

PNS School of Engg. & Tech, Marshaghai, Kendrapara
LESSON PLAN
Session (2024-2025)

Discipline: Computer Science		Semester: 5th	Name of the faculty: Jayashree Bishoi
Subject: COMPUTER HARDWARE & MAINTENANCE		No. of Days/week: 05	Start Date: 01/07/2024
			End Date: 08/11/2024
Week	Class Day	Theory Topics	
1st	1st	1.COMPUTER CENTRE MANAGEMENT (Introduction)	
	2nd	Need of Management in Computer Centre	
	3rd	Types of Jobs carried out in computers in an organization	
	4th	Duties and responsibilities of personnel involved	
	5th	Need of Training of Staff	
2nd	1st	Idea about Various makes of Computers	
	2nd	Various makes of Computers Continued	
	3rd	Question Answer Discussion	
	4th	2.SITE PREPARATION & INSTALLATION (Introduction)	
	5th	Layouts of computer centre	
3rd	1st	False Roofing, Air Conditioning, Dust Proofing	
	2nd	Power Conditioning equipments like CVT	
	3rd	Power Conditioning equipments like UPS	
	4th	Types of UPS and its functionality	
	5th	Isolation Circuits with Principles of functioning	
4th	1st	Exam related Question Answer Discussion	
	2nd	3.MOTHER BOARD and COMPONENTS (Introduction)	
	3rd	Components and slots (Processor socket/slot, memory sockets)	
	4th	Discussion about Chip sets, Cache, BIOS	
	5th	Discussion about Clock Generator, RTC, I/O Controller	
5th	1st	Key Board/Mouse Connectors, Jumpers, Pin Connectors etc)	
	2nd	Mother Board architecture and Block Diagram	
	3rd	Processors (Core2 Duo Processor, Quad Core Processor)	
	4th	Core i3,i5,i7 series, AMD A10 series, Xeon Processor	
	5th	Chip Sets	
	1st	Bus Standards: PCI, AGP, USB etc.	

6th	2nd	Colour Codes for Devices/ports
	3rd	Doubt clearing class
	4th	4.MEMORY AND I/O DEVICES (Introduction)
	5th	Primary and secondary Memory
7th	1st	Memory speed , Access time
	2nd	Hard Disk, Construction, Working Principles
	3rd	File System, Formatting, Partitioning
	4th	Removable Storage and Special devices and
	5th	Working principles of Removable Storage and Special devices
8th	1st	Working principle of(CD, DVD, External drives, Memory stick, USB flash drive, Solid state drive)
	2nd	Key Board(Interfacing, USB, Wireless, Types of keys, Keyboard Matrix, Key Bouncing)
	3rd	Printers(Types, operation and Trouble shooting)
	4th	Scanners(Types, operation and Trouble Shooting)
	5th	5.DISPLAY , POWER SUPPLY AND BIOS (Introduction)
9th	1st	Displays and Graphics Cards
	2nd	LCD,PLASMA,TFT,LED Displays
	3rd	SMPS (Basic Principles and operations, O/P voltage)
	4th	BIOS(Functions, setups, types of BIOS)POST(Operation, Faults related to Hardware)
	5th	6. MAINTENANCE AND TROUBLE SHOOTING (Introduction)
10th	1st	Assembly of Components of Desktop Computers
	2nd	Configuring Laptops and Power settings
	3rd	Laptop Components(Adapter , Battery, Basic problems, RAM types)
	4th	CPU types, Laptop Motherboard, block diagram, Laptop Keyboard
	5th	Commonly faced problems in Desktops and Laptops
11th	1st	Basic Maintenance concepts(Preventive, Corrective, online),Diagnostic programs and tools
	2nd	Methods of Trouble shooting, symptom observation, analysis, diagnosis, C
	3rd	Upgradation of system and application software
	4th	Virus concepts, Antivirus
	5th	7.NETWORKING DEVICES AND THEIR INTERFACES(Introducti
12th	1st	Network Interface card
	2nd	Networking interconnecting devices such as hub, switch, Router
	3rd	Types of Network cable

4th	Types of Network connector
5th	Previous year Question Discussion

Jayashree Bishei

SIGNATURE OF LECTURER

Biswanarjan Swain

SIGNATURE OF H.O.D