ALCCS – NEW SCHEME

Code: CT75  Subject: DATA WAREHOUSING AND DATA MINING
Time: 3 Hours  Max. Marks: 100

NOTE:
• Please write your Roll No. at the space provided on each page immediately after receiving the Question Paper.
• Question 1 is compulsory and carries 28 marks. Answer any FOUR questions from the rest. Marks are indicated against each question.
• Parts of a question should be answered at the same place.

Q.1  a. Define & Explain concept of Data Mining.

b. Explain Data Visualization in detail.

c. Differentiate between Data Warehouse and Data Mart.

d. What are the various data sources for the Data Warehouse?

e. Explain the concept of Data Extraction.

f. Explain data warehousing architecture. Support your answer with suitable example & diagram.

g. What is clustering? Explain with example.  

(7×4)

Q.2  a. Describe star schema & snowflake schema with examples.  

(9)

b. What is stored in meta data in a data warehouse implementation?  

(9)

Q.3  a. Differentiate between OLAP & OLTP.  

(9)

b. Explain Data Cleaning, Data Reduction, Data Integration & Transformation.  

(9)

Q.4  a. Explain Basic Concepts & Output Knowledge Representation of Data Classification.  

(9)

b. What is Neural Network-based Classification? Explain with example.  

(9)

Q.5  a. Explain major steps of Extraction Transformation & Loading process (ETL).  

(9)

b. Explain Drill-Down Analysis and Event Mapping in context of EIS.  

(9)
Q.6  a. Explain the process of Normalisation in warehouses with its advantages. (9)

b. Explain ID3 Algorithm for decision trees. (9)

Q.7  Write short notes on any THREE of the following:

(i)  Mining Association Rules
(ii) Outlier Analysis
(iii) Decision Support System
(iv) Applications & trends in Data Mining. (6+6+6)