Exam.Code:1007

Sub. Code: 7717

2021

M.E. (Information Technology) Third Semester

MEIT-315: Advanced Data Mining

Time allowed: 3 Hours Max. Marks: 50

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

X-X-X

- I. Answer the following:
 - a) Discuss the pros and cons of snowflake schema over star schema.
 - b) Decision Tree Induction is a linear model or a non-linear model? Justify your answer.
 - c) Differentiate between Classification and Association.
 - d) What is Metadata? Give some examples.
 - e) What is data discretization? Explain using example.

(5x2)

UNIT – I

- II. a) Illustrate the use of different components of a data warehouse using suitable examples.
 - b) Compare Data Warehouse and transactional database system using examples. (2x5)
- III. a) How can Data Warehouse be mapped to Multiprocessor Architecture? Explain using a real life case study.
 - b) How are OLAP operations performed on multidimensional databases? Demonstrate using suitable examples. (2x5)
- IV. a) Demonstrate various methods for performing Data cleaning and Data reduction using examples.
 - b) Compare mining class comparisons and mining descriptive statistical measures using examples. (2x5)

UNIT - II

- V. a) Implement Apriori algorithm for a real-life problem.
 - b) Demonstrate Embedded data mining using a real-life case study. (2x5)

P.T.O.

- VI. a) What role Data warehousing plays in BI? Justify your answer using an example.
 - b) Compare various data integration approaches using suitable examples. (2x5)
- VII. a) Analyse and discuss various tools for Enterprise Reporting using a real-life case study.
 - b) Implement and compare Decision Tree Induction and K-nearest neighbour classification techniques using an example. (2x5)