

22621

23242

3 Hours / 70 Marks

Seat No.

--	--	--	--	--	--	--	--

- Instructions :**
- (1) All Questions are *compulsory*.
  - (2) Answer each next main Question on a new page.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Figures to the right indicate full marks.
  - (5) Assume suitable data, if necessary.

**Marks**

**1. Attempt any FIVE of the following :**

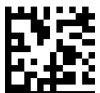
**5 × 2 = 10**

- (a) Explain Metadata Repository.
- (b) Explain Star-schema with example.
- (c) Draw Data Warehouse design process.
- (d) Enlist the different ways/steps in the process of (KDD).
- (e) Define the mining frequent patterns.
- (f) List different data cube computation methods.
- (g) State major issues in Data mining. (Any Two)

**2. Attempt any THREE of the following :**

**3 × 4 = 12**

- (a) Explain benefits of the Data Warehousing.
- (b) Explain OLAP operations.
- (c) What are Data Warehouse Usage for Information Processing ?
- (d) Describe the need of Data Preprocessing.
- (e) How to find Frequent Item sets Using Candidate Generation ?



- 3. Attempt any THREE of the following :** **3 × 4 = 12**
- (a) Explain Three Tier/Multi-tier architecture with diagram.
  - (b) State Indexing OLAP Data.
  - (c) Explain Data Objects and Attributes type.
  - (d) What is Cluster Analysis & its requirements ?
- 4. Attempt any THREE of the following :** **3 × 4 = 12**
- (a) Write about Business Analysis Frame-work for Data warehouse design.
  - (b) Give the architecture of typical DM system.
  - (c) Distinguish between OLAP and OLTP.
  - (d) Write & explain OLAP server architectures.
- 5. Attempt any TWO of the following :** **2 × 6 = 12**
- (a) How to generate association rules from Frequent Itemsets ? Explain with example.
  - (b) State how to clean missing values of Noisy Data with example.
  - (c) How modeling performed with Data Cube ? Explain with example of sales.
- 6. Attempt any TWO of the following :** **2 × 6 = 12**
- (a) Explain Basic Clustering Methods and Concept of Market Basket Analysis.
  - (b) Explain Apriori Algorithm with suitable example.
  - (c) Draw and explain architectures of
    - (i) ROLAP
    - (ii) MOLAP
-