GANDHI SCHOOL OF ENGINEERING
BHABANDHA, BERHAMPUR
SESSION PLAN (SUMMER-2025)
4TH SEMESTER, BRANCH-INFORMATION TECHNOLOGY

OPERATING SYSTEM (TH-1)

Name of the Faculty –ER.SONU SAHU

Topics to be taken				TOPIC NO.	Actually Taken		
SL NO & CHAPTER	**No. of Periods assigned by SCTE & VT**	**Details of the topics**	**PLANNING DATE**		**Details of the topics**	**ACTUAL DATE**	**Remarks**
1 INTRODUCTION	3	**1. INTRODUCTION** 1.1 Objectives and Explain functions of operating system. 1.2 Evolution of Operating system 1.3 Structure of operating system.	06-02-2025 TO 10-02-2025	1 1.1 1.2 1.3	1. INTRODUCTION 1.1 Objectives and Explain functions of operating system. 1.2 Evolution of Operating system 1.3 Structure of operating system.	06-02-2025 06-02-2025 07-02-2025 10-02-2025	
2 PROCESS MANAGEMENT	10	**2. PROCESS MANAGEMENT** 2.1 Process concept, process control, interacting processes, inter process messages. 2.2 Implementation issues of Processes. 2.3 Process scheduling, job scheduling. 2.4 Process synchronization, semaphore. 2.5 Principle of concurrency, types of scheduling.	11-02-2025 TO 24-02-2025	2 2.1 2.2 2.3 2.4 2.5	2. PROCESS MANAGEMENT INTRODUCTION 2.1 Process concept, process control, interacting processes, inter process messages. 2.1 Process concept, process control, interacting processes, inter process messages. 2.1 Process concept, process control, interacting processes, inter process messages. 2.2 Implementation issues of Processes. 2.3 Process scheduling, job scheduling. 2.4 Process synchronization, semaphore. Types of scheduling. 2.5 Principle of concurrency, types of scheduling.	11-02-2025 12-02-2025 13-02-2025 14-02-2025 17-02-2025 18-02-2025 19-02-2025 20-02-2025 21-02-2025 24-02-2025	

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SL NO & CHAPTER	No. of Periods assigned by SCTE & VT	Details of the topics	PLANNING DATE		Details of the topics	ACTUAL DATE	Remarks
3 MEMORY MANAGEMENT	10	**3 MEMORY MANAGEMENT** 3.1 Memory allocation Techniques □ Contiguous memory allocation □ non contiguous memory allocation 3.2 Swapping 3.3 Paging Segmentation, virtual memory using paging 3.4 Demand paging, page fault handling.	25-02-2025 TO 11-03-2025	3 3.1 3.2 3.3 3.4	3 MEMORY MANAGEMENT INTRODUCTION 3.1 Memory allocation Techniques 3.1 Memory allocation Techniques □ Contiguous memory allocation □ non contiguous memory allocation Contiguous memory allocation & non contiguous memory allocation 3.2 Swapping 3.3 Paging Segmentation, virtual memory using paging 3.3 Paging Segmentation, virtual memory using paging 3.4 Demand paging, page fault handling.	25-02-2025 27-02-2025 28-02-2025 03-03-2025 04-03-2025 06-03-2025 07-03-2025 08-03-2025 10-03-2025 11-03-2025	
4 DEVICE MANAGEMENT	10	**4 DEVICE MANAGEMENT** 4.1 Techniques for Device Management □ Dedicated, □ shared and □ virtual. 4.2 Device allocation considerations I/O traffic control & I/O Schedule, I/O Device handlers. 4.3 SPOOLING.	12-03-2025 TO 26-03-2025	4 4.1 4.2 4.3	4 DEVICE MANAGEMENT INTRODUCTION 4.1 Techniques for Device Management □ Dedicated, □ shared and □ virtual. Deadicated, Share and Virtual 4.2 Device allocation considerations I/O traffic control & I/O Schedule, I/O Device handlers. 4.3 SPOOLING.	12-03-2025 17-03-2025 18-03-2025 19-03-2025 20-03-2025 21-03-2025 22-03-2025 24-03-2025 25-03-2025 26-03-2025	
5 Input – Output System	10	**5 DEAD LOCKS** 5.1 Concept of deadlock. 5.2 System Model 5.3 Dead Lock Detection 5.4 Resources allocation Graph 5.5 Methods of Deadlock handling 5.6 Recovery &Prevention, Explain Bankers Algorithm & Safety Algorithm	03-04-2025 TO 22-04-2025	5 5.1 5.2 5.3 5.4 5.5 5.6	5 DEAD LOCKS INTRODUCTION 5.1 Concept of deadlock. Concept of deadlock 5.2 System Model 5.3 Dead Lock Detection 5.4 Resources allocation Graph 5.5 Methods of Deadlock handling 5.6 Recovery &Prevention, Explain Bankers Algorithm & Safety Algorithm	03-04-2025 04-04-2025 07-04-2025 08-04-2025 10-04-2025 11-04-2025 15-04-2025 17-04-2025 21-04-2025 22-04-2025	

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SL NO & CHAPTER	No. of Periods assigned by SCTE & VT	Details of the topics	PLANNING DATE		Details of the topics	ACTUAL DATE	Remarks
6 FILE MANAGEMENT	10	**6. FILE MANAGEMENT** 6.1 File organization, Directory & file structure, sharing of files 6.2 File access methods, file systems, reliability 6.3 Allocation of disk space 6.4 File protection, secondary storage management.	24-04-2025 TO 06-05-2025	6 6.1 6.2 6.3 6.4	6. FILE MANAGEMENT INTRODUCTION 6.1 File organization, Directory & file structure, sharing of files 6.2 File access methods, file systems, reliability 6.3 Allocation of disk space Allocation of disk space 6.4 File protection ,secondary storage management.	24-04-2025 25-04-2025 28-04-2025 29-04-2025 30-04-2025 01-05-2025 02-05-2025 01-05-2025 03-05-2025 06-05-2025	
7 SYSTEM PROGRAMMING	7	**7. SYSTEM PROGRAMMING** 7.1 Concept of system programming and show difference from Application Complier: 7.2 Compiler , functions of compiler. 7.3 Compare compiler and interpreter. 7.4 Seven phases of compiler, brief description of each phase. 7.5 Flynn‟s Classification	07-05-2025 TO 15-05-2025	7 7.1 7.2 7.3 7.4 7.5	7. SYSTEM PROGRAMMING INTRODUCTION 7.1 Concept of system programming and show difference from Application Complier: 7.2 Compiler , functions of compiler. 7.3 Compare compiler and interpreter. 7.4 Seven phases of compiler, brief description of each phase. 7.5 Flynn‟s Classification	07-05-2025 08-05-2025 09-05-2025 10-05-2025 13-05-2025 14-05-2025 15-05-2025	

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