Course: BCA **Semester: V** 7440

Sub Code: 5BCA1 **Subject Name: Operating System**

Unit	Lectures	Practical's	Workshops	Demo	Field Visits	Total Hours	Remarks
UNIT-I Definitions, functions and types of operating system, components, Operating system Services, System Calls, programs, System structure.	8					8	
UNIT –II Process Concepts, process state & process control block, Process Scheduling, Scheduling Criteria, Scheduling Algorithms, MultipleProcessor Scheduling Real-Time Scheduling, Threads,	8					8	
UNIT –III Critical Section Problem , Semaphores, Classical Problem Of Synchronization, , Deadlock Characterizations, Method for Handling,Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock .	8					8	
UNIT –IV Logical versus physical address space, Swapping, Contiguous Allocation, Paging, Segmentation, Virtual Memory, Demand Paging, Page Replacement, Page Replacement Algorithms,	8					8	
UNIT –V Disk Scheduling, Disk Management, Swap Space Management, Disk. reliability, Stable Storage Implementation. File Concepts Directory structure, Protection, File system in Linux.	8					8	
TEXT & REFERENCE BOOKS: • *OPERATING SYSTEM CONCEPTS BY SILBERSCHATZ & GALVIN, ADDISON EDITION.* • *OPERATING SYSTEM CONCEPTS & DESIGN BY MILAN MILEN KOVIC, WESLEY PUBLICATION 6* • *OPERATING SYSTEM CONCEPTS & DESIGN BY MILAN MILEN KOVIC,TMH PUBLICATION*							