Seat	No.:	Enrolment No		
Sout	110	GUJARAT TECHNOLOGICAL UNIVERSITY ME – SEMESTER IV (NEW) – • EXAMINATION – WINTER 2016		
			6/10/2016	
	ne:0 ructio 1. 2.	Name: Distributed Database Application System 2:30 pm to 05:00 pm Total Marks: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	70	
•	(a) (b)	Discuss problem areas in DDBS environment. Explain with example: tightly coupled and loosely coupled approach.	07 07	
-	(a) (b)	Explain reduction for hybrid fragmentation. Discuss attribute affinity matrix, ca matrix, BEA algorithm in the context of vertical fragmentation with an example.	07 07	
	(b)	OR Explain MDBS architecture without a GCS.	07	
Q.3	(a) (b)	Explain top-down design process in detail. Explain distributed cost model with an example. OR	07 07	
Q.3	(a) (b)	What do you mean by set-oriented assertions? Explain it. Explain architecture models for Distributed DBMS in brief.	07 07	
Q.4	(a)	Explain partitioning algorithm. And show the trace of algorithm for specific example.	07	
	(b)	What are the layers of query processing? Explain it. OR	07	

OR

(a) Explain semijoin-based algorithms.

(b) Explain networking partitioning.

(b) Give an example workflow during transactions.

Explain the compatibility matrix of lock modes.

Explain basic Time stamp based concurrency control algorithm.

Explain formalization of transaction concept with example.

Q.4

Q.5

Q.5

(b)

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