

LESSON PLAN

BRANCH-MCA

3rd SEMESTER

OPERATING SYSTEM

MODULE NO	TOPIC TO BE COVERED	NO OF CLASSES
	Evolution of Operating Systems: Types of operating systems	1
	Different views of the operating systems – Principles of Design and Implementation.	2
	The process concept – system programmer's view of processes – operating system's views of processes	3
	operating system services for process management.	4
	Process scheduling – Schedulers	5
	Scheduling Algorithms.	6
	Scheduling Algorithms.	7
	Structural overview, Concept of process and Process synchronization,	8
	Process Management and Scheduling,	9
	Hardware requirements: protection, context switching, privileged mode;	10
	Threads and their Management; Tools and Constructs for Concurrency,	11
	Detection and Prevention of deadlocks,	12
	Mutual Exclusion: Algorithms,	13
	Mutual Exclusion	14
	Mutual Exclusion	15
	semaphores	16
	concurrent programming using semaphores.	17
	Solving concurrent problem using semaphores.	18
	Memory Management paging,	19
	memory management,	20
	Contiguous allocation – static partitioned memory allocation	21
	dynamic partitioned memory allocation	22
	segmentation. Non-contiguous allocation	23
	paging – Hardware support – Virtual Memory, Dynamic Resource Allocation.	24
	File Systems: A Simple file system	25
	General model of a file system	26
	Symbolic file system – Access control verification	27
	Logical file system – Physical file system	28
	allocation strategy module – Device strategy module	29
	I/O initiators, Device handlers	30
	Disk scheduling	31
	Disk scheduling algorithms	32
	Disk scheduling algorithms	33
	Design of IO systems, File Management.	34
	Introduction to Unix and Unix commands.	35
	Introduction of sed, awk and grep family.	36
	Q and A	37
	Q and A	38
	Q and A	39
	Q and A	40