BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
LESSON PLAN

Discipline: CSE	Semester: 5th		Name of the Teaching Faculty: SOMYA SUBHADARSHINI
Subject: Computer Hardware & Maintenance	No. Of days/per week class allotted: 04 periods per week (Mon, Tue, Thurs, Fri)	No. Of period available 51	From Date 15-09-2022 To Date: 22-12-2022 No. Of Weeks: 15
WEEK	**CLASS DAY**		**Topics to be covered**
1st	15.09.2022	1	**1.COMPUTER CENTER MANAGEMENT** Fundamentals of Computer Hardware & Maintenance
	16.09.2022	1	1.1. Need of management in computer centre
2nd	19.09.2022	1	1.2. Types of job carried out in computers in an organisation
	20.09.2022	1	1.3. Duties & responsibility of personally involved in computer centre
	22.09.2022	1	1.4.Need of training of staffs in computer centre
	23.09.2022	1	1.5.Idea about various makes of computers
3rd	26.09.2022	1	Assignment & doubt clearing **2.SITE PREPARATION & INSTALLATION** 2.1.Lays outs of computer centre
	27.09. 2022	1	2.2.False roofing, Air conditioning, Dust proofing
	29.09. 2022	1	2.3. Power conditioning equipment like CVT
	30.09. 2022	1	2.4. Power conditioning equipment like UPS
4th	03-10-2022 TO 08-10-2022	1	PUJA HOLIDAY
5th	10.10.2022	1	2.5. Power conditioning equipment like Isolation circuits with principle of function Assignment & doubt clearing
	11.10.2022	1	**Class Test 1**
	13.10.2022	1	**3.MOTHER BOARD & COMPONENTS** 3.1.Components & slots(Processor socket/slot, memory sockets, chip sets)
	14.10.2022	1	3.2.Components & slots(cache, BIOS ,clock generator)
6th	17.10. 2022	1	3.3.Components & slots(RTC,I/O controller, power connector)
	18.10. 2022	1	3.4.Components & slots(key board/mouse connectors, jumpers, PIN connectors etc)
	20.10. 2022	1	3.5.MOTHERBOARD architecture &block diagram
	21.10. 2022	1	3.6.Processors(core2 Duo processor, Quad core processor)
7th	25.10. 2022	1	3.7.Processors(core i3,i5,i7 series ,AMD A10 series Xeon processor)
	27.10. 2022	1	3.4.Chip sets
	28.10. 2022	1	3.5.Bus standards :PCI, AGP,USB etc.
8th	31.10. 2022	1	3.6. Bus standards: PCI,AGP,USB etc
	01.11. 2022	1	3.7. Colour codes for devices/ports Assignment & doubt clearing
	03.11. 2022	1	**Class Test 2** **4.Memory & I/O devices** 4.1.Primary memory & secondary memory
	04.11. 2022	1	4.2.memory speed, Access time

9th	07.11.2022	1	4.3.Hard disk, Construction, working principles
	10.11.2022	1	4.4. File System, Formatting, Partitioning
	11.11.2022	1	4.5.Removable Storage and Special devices and their working principles(CD, DVD, External drives, Memory stick, USB flash drive, Solid state drive)
10th	14.11.2022	1	4.6.Removable Storage and Special devices and their working principles(CD, DVD, External drives, Memory stick, USB flash drive, Solid state drive)
	15.11.2022	1	4.7. Key Board(Interfacing, USB, Wireless, Types of keys, Keyboard Matrix, Key Bouncing)
	17.11.2022	1	Internal assessment-1
	18.11.2022	1	Internal assessment-1
11th	21.11.2022	1	4.8. Key Board(Interfacing, USB, Wireless, Types of keys, Keyboard Matrix, Key Bouncing) 4.9.Mouse Interfacing
	22.11.2022	1	4.10. Printers(Types, operation and Trouble shooting) 4.11.Scanners(Types, operation and Trouble shooting) **Assignment & doubt clearing**
	24.11.2022	1	**5. DISPLAY , POWER SUPPLY AND BIOS** 5.1 Displays and Graphics Cards 5.2 LCD,PLASMA,TFT,LED Displays
	25.11.2022	1	5.3 SMPS (Basic Principles and operations, O/P voltage)
12th	28.11.2022	1	5.4 BIOS(Functions, setups, types of BIOS)
	29.11.2022	1	5.5 POST(Operation, Faults related to Hardware **Assignment & doubt clearing**
	01.12.2022	1	**Class Test 3** **6. MAINTENANCE AND TROUBLE SHOOTING** 6.1 Assembly of Components of Desktop Computers
	02.12.2022	1	6.2 Configuring Laptops and Power settings
13th	05.12.2022	1	6.3 Laptop Components(Adapter , Battery, Basic problems, RAM types, CPU types, Laptop Motherboard, block diagram, Laptop Keyboard)
	06.12.2022	1	6.4 Laptop Components(Adapter , Battery, Basic problems, RAM types, CPU types, Laptop Motherboard, block diagram, Laptop Keyboard)
	08.12.2022	1	6.4 Formatting , Partitioning and installation of OS
	09.12.2022	1	6.5 Trouble shooting of Commonly faced problems in Desktops and Laptops
14th	12.12.2022	1	6.6 Basic Maintenance concepts(Preventive, Corrective, online)
	13.12.2022	1	6.7 Diagnostic programs and tools 6.8 Methods of Trouble shooting(symptom observation, analysis, diagnosis, Correction)
	15.12.2022	1	6.9 Up gradation of system and application software 6.10 Virus concepts, Antivirus **Assignment & doubt clearing** **Class Test 3**
	16.12.2022	1	**7. NETWORKING DEVICES AND THEIR INTERFACES** 7.1 Network Interface card
15th	19.12.2022	1	7.2 Networking interconnecting devices such as hub, switch, Router
	20.12.2022	1	7.3 Types of Network cable 7.4 Types of Network connector
	22.12.2022	1	**7.4 .Overall revision** **Assignment & doubt clearing**