QP CODE: 24800363

24800363

Reg No : .....

Name : .....

I.M.C.A DEGREE EXAMINATION, DECEMBER 2023

Sixth Semester

Faculty of Technology & Applied Science

Integrated MCA

CORE - IMCA6E02C - DISTRIBUTED PROCESSING

2020 Admission Onwards

5DED0D83

Time: 3 Hours Maximum: 75 Marks

Part A

*Answer any **ten** questions*

*Each question carries **3** marks*

1. Define key advantage of a distributed system.
2. What is Superpeers?
3. What is software adaptation?
4. What is client-side virtualization?
5. Explain the three segments in code miigration
6. What is MPI?
7. What is attribute-based naming?
8. Explain the drawbacks of ring algorithm.
9. What is process resilience?
10. Explain the concept of FIFO (First-In-First-Out) message ordering and its significance
11. Define DDoS?
12. What is digital signatures?

(10×3=30 marks)

Part B

*Answer **all** questions*

*Each question carries **9** marks*

13. a) Discuss the types of distributed embedded systems.

OR

b) Discuss about the type of systems in hybrid architecture.

14. a) Discuss the role and significance of threads in distributed systems.

OR

b) Examine the fundamental steps involved in a Remote Procedure Call (RPC).

15. a) Elaborate on the role of structured naming in the context of distributed system

OR

b) Explain token based algorithm with a neat diagram.

16. a) Explain the concept of client-centric consistency models in detail.

OR

b) Explain the importance of reliable communication in client-server systems.

17. a) How does cryptography function as a safeguard for sensitive information.

OR

b) Explore the significance of secure key exchange in both symmetric and asymmetric cryptographic systems.

(5×9=45 marks)