

IV/IV B.TECH.(CSE) II - SEMESTER

CSE 4.2.1 DISTRIBUTED OPERATING SYSTEMS Credits:4
Instruction: 3 Periods & 1 Tut. /Week Sessional Marks: 30
Univ.-Exam : 3 Hours Univ-Exam-Marks:70

Introduction to Distributed Systems, What is a Distributed System?, Hard ware concepts, Software concepts, Design issues.

Communication in Distributed Systems, Layered Protocols, ATM networks, The Client – server model, Remote Procedure call, Group communication.

Synchronization in Distributed System, Clock Synchronization, Mutual Exclusion, Election algorithms, Atomic transactions, Deadlocks in Distributed Systems.

Process and processors in Distributed System threads, System Models, Processors allocation, Scheduling in Distributed System, Fault tolerance, Real time Distributed System.

Distributed File Systems, Distributed File System Design, Distributed File System implementation, Trends in Distributed File System.

Distributed Shared Memory, Introduction, What is Shared memory?, Consistency models, Page based Distributed Shared memory, Shared – variable Distributed Shared memory, Object based Distributed Shared Memory.

TEXT BOOK:

Distributed Operating Systems, Andrew S. Tanenbaum

Reference Book:

Advanced Concepts in Operating Systems, Makes Singhal and Niranjana G.Shivaratna.