

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2024

Subject Code: 2170714**Date: 01-06-2024****Subject Name: Distributed DBMS****Time: 02:30 PM TO 05:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed

		Marks
Q.1	(a) Compare DBMS and Distributed DBMS	03
	(b) Explain location transparency.	04
	(c) Explain distributed database design process.	07
Q.2	(a) Compare push only and pull only data delivery mode.	03
	(b) Define: Data dictionary, global data dictionary	04
	(c) With the help of example explain horizontal partition.	07
OR		
	(c) With the help of example explain vertical partition.	07
Q.3	(a) List steps for query processing.	03
	(b) How can we measure query cost?	04
	(c) How view management can be done in Distributed DBMS.	07
OR		
Q.3	(a) Different query processing of DBMS and DDBMS.	03
	(b) Explain query optimization.	04
	(c) List and explain layers of transparency in DDBMS.	07
Q.4	(a) Explain serializability	03
	(b) Discuss timestamp based protocols	04
	(c) List and explain ACID property of transaction.	07
OR		
Q.4	(a) List various types of transactions.	03
	(b) Discuss lock based protocols	04
	(c) List objectives of distributed concurrency control.	07
Q.5	(a) Define failure. Give example.	03
	(b) Explain deadlock.	04
	(c) How deadlock can be prevented? Explain any one technique.	07
OR		
Q.5	(a) List various types of failures.	03
	(b) Explain two phase commit protocol.	04
	(c) How deadlock can be detected? Explain wound wait algorithm.	07
