



GANAPATI INSTITUTE OF ENGINEERING AND TECHNOLOGY
Mathasahi, Jagatpur, Cuttack - 754200, Odisha
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

LESSON PLAN


Discipline: Computer Science & Engineering	Semester: 4 th ,	Name of the Faculty: Smaranika Moharana
Subject: Operating System (Th-1)	No. of Days/week: 04	StartDate: 04.02.2025 EndDate: 17.05.2025

Week	Class Day	Theory Topics
1st	1st	Introduction, Objectives and functions of operating system.
	2nd	Evolution of Operating system
	3rd	Structure of operating system
	4th	Process concept, process control
2nd	1st	Interacting processes, interprocess messages, implementation issues of Processes.
	2nd	Process scheduling
	3rd	Job scheduling
	4th	Process synchronization
3rd	1st	Process synchronization (Cont..)
	2nd	Semaphore
	3rd	Principle of concurrency
	4th	Types of scheduling
4th	1st	Types of scheduling (Cont..)
	2nd	Revision and Question Answer Discussion
	3rd	Quiz Test
	4th	Memory allocation Techniques, Contiguous memory allocation
5th	1st	Non-contiguous memory allocation, Swapping
	2nd	Paging
	3rd	Segmentation
	4th	Virtual memory using paging,
6th	1st	Demand paging
	2nd	Page fault handling
	3rd	Revision and Question Answer Discussion
	4th	Techniques for Device Management: Dedicated
7th	1st	Techniques for Device Management: virtual
	2nd	Device allocation considerations / I/O traffic control
	3rd	I/O Schedule
	4th	I/O Device handlers.
8th	1st	SPOOLING.
	2nd	Revision and Question Answer Discussion
	3rd	Concept of deadlock, System Model
	4th	Dead Lock Detection
9th	1st	Resource allocation Graph
	2nd	Methods of Deadlock handling
	3rd	Deadlock avoidance
	4th	Recovery from deadlock
10th	1st	Bankers Algorithm

	2nd	Safety Algorithm
	3rd	RevisionandQuestionanswerDiscussion
	4th	Fileorganization,Directory&filestructure
11th	1st	Sharingof files
	2nd	Fileaccessmethods
	3rd	filesystems,reliability
	4th	Allocationofdiskspace
12th	1st	Allocationofdiskspace(cont...)
	2nd	Fileprotection
	3rd	Secondarystoragemanagement
	4th	Secondarystoragemanagement(Cont...)
13th	1st	HardDiskStructureanditsperformance
	2nd	HardDiskSchedulingAlgorithms
	3rd	RevisionandQuestionanswerDiscussion
	4th	QuizTest
14th	1st	SYSTEMPROGRAMMING:Conceptofsystemprogrammingandshow differencefromApplicationComplier
	2nd	Compiler,functionsofcompiler,Comparecompilerandinterpreter
	3rd	Sevenphasesofcompiler,briefdescriptionofeach phase
	4th	Sevenphasesofcompiler,briefdescriptionofeachphase(Cont...)
15th	1st	RevisionandQuestionanswerDiscussion
	2nd	PreviousEndsemestersendsemesterQuestionanswerDiscussion
	3rd	PreviousEndsemestersendsemesterQuestionanswerDiscussion
	4th	PreviousEndsemestersendsemesterQuestionanswerDiscussion


 29/01/25
 Sign Of Faculty

Dept. of Computer Science & Engg.
 S. P. ...
 29.1.25
 Sign Of Sr.Lect.


 29.1.25
 Sign Of Principal