Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII(OLD) • EXAMINATION – WINTER 2016

Subject Code: 171602 **Date: 25/11/2016**

Subject Name: Distributed Database Application & System

Time: 10:30 AM to 01:00 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)**	Consider a stock market having many broker and customer for trading, design distributed database with fragmentation and allocation strategy.	**07**
	(b)	List and briefly explain transparency for DDBS environment.	**07**
Q.2	**(a)**	Explain MDBMS architecture for distributed DBMS.	**07**
	(b)	Explain top-down design process in detail.	**07**
		OR	
	(b)	Explain Peer to Peer Distributed System.	**07**
Q.3	**(a)**	Explain Vertical fragmentation with example.	**07**
	(b)	Explain views in centralized DBMSs with examples.	**07**
		OR	
Q.3	**(a)**	Explain functional schematics of an integrated distributed DBMS.	**07**
	(b)	Explain centralized semantic integrity control with example.	**07**
Q.4	**(a)**	Explain layers of query processing.	**07**
	(b)	Describe the relative advantage and disadvantage of distributed DBMs.	**07**
		OR	
Q.4	**(a)**	Explain Centralized query optimization.	**07**
	(b)	What do you mean by normalization ? Explain any two with example.	**07**
Q.5	**(a)**	Explain distributed cost model with example.	**07**
	(b)	Briefly describe the characterization of query processors.	**07**
		OR	
Q.5	**(a)**	Discuss how you perform deadlock management in a distributed DBMS.	**07**
	(b)	Define a transaction. Discuss the AICD properties of transaction in the context of DDBs.	**07**

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