JB-003-003621   Seat No. _____

B. C. A. (Sem. VI) (CBCS) Examination

August – 2019

CS - 32 : Data Warehouse and Data Mining

Faculty Code : 003
Subject Code : 003621

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

1   Attempt following :   **20**

    (1)   _____ is source of data warehouse.

    (2)   _____ intermediate storage area between the sources of information and the data warehouse or Data mart.

    (3)   _____ is normalized form of star schema.

    (4)   ROLAP stands for : _____

    (5)   What is metadata.

    (6)   Define data mining.

    (7)   _____ structure is followed by data mart.

    (8)   _____ key is substitute for the natural primary key.

    (9)   _____ method is used for hypothesis statical testing.

    (10)   The star schema is composed of _____ fact table.

    (11)   Write down Full form and equation of MSE.

    (12)   What do you mean by outlier.

    (13)   A Process of removing duplicate records is called _____.

    (14)   AI stands for :

    (15)   Which are two types of hierarchical clustering ?

    (16)   _____ OLAP techniques stores data in cubes.

    (17)   _____ is the collection of data objects which are similar to one another in the same group.

    (18)   Full form of BRICK.

    (19)   Name different statistic techniques used for data mining.

    (20)   CURE stands for _____.

2 (A) Attempt following question : (Any **Three**)   **6**
  (1) Explain Data Granularity.
  (2) Discuss the task of Query manager.
  (3) Explain advantages and disadvantages of three tier data warehouse system architecture.
  (4) Define data mart.
  (5) Write a note on data mining techniques.
  (6) Explain regression and correlation with concept to data mining.

  (B) Attempt following question : (Any **Three**)   **9**
  (1) Differentiate : Operational System and Informational System.
  (2) Describe ETL.
  (3) Explain method to calculate the distances between clusters in agglomerative clustering.
  (4) Draw classification of Data Mining and list the techniques.
  (5) Describe various parts of genetic algorithm in detail.
  (6) Explain Point Estimation.

  (C) Attempt following question : (Any **Two**)   **10**
  (1) Describe data warehouse with respect to its characteristics.
  (2) Explain star schema in detail.
  (3) Explain K means algorithm.
  (4) Explain Apriori algorithm with example.
  (5) Explain Hierarchical and agglomerative clustering algorithm.

3 (A) Attempt following question : (Any **Three**)   **6**
  (1) Which operation performed by load manager.
  (2) Define meta data.
  (3) List popular ETL tools.
  (4) What is FP-tree growth algorithm?
  (5) List out application area of Neural Network.
  (6) List out various data mining tools. Explain any one

(B) Attempt following question : (Any **Three**)   9
  (1) Explain Basic steps to develop data warehouse architecture.
  (2) State the difference between OLAP and OLTP.
  (3) Explain machine learning data mining techniques.
  (4) Explain Divisive clustering algorithm.
  (5) Explain association rule mining model with measurement.
  (6) Explain KDD process.

(C) Attempt following question : (Any **Two**)   10
  (1) Explain Decision tree with example.
  (2) Explain Data mining process.
  (3) Explain DBSCAN algorithm.
  (4) How to open file in WEKA for pre processing.
  (5) What is the role of data mining in education system? Discuss as a case study.

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