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: (1) Rename (2) Alter (3) View (4) Unique (5) Drop (6) Default (7) Update	**07**
Q.2	**(a)**	Explain with examples: (1) To_char() (2) To_date() (3) To_num()	**07**
	(b)	Explain the difference between: (1) Primary key and foreign key (2) Grant and Revoke (3) Commit and Rollback	**07**
		OR	
	(b)	Explain with example: (1) order by (2) group by and having (3) as select (4) schema	**07**
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. (1) Create a table from at table. (2) To join two existing tables. (3) To view system date. (4) To drop a view.	**07**
		OR	
Q.5	**(a)**	What is concurrency? Explain concurrency control techniques.	**07**
	(b)	What is database Recovery? Explain Shadow paging in detail.	**07**

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