R20 Regulation *Subject code: 3E5HA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, November 2025

DISTRIBUTED DATABASE

(CSE(DS))

Maximum Marks: 70 Date:12.11.2025 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.
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 Distributed Database.	2M	1	L1
2	What are the distribution design issues?	2M	1	L1
3	What is meant by query processing?	2M	2	L1
4	What is Query Decomposition?	2M	2	L1
5	What are the types of Transaction?	2M	3	L1
6	Define Deadlock.	2M	3	L1
7	What are the types of Failures in Distributed DBMS?	2M	4	L1
8	Define MTBF and MTTD.	2M	4	L1
9	What are the kinds of object distribution design?	2M	5	L1
10	Define Composition, Subclasses and Inheritance.	2M	5	L1
	Part-B			
Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) Explain Briefly about DDBMS Architecture. b) Explain the advantages & disadvantages of distributed databases.	5M 5M	1	L2
	OR			
12	a) What are the distribution design issues? Explain with examples? b) Explain Distributed Data Processing?	5M 5M	1	L2
13	Explain query processing with examples.	10M	2	L2
	OR			
14	Explain briefly about query decomposition & data localization.	10M	2	L2
15	Explain Serializability theory with an example.	10M	3	L2
	OR			
16	Explain Time-Stamped and Optimistic Concurrency Control algorithms.	10M	3	L2
17	Explain 2 Phase and 3 Phase commit Protocols with neat diagrams.	10M	4	L2
	OR			

18	Explain Parallel Database Architectures with neat diagrams and its advantages and disadvantages.	10M	4	L2
19	Explain briefly about architectural issues in distributed object DBMS.	10M	5	L2
	OR			
20	a) Explain Persistent Programming Languages. b) Distinguish between OODBMS and ORDBMS.	5M 5M	5	L2