

**PNS SCHOOL OF ENGINEERING AND TECHNOLOGY, MARSHAGHAI**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING LESSON PLAN**

BRANCH : COMPUTER SCIENCE AND ENGINEERING		SEMESTER : 5TH	NAME OF THE TEACHING FACULTY : ER : JAYASHREE BISHOI
SUBJECT : COMPUTER HARDWARE & MAINTENANCE		NO. OF DAYS PER WEEK CLASS ALLOTTED : 05	SEMESTER FROM DATE : 01.08.2023 TO 30.11.2023
CHAPTER	WEEK	CLASSES	TOPIC TO BE COVERED
COMPUTER CENTRE MANAGEMENT	1ST	1st	Need of Management in Computer Centre
		2nd	Types of Jobs carried out in computers in an organization
		3rd	Duties and responsibilities of personnel involved
		4th	Need of Training of Staff
		5th	Idea about Various makes of Computers.
SITE PREPARATION & INSTALLATION	2nd	1st	Layouts of computer centre
		2nd	False Roofing, Air Conditioning, Dust Proofing
		3rd	Power Conditioning equipments like CVT, UPS,
		4th	Isolation Circuits with Principles of functioning
		5th	Components and slots (Processor socket/slot, memory sockets,
MOTHER BOARD and COMPONENTS	3rd	1st	Chip sets, Cache, BIOS, Clock Generator, RTC, I/O Controller
		2nd	Key Board/Mouse Connectors, Jumpers, Pin Connectors etc)
		3rd	Mother architecture and Block Diagram
		4th	Processors (Core2 Duo Processor, Quad Core Processor)
		5th	Core i3,i5,i7 series, AMD A10 series, Xeon Processor
	4th	1st	Chip Sets
		2nd	Bus Standards: PCI, AGP, USB etc.
		3rd	Colour Codes for Devices/ports
		4th	Doubt clearing class
	5th	5th	Primary and secondary Memory
		1st	Memory speed , Access time
		2nd	Hard Disk, Construction, Working Principles
		3rd	File System, Formatting, Partitioning
		4th	Removable Storage and Special devices and
		5th	their working principles
MEMORY AND I/O DEVICES		1st	Working principle of(CD, DVD, External drives, Memory stick, USB flash drive, Solid state drive)
		2nd	Key Board(Interfacing, USB, Wireless



DISPLAY , POWER SUPPLY AND BIOS	6th	3rd	Types of keys, Keyboard Matrix, Key Bouncing)
		4th	Mouse Interfacing
		5th	Printers(Types, operation and Trouble shooting)
		1st	Scanners(Types, operation and Trouble Shooting)
		2nd	Doubt clearing class
MAINTENANCE AND TROUBLE SHOOTING	7th	3rd	Displays and Graphics Cards
		4th	LCD, PLASMA, TFT, LED Displays
		5th	Class test
		1st	SMPS (Basic Principles and operations, O/P voltage)
		2nd	BIOS( Functions, setups, types of BIOS)
	8th	3rd	POST(Operation, Faults related to Hardware)
		4th	Assembly of Components of Desktop Computers
		5th	
	9th	1st	Configuring Laptops and Power settings
		2nd	Laptop Components
		3rd	(Adapter , Battery, Basic problems, RAM types)
		4th	CPU types, Laptop Motherboard, block diagram, Laptop Keyboard
		5th	Formatting , Partitioning and installation of OS
NETWORKING DEVICES AND THEIR INTERFACES	10th	1st	Trouble shooting of Common ly faced problems in Desktops and Laptops
		2nd	
		3rd	Basic Maintenance concepts(Preventive, Corrective, online)
		4th	Diagnostic programs and tools
		5th	Methods of Trouble shooting
	11th	1st	symptom observation, analysis, diagnosis, Correction
		2nd	Up gradation of system and application software
		3rd	Virus concepts, Antivirus
		4th	Doubt clearing class
		5th	Network Interface card
NETWORKING DEVICES AND THEIR INTERFACES	12th	1st	Networking interconnecting devices such as hub, switch, Router
		2nd	Types of Network cable
		3rd	Types of Network connector
		4th	Previous year Question answer discusion
		5th	Doubt clearing class

Jayashree Bishtoi

SIGNATURE OF LECTURER

Biswanarayan Swain

SIGNATURE OF HOD