

Roll No .....

## **MCADD-802**

**M.C.A. (Integrated), VIII Semester**

**Examination, November 2023**

**Distributed Systems**

**Time : Three Hours**

**Maximum Marks : 70**

- Note :** i) Attempt any five questions.  
ii) All questions carry equal marks.

1. a) Explain properties of Distributed System. Discuss concept of Clock in Distributed System.  
b) With clear explanation describe the Message and Stream oriented communications in Distributed System.
2. a) Discuss the concept of Process and synchronization in Distributed Systems.  
b) Explain the concept of Mutual exclusion principle using a suitable example related to Distributed System.
3. a) Describe in detail about Replication and fault tolerance related to Distributed System.  
b) Explain Distributed Security Architecture(DSA) using a suitable example.
4. a) Describe CORBA Distributed Object Based File Systems and its need.  
b) Discuss in detail about the Goals and Design Issues of Distributed file.

5. a) Explain the architecture of Distributed transactions using a suitable example.  
b) Explain the concept of Remote object invocation in Distributed system.
6. a) Describe the importance and architecture of JAVA RMI in Distributed system.  
b) Explain the concept of Bully and Ring Algorithm in Distributed system.
7. a) Explain ActiveX and Orbix in Distributed System.  
b) Explain KERBEROS authentication and its versions including transactions.
8. a) Explain in detail about the Sun network file system in Distributed System.  
b) Explain Synchronization, Control and Communications in Distributed System using a suitable example.

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