

DHABALESWAR INSTITUTE OF POLYTECHNIC

LESSON PLAN

Discipline: <u>Comp. Sc & Engg</u>		Name of the Teaching Faculty <u>Mam Rajan Mohanty</u>	
Semester: <u>4th</u>	No. of days per week Class Allotted: <u>05</u>	Semester from Dt. <u>14.2.23</u> to Dt. <u>29.5.23</u>	No. of Weeks: <u>15</u>
Subject: <u>Operating System</u>	Class Day	Theory / Practical Topics	
1st	1st, 2nd, 3rd, 4th	→ Objectives and Functions of operating systems → Evolution of operating systems → Structure of operating system	
2nd	1st, 2nd, 3rd, 4th, 5th	→ Process Management → process concept, process control → interacting process, interprocess messages → Implementation issues of processes → process scheduling	
3rd	1st, 2nd, 3rd, 4th, 5th	→ Job scheduling → process Synchronization → Semaphore → principle of concurrency → Types of scheduling	
4th	1st, 2nd, 3rd, 4th, 5th	→ Memory Management → Memory allocation techniques → contiguous memory allocation → non contiguous memory allocation → Swapping	
5th	1st, 2nd, 3rd, 4th, 5th	→ Paging → Segmentation → virtual memory using paging → Demand paging → Page fault handling	
6th	1st, 2nd, 3rd, 4th, 5th	→ Device Management → Techniques for device Management → dedicated device Management → Shared device Management	

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LESSON PROGRESS

Topic to be covered as per Lesson Plan	Topic actually covered	Point / Contents Discussed (in brief)	Sign of Teacher
2.2.1 Objective of operating system	Objective of operating system	Objective of operating system	<u>Mam</u>
2.2.3 Functions of operating system	Functions of operating system	Functions of operating system	<u>Mam</u>
2.2.3 Evolution of operating system	Evolution of operating system	Evolution of operating system	<u>Mam</u>
2.2.3 Structure of operating system	Structure of operating system	Structure of operating system	<u>Mam</u>
2.2.3 Layered structure of operating system	Layered structure of operating system	Layered structure of operating system	<u>Mam</u>
2.2.3 Simple structure of operating system	Simple structure of operating system	Simple structure of operating system	<u>Mam</u>

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Week	Class Day	Theory / Practical Topics
6th	5th	→ virtual device management
7th	1st	→ Device allocation considerations
	2nd	→ I/O control
	3rd	→ I/O schedule
	4th, 5th	→ I/O device Handlers
8th	1st (Ch-5)	→ Spooling
	2nd	→ Dead Locks
	3rd, 4th	→ concept of dead lock
	5th	→ System Model
9th	1st	→ Dead lock detection
	2nd, 3rd	→ Resource allocation graph
	4th	→ Methods of deadlock Handling
	5th	→ Recovery and prevention
10th	1st (Ch-6)	→ Explain Bankers Algorithm and Safety Algorithm
	2nd	→ File Management
	3rd	→ File organization
	4th	→ Directory
	5th	→ File structure
11th	1st	→ Sharing of Files
	2nd	→ File access methods
	3rd	→ File Systems
	4th, 5th	→ reliability
12th	1st	→ Allocation of disk Space
	2nd	→ File protection
	3rd	→ Secondary storage
		→ Storage Management

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Week	Class Day	Theory / Practical Topics
12th	4th, 5th	→ System programming
	5th	→ Concept of system programming
13th	1st	→ Difference from application compiler
	2nd	→ compiler
	3rd	→ Function of compiler
	4th, 5th	→ compare compiler and interpreter
14th	1st, 2nd	→ seven phases of compiler
	3rd, 4th	→ Description of seven phases
	5th	→ Description of each seven phases of compiler
15th	1st	→ Revision
	2nd	→ Revision