

Introduction to distributed system.	Distributed Systems, Computation models	Review the problem with traditional sequential systems and give the basic idea of distributed computing	Chapter 1 - (upto 1.3.1) Distributed Systems - Tannenbaum
Architectures	Client - Server Computing, Multi-tier Architectures, Cluster, Peer to Peer Architectures	Introduction to architectures	
Shared Memory	on-chip, bus-based, ring-based, switch based	Understand different Architectures	
Message passing system	synchronous (Blocking) and asynchronous (Non-blocking) systems	To know various Message passing models used in distributed computing	Chapter - 1 (1.5, 1.6, 1.7) - Distributed Computing - Kshemkalyani
Communication	RPC, Message -Oriented Communication		Chapter - 4 (4.2, 4.3) - Distributed Systems - Tannenbaum
Introduction to Global State Snapshot			Chapter 2 (till 2.6)
Global state and snapshot algorithms	System Model, Snap-shot Algorithm for FIFO Channels (Chandy-Lamport Algorithm)		Chapter 4 - Distributed Computing - Kshemkalyani
Global state and snapshot algorithms	Snap-shot Algorithm for Non-FIFO Channel (Lai-Yang)		Chapter 4 - Distributed Computing - Kshemkalyani
Global state and snapshot algorithms	Snap-shots in causal delivery system (Channel state recording in Acharya-Badrinath algorithm)		Chapter 4 - Distributed Computing - Kshemkalyani
Logical Time and Event Ordering, Clock Synchronization	Scalar - time, Vector - time		Chapter 3 - (3.1 to 3.5.1) - Distributed Computing - Kshemkalyani
Distributed Mutual Exclusion Algorithms	System Model, Requirements, Performance Metrics. Token-based, non-token based and Quorum based Algorithms	Understand how distributed Algorithms are designed	Chapter 9 - Distributed Computing - Kshemkalyani (9.1, 9.2)
Distributed Mutual Exclusion Algorithms	Non - Token based - Lamport's and Ricart - Agrawala Algorithm	Understand how distributed Algorithms are designed	Chapter 9 - Distributed Computing - Kshemkalyani (9.3, 9.4)
Distributed Mutual Exclusion Algorithms	Token based - Suzuki-Kasami's broadcast Algorithm	Understand how distributed Algorithms are designed	Chapter 9 - Distributed Computing - Kshemkalyani (9.11)
Distributed Mutual Exclusion Algorithms	Quorum based Algorithm - Maekawa's Algorithm	Understand how distributed Algorithms are designed	Chapter 9 - Distributed Computing - Kshemkalyani (9.7, 9.8)