

DISTRIBUTED COMPUTING – MCS-12

Theory Paper – 100 Marks

Sessional – 50 Marks

Introduction to the distributed systems, Pros and Cons of distributed Processing, distributed databases, distributed Resources, distributed Networks management. Design Considerations; Communication line loading , Partitioning and Allocation, Network Data Base design Consideration .data Communications distributed Networks-Uylessd, Black.

Fundamental of Network and distributed Operating System, Remote Service Robustness Design issues, distributed file system , Naming and Transparency, Remote file Access, File replication , Distributed coordination ; Event ordering, Mutual exclusion , Atomicity , concurrency control, Deadlock handling, various algorithms.

Distributed shared Memory ; Architecture, Design & Implementation issues, Granularity, structure, replacement strategy , Thrashing synchronization : clock synchronization, Event Ordering, Mutual Exclusion Process Management: Process Migration Threads. Case studies: Amoeba, V-System , Mach, Chorus.

BOOKS :

- 1 Computer Networks: Tanenbaum.
- 2 Data Communication and Distributed Networks : Black.
- 3 Distributed Operating System: Sinha
- 4 Internetworking with TCP/IP : Comer.
- 5 Data Communications, Computer Networks and Open Systems : Hallsall.
- 6 Data Communications : Stalling.