Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.B.A. Sem. – III - Examination –June- 2011

Subject code: 830401

Subject Name: Database Management

Date:09/06/2011 **Time: 02.30 pm – 05.30 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)**	What is RDBMS and what are the advantages gained by the adoption of the standardized relational language?	**07**
	(b)	How do data and information differ from each other? Explain the range of database application in detail.	**07**
Q.2	**(a)**	What is the three-schema architecture for database development and what is its significance?	**07**
	(b)	Discuss SDLC and its core components and also explain alternative information system development approaches.	**07**
		OR	
	(b)	What is supertype/ subtype Hierarchies? Explain attribute inheritance in detail.	**07**
Q.3	**(a)**	What is integrity constraints? Discuss various integrity constraints in detail.	**07**
	(b)	What are relationships? Compare and contrast the different degrees of relationships.	**07**
		OR	
Q.3	**(a)**	Explain Normalization in detail. How do functional dependencies affect Normalization?	**07**
	(b)	Describe the components and structure of a typical SQL environment and briefly explain Data Definition Language, Data Manipulation Language and Data Control Language.	**07**
Q.4	**(a)**	What is distributed database? Discuss different objectives of distributed database.	**07**
	(b)	Briefly explain the different categories of middleware and also explain the advantages of Three-tier architectures.	**07**
		OR	
Q.4	**(a)**	What is data warehouse? List characteristics of Data Warehouse Data.	**07**
	(b)	Define Informational systems and also describe the major components of a data warehouse architecture.	**07**
Q.5	**(a)**	What is database? List the major components in a database system environment.	**07**
	(b)	Explain the Internet and Database connection and also discuss some common Internet Architecture Components.	**07**
		OR	
Q.5	**(a)**	Differentiate between attribute, entity, entity type and entity instance. Explain the different types of attributes with examples.	**07**
	(b)	Explain potential benefits of the database approach over conventional file systems.	**07**

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