuss functionalities issues in data mining.

    3)   Discuss Apriori algorithm.

Q.2 What is data warehousing? Describe components of data warehousing. **(10)**

Q.3 Define data mining. Explain its process in detail. **(10)**

Q.4 What is classification and prediction? Discuss a classification by decision tree. **(10)**

Q.5 Discuss different clustering methods in detail. **(10)**

Q.6 **Write short notes. (Any four)** **(20)**

    1)   Clean and transform data in data warehouse

    2)   Online analytical processing

    3)   Tree algorithm

    4)   3 tier data warehouse architecture

    5)   Rule based classification

    6)   Cluster analysis