R18 Regulation Subject code:2E6EC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, June/July 2023

Distributed Systems

(Computer Science and Engineering)

Maximum Marks: 70 Date:22.06.2023 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)

1 Define distributed system?
2 Why do you need distributed system?
3 Define clock.
4 What is distributed garbage collection?
5 What is unmarshalling?
6 What are the approaches used in data representation?
7 Define Flat file service.
8 What are the components of file service.
9 Define Transactions?
10 Define Failure atomicity?

Part-B

Answer All the following questions. (5X10M=50Marks)

11 Explain briefly about the general examples of distributed system? [10]

OR

12 Explain about the challenges of distributed system? [10]
13 Discuss in detail about lamport algorithm in logical clock. [10]

OR

14 Explain briefly about distributed mutual exclusion. [10]
15 Discuss: a) UDP datagram communication b) TCP stream communication [5+5]

OR

16 What is marshalling? Explain the marshalling operation in CORBA? [10]
17 Explain about the Internet Domain Name System. [10]

OR

18 Describe about DNS resource records. [10]
19 Describe about locking rules in nested transaction. [10]

OR

20 Explain about deadlock avoidance and deadlock prevention. [10]