



R20 Regulation
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
 (Autonomous, Accredited by NAAC with 'A+' Grade)

Subject code:3E5EA

B.Tech V Semester Supplementary Examinations, December 2024

**DISTRIBUTED DATABASES
(CSE)**

Maximum Marks: 70

Date:06.01.2025

Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20) Marks		CO	Bloom Tx
1	Define Distributed Database.	1	L1
2	Why distributed databases are essential?	1	L1
3	What is meant by query processing?	2	L1
4	What is query optimization?	2	L1
5	What are the properties of transaction?	3	L1
6	What are the types of Transaction?	3	L1
7	What are the reliability protocols in distributed systems?	4	L1
8	What is meant by parallel database	4	L1
9	What is meant by distributed object storage?	5	L1
10	What is meant by Pointer Swizzling?	5	L1

Part-B

Answer All the following questions.

(5X10M=50Marks)		CO	Bloom Tx
11	A) Explain Promises of DDBSs. [5M] B) Explain Briefly about MDBS Architecture. [5M]	1	L2
OR			
12	A) Explain about Architectural Models for DDBMS. [5M] B) Explain about DBMS Standardization? Give Examples. [5M]	1	L2
13	A) Explain characterization of query processors. [5M] B) Explain query decomposition with examples. [5M]	2	L2
OR			
14	Explain INGRES and system R algorithms in centralized query optimization. [10M]	2	L2
15	A) Explain communication structure of centralized 2PL and Distributed 2PL. [5M] B) Explain about conservative TO and Multiversion TO Algorithm. [5M]	3	L2
OR			
16	A) Explain nested transactions and work flows. [5M]	3	L2

	B) Explain properties of transactions. [5M]		
17	A) Explain the failures in DDBMS. [5M] B) Explain by means of a diagram the interface between the local recovery manager& buffer manager. [5M]	4	L2
	OR		
18	A) Explain database servers. [5M] B) Draw a diagram of state transactions in 3PC protocols. [5M]	4	L2
19	A) Explain fundamental object concepts and object models. [5M] B) Write about class Partitioning Algorithms. [5M]	5	L2
	OR		
20	A) Explain about Inheritance and Object Identity. [5M] B) Compare and contrast between OODBMS and ORDBMS. [5M]	5	L2