KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN

Session	::	Winter 2022
Course Type	::	Theory
Semester/Branch	::	5th Semester, Computer Science &Engineering
Subject (with code)	::	Computer Hardware & Maintenance (Th.4)
Contact hours/week	::	4 hrs/week
Name of Faculty	::	Mr. Amalendu Kumar Pradhan

Sl. No	Class ID	Course Content	Mode of Delivery	Exhibit/Reference
1	1	**Unit-1: Computer Centre Management** Need of Management in Computer Centre	Lecture (Explanation)	"Computer Management & Planning" By Utpal Banarjee / Study Material
2	2	Types of Jobs carried out in computers in an organization Duties and responsibilities of personnel involved	Lecture (Explanation)	"Computer Management & Planning" By Utpal Banarjee / Study Material
3	3	Need of Training of Staff Idea about Various makes of Computers.	Lecture (Explanation)	"Computer Management & Planning" By Utpal Banarjee / Study Material
4	4	**Unit-2: Site Preparation & Installation** Layouts of computer centre	Lecture (Explanation)	Study Material
5	5	False Roofing, Air Conditioning, Dust Proofing	Lecture (Explanation)	Study Material
6	6	Power Conditioning equipment like CVT, UPS, Isolation Circuits with Principles of functioning.	Lecture (Explanation)	Study Material
7	7	**Unit-3: Mother Board and Components** Processor socket/slot, memory sockets, Chip sets, Cache, BIOS, Clock Generator, RTC, I/O Controller, power Connector	Lecture (Explanation)	PC Hardware by B. Singh / Study material
8	8	Key Board/Mouse Connectors, Jumpers, Pin Connectors etc)	Lecture (Elaboration)	PC Hardware by B. Singh / Study material

9	9	Components and slots	Lecture (Explanation)	PC Hardware by B. Singh / Study material
10	10	Components and slots	Lecture (Explanation)	PC Hardware by B. Singh / Study material
11	11	Components and slots	Lecture (Explanation)	PC Hardware by B. Singh / Study material
12	12	Mother architecture and Block Diagram	Lecture (Explanation)	PC Hardware by B. Singh / Study material
13	13	Processors (Core2 Duo Processor, Quad Core Processor, Core i3, i5, i7 series, AMD A10 series, Xeon Processor)	Lecture (Explanation)	PC Hardware by B. Singh / Study material
14	14	Processors (Core2 Duo Processor, Quad Core Processor, Core i3, i5, i7 series, AMD A10 series, Xeon Processor)	Lecture (Explanation)	PC Hardware by B. Singh / Study material
15	15	Processors (Core2 Duo Processor, Quad Core Processor, Core i3, i5, i7 series, AMD A10 series, Xeon Processor)	Lecture (Explanation)	PC Hardware by B. Singh / Study material
16	16	Chip Sets	Lecture (Explanation)	PC Hardware by B. Singh / Study material
17	17	Bus Standards: PCI, AGP, USB etc.	Lecture (Elaboration)	PC Hardware by B. Singh / Study material
18	18	Bus Standards: PCI, AGP, USB etc.	Lecture (Elaboration)	PC Hardware by B. Singh / Study material
19	19	Colour Codes for Devices/ports	Lecture (Elaboration)	PC Hardware by B. Singh / Study material
20	20	**Unit-4; Memory And I/O Devices** Primary and secondary Memory	Lecture (Explanation)	PC Hardware by B. Singh / Study material
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22	22	Primary and secondary Memory	Lecture (Explanation)	PC Hardware by B. Singh / Study material
23	23	Memory speed, Access time	Lecture (Explanation)	PC Hardware by B. Singh / Study material

24	24	Hard Disk, Construction, Working Principles	Guest Lecture (Explanation)	PC Hardware by B. Singh / Study material
25	25	Hard Disk, Construction, Working Principles	Guest Lecture (Explanation)	PC Hardware by B. Singh / Study material
26	26	File System, Formatting, Partitioning	Guest Lecture (Explanation)	PC Hardware by B. Singh / Study material
27	27	Removable Storage and Special devices and their working principles (CD, DVD, External drives, Memory stick, USB flash drive, Solid state drive)	Lecture (Explanation)	PC Hardware by B. Singh / Study material
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29	29	Key Board (Interfacing, USB, Wireless, Types of keys, Keyboard Matrix, Key Bouncing) Mouse Interfacing	Lecture (Explanation)	PC Hardware by B. Singh / Study material
30	30	Printers (Types, operation and Troubleshooting)	Lecture (Elaboration)	PC Hardware by B. Singh / Study material
31	32	Scanners (Types, operation and Trouble Shooting)	Lecture (Explanation)	PC Hardware by B. Singh / Study material
33	33	**Unit-5: Display, Power Supply and Bios** Displays and Graphics Cards	Lecture (Explanation)	PC Hardware by B. Singh / Study material
34	34	LCD, PLASMA, TFT, LED Displays	Lecture (Explanation)	PC Hardware by B. Singh / Study material
35	35	SMPS (Basic Principles and operations, O/P voltage)	Lecture (Explanation)	PC Hardware by B. Singh / Study material
36	36	BIOS (Functions, setups, types of BIOS)	Lecture (Explanation)	Study material
37	37	POST (Operation, Faults related to Hardware)	Lecture (Explanation)	Study material
38	38	**Unit-6: Maintenance and Trouble Shooting** Assembly of Components of Desktop Computers	Lecture (Explanation)	Study material

39	39	Configuring Laptops and Power settings	Lecture (Explanation)	Study material
40	40	Laptop Components (Adapter, Battery, Basic problems, RAM types, CPU types, Laptop Motherboard, block diagram, Laptop Keyboard)	Lecture (Explanation)	Study material
41	41	Laptop Components	Lecture (Explanation)	Study material
42	42	Formatting, Partitioning and installation of OS		
43	43	Trouble shooting of Commonly faced problems in Desktops and Laptops	Lecture (Explanation)	Study material
44	44	Basic Maintenance concepts (Preventive, Corrective, online) Diagnostic programs and tools	Lecture (Explanation)	Study material
45	45	Methods of Trouble shooting (symptom observation, analysis, diagnosis, Correction)	Lecture (Explanation)	Study material
46	46	Up gradation of system and application software Virus concepts, Antivirus	Lecture (Explanation)	Study material
47	47	**Unit-7: Networking Devices and Their Interfaces** Network Interface card Networking interconnecting devices such as hub, switch, Router	Lecture (Explanation)	Study material
48	48	Networking interconnecting devices such as hub, switch, Router, Types of Network cable, Types of Network connector	Lecture (Explanation)	Study material

Amalendu Kumar Pradhan

Signature of Faculty