

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III (OLD) - EXAMINATION – SUMMER 2017****Subject Code: 130703****Date: 07/06/2017****Subject Name: Database Management System****Time: 10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain : (1) Database (2) Meta data (3) Data Dictionary (4) user_constraints table (5) check constraint (6) null (7) cursor **07**
- (b) Explain commands: **07**
 (1) Rename (2) Alter (3) View (4) Unique (5) Drop (6) Default (7) Update
- Q.2** (a) Explain with examples: (1) To_char() (2) To_date() (3) To_num() **07**
- (b) Explain the difference between: **07**
 (1) Primary key and foreign key
 (2) Grant and Revoke
 (3) Commit and Rollback
- OR**
- (b) Explain with example: **07**
 (1) order by (2) group by and having (3) as select (4) schema
- Q.3** (a) Define DBMS. Explain the role of DBA. **07**
- (b) Explain Data Independence and its types in detail. **07**
- OR**
- Q.3** (a) Define Schema. Explain three level architecture in DBMS. **07**
- (b) Explain Specialization, Generalization and Categorization in DBMS. **07**
- Q.4** (a) What is functional dependency and explain its various types? **07**
- (b) What is Redundancy? Explain the anomalies in relational database. **07**
- OR**
- Q.4** (a) What is Join and explain various types of Joins? **07**
- (b) What is Normalization and its properties? Explain 3NF and BCNF. **07**
- Q.5** (a) What is locking? Explain Implicit and Explicit locking in oracle. **07**
- (b) Write query for the following. **07**
 (1) Create a table from at table.
 (2) To join two existing tables.
 (3) To view system date.
 (4) To drop a view.
- OR**
- Q.5** (a) What is concurrency? Explain concurrency control techniques. **07**
- (b) What is database Recovery? Explain Shadow paging in detail. **07**
