MCA/M07
Data Mining and Warehousing
MCA -402

Time : 3 Hours MM:50
Note:- Attempt Five questions in all, selecting One question from each unit.

UNIT-I

1(a) What are Decision Support Application? Why are traditional DBMs inadequate for decision making? 6

(b) What is data warehousing and why is it important for decision support? 4

2(a) Explain the evolution of Data Warehousing. Describe the relationship between:- Operational Database Systems and Data Warehouses. 7

(b) What considerations are involved in designing a data warehouse? 3

3(a) What is meant by "multidimensional Data Model"? How multidimensional data can be best represented? 3

(b) Explain the distinction between measures and dimensions and between fact tables and dimension tables. 4

4(a) Describe various OLAP operations on multidimensional data and illustrate them using examples. 6

(b) Explain three-tier data warehouse architecture. 4

UNIT-II

5(a) 'Data Mining is multi-disciplinary field' Discuss. 3

(b) What is difference between data mining and a normal query environment? What can data mining do that SQL can't? Discuss.
(c) What is the role data mining in KDD process? 3

6(a) "All patterns are not interesting." Comment. What makes a pattern interesting?4
(b) What is different between descriptive mining and predictive mining? Explain various methods for concept description 6

7(a) How can the data be preprocessed so as to improve the efficiency and case of mining process? Discuss. 5
(b) Describe various primitives for specifying a data mining Task. 5

UNIT-III

8(a) What is ‘Association Rule’? What is the difference between support and confidence of a rule? 4

(b) What is meant by ‘Association Rule mining’? Explain by presenting an example of Market Basket Analysis. 6

9(a) “Databases are rich with hidden information.” Comment. 3

(b) What is difference between classification and prediction? Explain data classification process. 4

(c ) Discuss various issues regarding preprocessing data for classification and prediction. 3

10 Write short notes on the following:

(a) Applications of data mining 5

(b) Tools for data mining 5