

**Bachelor of Science (Information Technology) (I.T.) Semester—V Examination****DATA WAREHOUSING****Paper—4**

Time : Three Hours]

[Maximum Marks : 50

- N.B. :—** (1) All questions are compulsory and carry equal marks.  
 (2) Draw neat and labelled diagrams wherever necessary.

**EITHER**

1. (A) Give architecture of data warehouse and explain it in detail . 5  
 (B) What are the issues in building data mart ? Explain. 5

**OR**

- (C) Write short notes on :  
 (i) Classification of metadata  
 (ii) Importance of metadata. 5  
 (D) Explain how data flow from warehouse to operational system. 5

**EITHER**

2. (A) What do you mean by data loading ? Explain. 5  
 (B) Describe the snowflake schema with example. 5

**OR**

- (C) Write short notes on :  
 (i) Factless Fact Table  
 (ii) Surrogate Keys. 5  
 (D) Explain how we can enhance the data warehouse performance. 5

**EITHER**

3. (A) What is OLAP ? Explain in detail. 5  
 (B) Explain the following :  
 (i) Tuning  
 (ii) Feedback Loop. 5

**OR**

- (C) Discuss Data Administration in OLAP. How is it used to improve performance of OLAP ? 5  
 (D) List any five functions with its meaning and examples used in OLAP. 5

**EITHER**

4. (A) List different pitfalls in building Data Warehouse. 5  
 (B) What are stages in Data Warehouse Design ? Explain. 5

**OR**

- (C) Explain backup and recovery mechanism in Data Warehouse. 5  
 (D) Explain following terms in Data Warehousing :  
 (i) Requirement Analysis  
 (ii) Planning. 5

5. (A) Explain metadata implementation with example. 2½  
 (B) What is Aggregate Table ? Discuss limitations of Aggregate fact tables. 2½  
 (C) Write notes on testing the Data Warehouse :  
 (i) Unit Testing  
 (ii) Integration Testing 2½  
 (D) Write down critical success factors in Data Warehouse. 2½