Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY

	•	BE - SEMESTER-VII (OLD) - EXAMINATION - SUMMER 2017  Code: 171602  Date: 06/05/202	17
Tir	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
Q.1	(a)	What is distributed database system? Explain shared memory, shared disk and shared nothing multiprocessor system with neat sketches.	07
Q.2	<ul><li>(b)</li><li>(a)</li><li>(b)</li></ul>	Explain different relational algebra operations with proper example(s).  What do you mean by normalization? Enlist and explain various normal forms with appropriate example(s).  Discuss in detail the problem areas in DDBS environment.	07 07 07
	<b>(b)</b>	<b>OR</b> What are the various types of computer networks? Explain in detail.	07
Q.3	(a) (b)	Explain layers of transparency.  Describe architectural models for distributed DBMSs.	07 07
Q.3	(a) (b)	OR Elaborate MDBS architecture without GCS. Explain distribution design issues in detail.	07 07
Q.4	(a) (b)	Discuss top-down design process in detail. Explain views in centralized DBMSs with example(s).	07 07
Q.4	(a) (b)	OR Explain client/server reference architecture. Write a note on : allocation model	07 07
Q.5	(a) (b)	Describe horizontal fragmentation with its various types. Elaborate layers of query processing.	07 07
Q.5	(a) (b)	OR Discuss query processing system with example(s). Explain centralized semantic integrity control with examples.	07 07

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