Roll No											

PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF ENGINEERING
END TERM EXAMINATION - JUN 2023

Semester : Semester VI - 2020
Course Code : CSE2052
Course Name : Sem VI - CSE2052 - Distributed System
Program : COM&CSE

Date : 14-JUN-2023
Time : 9.30AM - 12.30PM
Max Marks : 100
Weightage : 50%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.
(iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS **(5 X 2 = 10M)**

1. List down the goals of process Migration.

(CO5) [Knowledge]

2. Define URI.

(CO1) [Knowledge]

3. Mention the categories of Structured files.

(CO3) [Knowledge]

4. Define Clock skew.

(CO2,CO4) [Knowledge]

5. Define Arbitrary failure.

(CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS **(5 X 10 = 50M)**

6. Compare the various types of system models in distributed system

(CO1) [Comprehension]

7. Define the integrity property of reliable communication and list all the possible threats to integrity from users and from system components. What measures can be taken to ensure the integrity property in the face of each of these sources of threats.

(CO3) [Comprehension]

8. What is the need of distributed system ?List the distributed system challenges.

(CO2) [Comprehension]

9. What is deadlock?How deadlock can be recovered?Explain the types of distributed deadlocks.

(CO5) [Comprehension]

10. Elucidate about file service architecture and its operations with neat sketch.

(CO4) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS **(2 X 20 = 40M)**

11. Enumerate and explain the two types of Election algorithms and illustrate its functioning, when process P wants to send a request to the coordinator. Assume that coordinator is not responding to process P. How is the election conducted by both of the Election Algorithm for selecting the coordinator.

(CO5) [Application]

12. How does a process migration happen, examining the major methods involved to transfer address space. Illustrate it with diagrams to explain.

(CO3) [Application]