Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-V • EXAMINATION - WINTER 2013

•		Code: 650004 Date: 29-11-2013	
-	e: 02	Name: Advanced Data Base Management System 2.30 pm - 05.00 pm Total Marks: 70	
instru	1. 2. 3.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. English version is Authentic	
Q.1	(a)		07
	(b)	access time? What is the difference between logical data independence and physical data independence? Which one is harder to achieve? Why?	07
Q.2	(a)	Discuss the goals of tuning. List the typical inputs to the tuning process. What are the types of problems encountered during tuning?	07
	(b)	Discuss the guidelines for physical database design in RDBMS. OR	07
	(b)		07
Q.3	(a)	**	07
	(b)	concurrency control and recovery in distributed database. What is write-ahead logging? Explain steal/no steal and force/ no force. OR	07
Q.3	(a) (b)	Compare the primary copy method with primary site method for distributed concurrancy control. When voting method is used in distributed database? Define following terms: indexing field, primary key field, clustering field, secondary key field, block anchor, dense index and non dense index.	07 07
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Q.4	(a)	What are the differences between tuple versioning and attribute versioning. Discuss the concept of attribute versioning with example.	07
	(b)	What is a fragment of a relation? What are the main types of fragments? Why is fragmentation a useful concept in distributed database design? OR	07
Q. 4	(a)	Describe the concept of a deductive database. What is the similarity between rules used in deductive database and views in the relational model?	07
	(b)	Explain five level schema architecture in a federated database system.	07
Q.5	(a)	List the object relational features included in SQL-99. Give an example with syntax.	07
	(b)	Explain characteristics of data in GIS. OR	07
Q.5	(a) (b)	What is multimedia database? Explain its data management issues.	07 07
