

**Bachelor of Science (Information Technology) Semester—V Examination**

**DATA WAREHOUSING**

**Paper—4**

Time : Three Hours]

[Full Marks : 50

**N.B. :**— (1) All questions are compulsory and carry equal marks.

(2) Draw neat and labelled diagram wherever necessary.

**EITHER**

1. (a) How is data granularity performed in data warehousing ? 5
- (b) Explain the following terms :
  - (i) Life cycle of data
  - (ii) Class of data. 5

**OR**

- (c) Explain the terms pushing and pulling data in data warehousing. 5
- (d) List and explain characteristics and goals of data warehouse. 5

**EITHER**

2. (a) Compare the following schema used in data warehousing :  
Fact Constellation Schema and Snowflake Schema. 5
- (b) Explain in detail :
  - (i) Data Extraction
  - (ii) Data Loading. 5

**OR**

- (c) List any four types of tables used in modeling of data warehousing and explain any two of them in detail with example. 5
- (d) What do you mean by Schema ? Explain how it is used in warehousing data with example. 5

**EITHER**

3. (a) Discuss any two applications of OLAP. 5
- (b) What are the considerations in design of OLAP ? Explain. 5

**OR**

- (c) Explain multidimensional analysis used in modeling of data warehousing. 5
- (d) Briefly explain :
  - (i) Data design
  - (ii) Administration and performance. 5

**EITHER**

- 4. (a) What steps are used in building data warehouse ? Explain in detail. 5
- (b) Explain the following terms :
  - (i) Quality Framework
  - (ii) Operating warehouse. 5

**OR**

- (c) Explain the process of building data marts in data warehouse. 5
- (d) Explain the following terms :
  - (i) Problem definition
  - (ii) Planning. 5

- 5. Attempt **ALL** :

- (a) How data flows in data warehouse ? 2½
- (b) Explain star schema with example. 2½
- (c) What is multidimensional analysis ? Explain. 2½
- (d) Explain briefly requirement analysis. 2½