

GUJARAT TECHNOLOGICAL UNIVERSITY**MBA - SEMESTER-III • EXAMINATION – WINTER • 2014****Subject Code: 2830401****Date: 09-12-2014****Subject Name: Database Management (DM)****Time: 10:30 am - 01:30 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)** Define RDBMS and also explain six potential benefits of standardized relational language. **07**
- (b)** List the major components of the database system environment. **07**
- Q.2 (a)** Describe SDLC for database development process and also discuss the alternative Information System development approaches. **07**
- (b)** Compare and contrast the following terms: **07**
- a) base table; view
- b) dynamic view; materialized view
- OR**
- (b)** Define join. Explain in brief the various types of joins. **07**
- Q.3 (a)** Discuss degree of relationships. Explain Unary, Binary and Ternary relationships in detail. **07**
- (b)** Write a short note on attribute inheritance. **07**
- OR**
- Q.3 (a)** Explain cardinality constraints. List different types of cardinality constraints, and draw an example of each. **07**
- (b)** Briefly explain steps involved in transforming Entity relationships diagram into relations. **07**
- Q.4 (a)** Explain seven potential benefits of the database approach over conventional file systems. **07**
- (b)** Explain key components of Information System Architecture and also discuss importance of ISA in the creation of the database. **07**
- OR**
- Q.4 (a)** Write a short note on Normalization. **07**
- (b)** Distinguish between primary key and foreign key. Explain Integrity constraints in detail. **07**
- Q.5 (a)** Discuss the three –schema architecture for database development. **07**
- (b)** Explain the INSERT and UPDATE command in SQL with examples. **07**
- OR**
- Q.5 (a)** Distinguish between Data, Information and Metadata. **07**
- (b)** Discuss the COMMIT and ROLLBACK command in SQL with examples. **07**
