Important Question

Chapter 1

- 1. Define a distributed system.(5 times)
- 2. What are the main characteristics (design goals or objectives or requirements) of a distributed system?(6 times)
- 3. Explain the need for transparency in distributed system along with the challenges in achieving that.(3 times)

Chapter 2

- 4. Explain RPC mechanism.(3 times)
- 5. Remote Method Invocation(RMI)(5 times)
- 6. Explain Distributed File System (DFS)(4 times)
- 7. Explain Sun Network File System along with features(4 times)
- 8. Explain the operation of SUN NFS with its architecture.(4 times)
- Explain DNS is a distributed hierarchical database along with the working mechanism.(4 times)
- 10. Difference between RMI & RPC(3 times)

Chapter 3

- 11. Explain monolithic kernel.(4 times)
- 12. Explain microkernel.(3 times)

Chapter 4

- 13. Explain role of middleware in DS(3 times)
- 14. What is IDL? Along with its role (6 times)

Chapter 5

- 15. Cristian's Method(4 times)
- 16. Define Logical Clock(3 times)
- 17. Lamport's Clock Algorithm(5 times)
- 18. Type of Cuts(3 times)

Chapter 6

- 19. Define election algorithm along with its importance(3 times)
- 20. Bully Algorithm(5 times)
- 21. How to come to consensus in DS(3 times)

Chapter 7

- 22. Define Replication along with the reasons for it(5 times)
- 23. How can you claim replication is one of the scaling technique in DS(3 times)

- 24. Passive & Active Replication(7 times)
- 25. Discuss a technique to make DS highly available(4 times)

Chapter 8

- 26. Define Nested Transaction(3 times)
- 27. Different Method of Concurrency Control(4 times)
- 28. Optimistic Concurrency Control(3 times)
- 29. Atomic Commit Protocol(3 times)
- 30. Two Phase Commit Protocol(3 times)
- 31. Distributed Deadlock(4 times)

Chapter 9

- 32. Define K-fault tolerant system(3 times)
- 33. Process Resilience(6 times)
- 34. Coordinated Checkpoint(3 times)
- 35. Explain Byzantine general problem to handle faculty process with an example(3 times)

Chapter 10

- 36. Main component of COBRA RMI(4 times)
- 37. Dynamic & Static Invocation approaches of COBRA(3 times)
- 38. COBRA Services(6 times)
- 39. MACH(3 times)
- 40. JINI(4 times)