



R18 Regulation

Subject code:2E6EC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, November 2025

DISTRIBUTED SYSTEMS

(CSE)

Maximum Marks: 70

Date: 19.11.2025

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	What are the types of transparencies?	2M	1	L1
2	List the key design goals of DS?	2M	1	L1
3	Define Mutual Exclusion.	2M	2	L1
4	what is asynchronization?	2M	2	L1
5	How callback is implemented in RMI.	2M	3	L1
6	Draw the Middleware Architecture.	2M	3	L1
7	Define Flat file service.	2M	4	L1
8	Define Client module.	2M	4	L1
9	Define Transactions?	2M	5	L1
10	Define Failure atomicity?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Describe about the client – server and peer-peer in system architecture.	10M	1	L2
OR				
12	Explain the following a) Failure Model b) Security Model	5M 5M	1	L2
13	Explain about bully election algorithm?	10M	2	L2
OR				
14	Explain central server and ring based Algorithms for mutual exclusion	10M	2	L2
15	Explain briefly about group communication.	10M	3	L2
OR				
16	Describe about the distributed object model.	10M	3	L2
17	Discuss briefly in distribution of processes in the Andrew File System?	10M	4	L2
OR				
18	Describe briefly about Iterative navigation?	10M	4	L2
19	Compare and contrast between forward and backward validation	10M	5	L2
OR				
20	Write about time stamp ordering?	10M	5	L2