END TERM EXAMINATION

SIXTH SEMESTER [BCA] MAY-JUNE, 2025

Paper Code: BCA-302	Subject: Data Ware Housing & Mining
Time: 3 Hours	(Batch 2021 onwards)	Maximum Marks: 75

Note: Attempt any five questions in all including Q.No1 which is compulsory. Select one question from each unit.

Q1 Attempt **any Five** of the following questions: (5x5=25)
  (a) What is data mart? Explain types of data mart.
  (a) Briefly explain the ETL process.
  (b) List different components of DW.
  (c) Explain information package diagram(IPD) with an example.
  (d) Differentiate between MOLAP and ROLAP.
  (e) Briefly explain what is understood by Data Mining and KDD?
  (f) What do you mean by data transformation and data discretization?
  (g) What is a Recommender System?

Unit-I

Q2 Explain three tier Architecture of DataWare house and How this architecture helps in better analysis of Business.   (12.5)

OR

Q3 Why do big organizations and companies need a data warehouse system? Explain its compelling need and also write differences in a database system and a data warehouse system.   (12.5)

Unit-II

Q4 What is Multidimensional modeling in DW and Explain star , snowflake and fact constellation Schema for multidimensional data model with their advantages and disadvantages.   (12.5)

OR

Q5 What are the fundamental differences between OLAP and OLTP? What are the key operations involved in OLAP, and how do these operations facilitate efficient data analysis and decision-making in business intelligence systems?   (12.5)

Unit-III

Q6 (a) Explain all Phases used for Data Preprocessing.   (7.5)
  (b) List Various technologies used for Data Mining and what kind of pattern can be mined.   (5)

OR

Q7 Discuss Apriori Algorithm and Association Rule Mining. What are the key steps involved Min the Apriori algorithm for association rule mining, discuss with an example and how does it contribute to efficient market basket analysis?   (12.5)

Unit-IV

Q8 Explain the significant role of data mining in the retail and telecommunication industries, supporting your explanation with examples from each sector.   (12.5)

OR

Q9 (a) Explain the difference between classification and clustering technique, Write steps to classify the IRIS dataset.   (7.5)
  (b) Explain any two open source data mining tools.   (5)

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