

- Instruction :**
- (1) Each question carries 5 marks.
  - (2) Draw diagrams neatly using pencil.
  - (3) Questions should be answered in a proper sequence.
  - (4) Use of scientific calculator is allowed. Mobile phones are NOT allowed.
1. Attempt any **TWO** question of the following : [10]
- (a) Explain Data Warehouse Architecture.
  - (b) Differentiate OLTP database and Data Warehouse.
  - (c) Explain the various types of additivity of facts with examples.
  - (d) What are the various levels of data redundancy in data warehouse?
2. Attempt any **TWO** question of the following : [10]
- (a) What is Listener? Write a procedure to create a listener.
  - (b) Why and how is repository and workspaces configured?
  - (c) What is defined in the Project Explorer Window, Connection Explorer Window and Global Explorer Window in the Design Center screen?
  - (d) Explain OWB components and architecture with diagram.
3. Attempt any **TWO** question of the following : [10]
- (a) What is module? Explain source module and target module.
  - (b) Differentiate between relational model (star schema) and multidimensional model.
  - (c) Explain creating a time dimension with the time dimension wizard.
  - (d) What is use of canvas area in data object editor? Also explain the explorer and palette windows.
4. Attempt any **TWO** question of the following : [10]
- (a) Explain the following operators:
    - (i) Cube operator
    - (ii) Dimension operator
    - (iii) External Table operator
    - (iv) Table operator
    - (v) Constant operator
  - (b) Write the steps to connect source table to target using joiner operator with example.
  - (c) What is staging in data warehouse? List the advantages and disadvantages of staging.
  - (d) Discuss in detail the constraints tab in the Data Object Editor in OWB.
5. Attempt any **TWO** question of the following : [10]
- (a) What is expression operator? Explain the mapping of a data field SALE\_DATE to a numeric field DAY\_CODE by applying TO\_CHAR() and TO\_NUMBER() functions through expression operator. The string format for TO\_CHAR() function is 'YYMMDD'.
  - (b) Write the steps for validating and generating in Design Center and Mapping Editor.
  - (c) Write a short note on Control Center Manager.
  - (d) What is Transformation Operator? How is UPPER() transformation function used?
6. Attempt any **TWO** question of the following : [10]
- (a) What is Recycle Bin? Describe the features of warehouse builder Recycle Bin window.
  - (b) Explain the export feature of Metadata Loader.
  - (c) What is the difference between ROLAP and MOLAP?
  - (d) What are the different operations that can be performed on a snapshot of an object that is created?
7. Attempt any **THREE** question of the following : [15]
- (a) Differentiate between Star Schema and Snowflake Schema.
  - (b) What is the relationship between OWBSYS and Oracle Warehouse Builder?

- (c) Differentiate Surrogate identifier and Business identifier with suitable examples.
- (d) List and explain the use of various windows available in mapping editor.
- (e) What is object deployment? Explain the functions of Control Center Manager.
- (f) Explain data density and data sparsity with example.



**Paper Discussion Schedule for TY B.Sc. (IT) Sem. VI**

| <b>Date</b>   | <b>Day</b> | <b>Timing</b>            | <b>Centre</b> |
|---------------|------------|--------------------------|---------------|
| 28 April 2018 | Saturday   | 10.00 a.m. to 12.00 p.m. | Borivali      |
| 28 April 2018 | Saturday   | 1.00 p.m. to 3.00 p.m.   | Andheri       |
| 29 April 2018 | Sunday     | 1.00 p.m. to 3.00 p.m.   | Dadar         |
| 29 April 2018 | Sunday     | 4.00 p.m. to 6.00 p.m.   | Nerul         |
| 30 April 2018 | Monday     | 9.00 a.m. to 11.00 a.m.  | Ghatkopar     |
| 30 April 2018 | Monday     | 12.00 p.m. to 2.00 p.m.  | Thane         |
| 30 April 2018 | Monday     | 3.00 p.m. to 5.00 p.m.   | Dombivli      |