GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING FOR WOMEN (JG),
DEPARTMENT OF CSE & IT
LECTURE SCHEDULE

FACULTY NAMES: S.SUMAHASAN, CH.V.V.D.PRASAD, D.INDU
YEAR: 2017-18 **CLASS: IV B.Tech II-Sem**
BRANCH: CSE & IT **SUBJECT: DISTRIBUTED SYSTEMS**

No. of the Unit	Name of the Concept	No. of Classes Required
Unit-1	**Characterization of Distributed Systems**	
	Introduction, Examples of Distributed Systems	1
	Resource Sharing and the Web Challenges.	1
	System Models	
	Introduction, Architectural Models- Software Layers,	1
	System Architecture, Variations	1
	Interface and Objects, Design Requirements for Distributed Architectures,	2
	Fundamental Models- Interaction Model	1
	Failure Model, Security Model.	2
	Total Number of Classes	9
Unit-2	**Inter process Communication**	
	Introduction, The API for the Internet Protocols- The Characteristics of Inter process communication,	2
	Sockets	1
	UDP Datagram Communication,	1
	TCP Stream Communication;	1
	External Data Representation and Marshalling;	1
	Client Server Communication;	2
	Group Communication- IP Multicast- an implementation of group communication	2
	Reliability and Ordering of Multicast.	1
	Total Number of Classes	11
Unit-3	**Distributed Objects and Remote Invocation**	
	Introduction, Communication between Distributed Objects- Object Model	2
	Distributed Object Model	1
	Design Issues for RMI, Implementation of RMI	2
	Distributed Garbage Collection	1
	Remote Procedure Call	1
	Events and Notifications, Case Study: JAVA RMI	2
	Total Number of Classes	09
	Operating System Support	

Unit-4	Introduction, The Operating System Layer	2
	Protection, Processes and Threads Address Space	2
	Creation of a New Process	1
	Threads	1
	Total Number of Classes	06
Unit-5	**Distributed File Systems**	
	Introduction, File Service Architecture	1
	Peer-to-Peer Systems: Introduction, Napster and its Legacy	2
	Peer-to-Peer Middleware	1
	Routing Overlays.	1
	Coordination and Agreement	
	Introduction, Distributed Mutual Exclusion,	2
	Elections	2
	Multicast Communication.	1
	Total Number of Classes	10
Unit-6	**Transactions & Replications**	
	Introduction, System Model and Group Communication	2
	Concurrency Control in Distributed Transactions,	2
	Distributed Dead Locks	2
	Transaction Recovery	2
	Replication-Introduction, Passive (Primary) Replication, Active Replication.	2
	Total Number of Classes	10
OVERALL NUMBER OF CLASSES REQUIRED		55