

(3 Hours)

[Total Marks: 100]

- N. B.: (1) **All** questions are **compulsory**.  
 (2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.  
 (3) Answers to the **same question** must be **written together**.  
 (4) Numbers to the **right** indicate **marks**.  
 (5) Draw **neat labeled diagrams** wherever **necessary**.  
 (6) Use of **Non-programmable** calculators is **allowed**.

- 1. Attempt any two of the following: 10**  
 a. What is data warehouse? Explain in detail.  
 b. What are the different aspects of data that are looked by ETL data quality monitor?  
 c. Write short note on online response time.  
 d. Give reasons why the data warehouse must be backed up.
- 2. Attempt any three of the following: 15**  
 a. Write short note on online applications.  
 b. What are impact of the data warehouse on business?  
 c. What are the reasons that DW2.0 appeals to the business person?  
 d. What is metadata? Give the reasons for the importance of metadata in the DW 2.0 architecture.  
 e. Explain different types of data structures founded in the Integrated Sector.  
 f. Explain unstructured processing of Integrated Sector of DW 2.0.
- 3. Attempt any three of the following: 15**  
 a. Explain general architecture for metadata in DW 2.0.  
 b. What is taxonomy? Explain different types of taxonomy in the unstructured DW 2.0.  
 c. What are the hallmarks of the spiral development methodology?  
 d. Explain enterprise knowledge coordination stream.  
 e. What are differences between a data mart and an exploration facility?  
 f. Write short note on Heuristic Analysis.
- 4. Attempt any three of the following: 15**  
 a. Explain different levels of data model with diagram.  
 b. Explain corporate data model.  
 c. Explain transaction monitor with its features.  
 d. Explain dormant data monitor in data warehouse.  
 e. How data is protected using encryption? Explain its drawbacks.  
 f. Write short note on sensing an attack.
- 5. Attempt any three of the following: 15**  
 a. Explain non-overlapping records.  
 b. Explain time-collapsed data.  
 c. Explain data flow into the integrated sector.  
 d. Explain data flow into the archival sector.  
 e. Explain ETL processing in online mode.  
 f. Explain different approaches for handling rejected data in ETL processing.

**6. Attempt any three of the following:**

**15**

- a. What are the functions of the granularity manager? Explain.
- b. Explain metadata as a by-product.
- c. Explain indexing for data warehouse performance.
- d. Explain batch parallelization to enhance data warehouse performance.
- e. Write steps for building enterprise metadata.
- f. Explain separating farmers and explorers to optimize data warehouse performance.

**7. Attempt any three of the following:**

**15**

- a. What are the objectives of physical design? Explain.
- b. Explain naming of files and tables in the staging area.
- c. List five common provisions to be found in a good security policy.
- d. What topics should the users be trained on initially?
- e. Describe different types of action for growth planning prompted by the collected statistics.
- f. Describe major tasks needed to prepare a training program.