17520

15162

3 Hours / 100 Marks Seat No. | | | | | | | | |

Instructions : *(1)* ***All*** *questions are* ***compulsory****.*

(2) Illustrate your answers with neat sketches ***wherever*** *necessary.*

(3) Figures to the ***right*** *indicate* ***full*** *marks.*

(4) Assume suitable data, if ***necessary****.*

Marks

1. Solve **any five** : **(5×4=20)**

a) Describe any four characteristics of data warehouse.

b) Define Metadata and classify metadata into technical and business metadata.

c) Explain the term DSS and ingredients of DSS.

d) Define the following schemas for multi dimensional data base :

i) Star

ii) Snowflakes

iii) Star Join

iv) Fact constellation measures.

e) What is concept description ?

f) State association rule of mining.

g) What is meant by classification and prediction ?

2. Solve **any two** : **(2×8=16)**

a) Who are DSS users ? Explain the categories and classes of DSS's.

b) Explain about mining text databases.

c) Write a short note on :

i) Constraint based association mining

ii) Sequential mining.

P.T.O.

Marks

3. Solve **any two** : **(2×8=16)**

a) What is the need of data warehousing and explain about operational and informational data.

b) Explain the need for OLAP in Data Warehouse. What are the various OLAP tools ?

c) Explain OLAP operations in the multidimensional data models.

4. Solve **any two** : **(2×8=16)**

a) Explain the concept of hierarchy generation for numeric and categorical data.

b) Explain the concept of mining world wide web.

c) Explain the terms : Data Generalization and Summarization of data mining algorithm.

5. Solve **any two** : **(2×8=16)**

a) List and explain data cleaning techniques.

b) Explain Apriori Algorithm.

c) Draw block diagram of data warehouse architecture and state the functions of each components.

6. Solve **any two** : **(2×8=16)**

a) Explain the terms in detail :

i) Data integration and

ii) Transformation.

b) What is meant by mining descriptive statistical measures in large data bases.

c) Explain in detail **(any two) :**

i) Fraud detection

ii) Scientific data analysis

iii) Web mining

iv) Decision tree induction.
