

**SAKET GYANPEETH'S**  
**SAKET COLLEGE OF ARTS, SCIENCE & COMMERCE, KALYAN(EAST)**  
**T.Y.B.SC (IT) SEMESTER VI PRELIMINARY EXAM MARCH 2018**

**SUBJECT: Data Warehousing**

**Time: 2<sup>1/2</sup> hours**

**Total Marks: 75**

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

- Q.1) Attempt any TWO. [10 M]**
- Define data warehouse. Explain Characteristics of data warehouse.
  - Distinguish between OLAP and OLTP.
  - Differentiate between star schema and snowflake schema with respect to Data warehouse.
  - Explain different types of facts with the help of suitable example.
- Q.2) Attempt any TWO. [10 M]**
- What is Listener? Explain steps for configuring listener.
  - Which are various components of OWB? Explain with the help of diagram.
  - Explain three windows in OWB design center.
  - What is Module? Write down steps for creating module and project in OWB.
- Q.3) Attempt any TWO. [10 M]**
- Write a short note on dimensional modeling.
  - Differentiate between relational modeling and multidimensional modeling.
  - How we can create target user in OWB?
  - Write a short note on- 1.Slowly changing dimensions 2.Surrogate keys
- Q.4) Attempt any TWO. [10 M]**
- Explain ETL in detail.
  - Explain following operators- Table operator, External operator, Dimension operator, Cube operator, Constant operator
  - Write down the steps to connect source table and target table using Joiner.
  - Explain OWB operators in detail.
- Q.5) Attempt any TWO. [10 M]**
- How we can create new mapping? How we can add source and target operators in OWB?
  - What is Transformation operator? How we can use Upper Function for transformation operator?
  - Write the procedure to create and load a lookup table.
  - What is Validation and Generation ? How we can validate and generate in OWB?

**P.T.O.**

**Q.6) Attempt any TWO. [10 M]**

- a) Define snapshot. What are the steps to perform snapshot.
- b) What is recycle bin? Describe the features of warehouse builder recycle bin window.
- c) Explain data explosion and data sparsity?
- d) What are the matching strategies for synchronizing workspace objects with its mapping operator? Explain inbound and outbound synchronization.

**Q.7) Attempt any TWO. [15 M]**

- a) Write a short note on Helper table.
- b) Explain steps for configuring repository and workspaces.
- c) Explain object deployment in detail.
- d) What is the use of staging area in OWB?
- e) Explain Time dimension. How we can create time dimension in OWB?
- f) Explain Data warehouse architecture with the help of diagram.

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