

**GUJARAT TECHNOLOGICAL UNIVERSITY****MBA INTEGRATED - SEMESTER- II EXAMINATION – WINTER 2019****Subject Code: 2527107****Date: 21/11/2019****Subject Name: Database Management System****Time: 02:30PM to 05:30PM****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) Discuss the characteristics of Data in Database Management System. **07**  
(b) Describe in detail various components of Database Management System. **07**
- Q.2** (a) Discuss in brief Data Dictionary. Describe various types of users of DBMS. **07**  
(b) Define Data Abstraction. Differentiate between logical and physical data interdependence. **07**
- OR**
- (b) Discuss advantages of using DBMS against the File Management System. **07**
- Q.3** (a) Define Entity. Discuss various types of entity with suitable example. **07**  
(b) Discuss various forms of relationships in database in detail. **07**
- OR**
- Q.3** (a) Discuss various models of database with appropriate examples. **07**  
(b) Discuss various symbols used to draw E-R diagram with explanation. **07**
- Q.4** (a) Discuss Codd's rules for Database Management System. **07**  
(b) Define Data integrity. Discuss various integrity constraints of DBMS. **07**
- OR**
- Q.4** (a) Discuss the process of Normalization and explain BCNF with example. **07**  
(b) Discuss the concept of foreign key and primary keys in DBMS with suitable example. **07**
- Q.5** (a) Discuss the functions of SQL- ROLLBACK, COMMIT, SAVEPOINT **07**  
(b) Define Views. Discuss the benefits of generating views in DBMS. **07**
- OR**
- Q.5** (a) Define SQL. Discuss various types of languages available in SQL. **07**  
(b) Discuss the role of Data Warehouse for online retailer. **07**

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