C.U.SHAH UNIVERSITY
Summer Examination – 2018

Subject Name : Data Warehousing and Data Mining

Subject Code : 5CS02WWM1   **Branch: M.Sc.IT (WebTech)**

Semester : 2   **Date : 27/04/2018**   **Time : 10:30 To 01:30**   **Marks : 70**

Instructions:
   (1) Use of Programmable calculator and any other electronic instrument is prohibited.
   (2) Instructions written on main answer book are strictly to be obeyed.
   (3) Draw neat diagrams and figures (if necessary) at right places.
   (4) Assume suitable data if needed.

SECTION – I

Q-1   **Attempt the Following questions:**   **(7)**

   a. What do you meant by OLTP?
   b. What is the role of data cube in OLAP technology?
   c. What is ETL?
   d. What is the role of DSS in decision making?
   e. What is the role of WEKA in data mining and data warehousing?
   f. What do you mean by operational system?
   g. Define the term: Data Mart.

Q-2   **Attempt all questions:**
   (a) Explain Data warehouse system architecture.   **(5)**
   (b) Explain MOLAP with advantages and disadvantages.   **(5)**
   (c) Differentiate Data warehouse and Data Mart.   **(4)**

                                             OR

Q-2   **Attempt all questions:**
   (a) Discuss various components of data warehouse Architecture.   **(5)**
   (b) Discuss various characteristics of data warehouse.   **(5)**
   (c) Differentiate OLTP and OLAP.   **(4)**

Q-3   **Attempt all questions:**
   (a) Describe Data understanding phase of data mining model.   **(5)**
   (b) Explain ROLAP with advantages and disadvantages.   **(5)**
   (c) Explain Extraction of Data of ETL process.   **(4)**

                                             OR

Q-3   **Attempt all questions:**
  (a)   Explain modeling phase of data mining model.   **(5)**
  (b)   Discuss Transformation of Data in ETL Process.   **(5)**
  (c)   Describe Decision Tree with suitable example.   **(4)**

SECTION – II

Q-4   **Attempt the Following questions:**   **(7)**
  a.   Define the term: Data warehouse.
  b.   What is Data Mining?
  c.   What is the role of mutation function in apriori algorithm?
  d.   What do you meant by fitness function?
  e.   List data mining techniques.
  f.   Define the term: Cluster.
  g.   What do you meant by ETL?

Q-5   **Attempt all questions:**
  (a)   Explain hierarchical algorithm,   **(5)**
  (b)   Explain Neural networks of data mining.   **(5)**
  (c)   Explain loading of data of ETL Process.   **(4)**
                                   OR
Q-5   **Attempt all questions:**
  (a)   Explain WEKA Explorer in details   **(5)**
  (b)   Explain Partitioning algorithm.   **(5)**
  (c)   Explain Correlation and regression.   **(4)**

Q-6   **Attempt all questions:**
  (a)   Discuss Clustering with Agglomerative algorithm   **(5)**
  (b)   Write a note on: WEKA   **(5)**
  (c)   Discuss Association Rules   **(4)**
                                   OR
Q-6   **Attempt all Questions:**
  (a)   Explain Apriori algorithm.   **(5)**
  (b)   Explain Sampling algorithm.   **(5)**
  (c)   Explain Machine learning.   **(4)**