R20 Regulation *Subject code: 3E6FD*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, April 2026

DISTRIBUTED DATABASES

(IT)

Maximum Marks: 70 Date: 23.04.2026 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.
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)		Marks	CO	BTL
1	Define Centralized Database System.	2M	1	L1
2	What are the promises of Distributed DBMS?	2M	1	L1
3	Define Normalization.	2M	2	L1
4	Define Global Query Optimization.	2M	2	L1
5	What are the properties of Transaction?	2M	3	L1
6	Define Serializability.	2M	3	L1
7	What is MTBF and MTTR?	2M	4	L1
8	What is Parallel Database System?	2M	4	L1
9	Define OODBMS.	2M	5	L1
10	What is distributed object storage?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain in brief architectural models for distributed DBMS.	10M	1	L2
	OR			
12	Explain in brief about vertical fragmentation.	10M	1	L2
13	Discuss the objectives of query processing.	10M	2	L2
	OR			
14	Explain in detail about characterization of Query Processors.	10M	2	L2
15	Explain in detail about basic TO time-stamp based concurrency control algorithm.	10M	3	L2
	OR			
16	Discuss about Centralized 2PL and Distributed 2PL.	10M	3	L2
17	Discuss about network partitioning.	10M	4	L2
	OR			
18	Explain about parallel DBMS techniques.	10M	4	L2
19	State various elements of Object-oriented data model.	10M	5	L2
	OR			
20	Explain the OODBMS and ORDBMS in detail.	10M	5	L2