## DCHN-12 PC Architecture Module II

Topic	Lecture No.
The Computer Architecture The mother Board, Hard Disk drives, Floppy disk drives, display systems, Input & Output devices and their role in the functioning of Computer System	(1-2)
Study of PC/AT motherboards:	(3-4)
Block diagram architecture of motherboard. CMOS setup and their features, configuring extended, expanded memory, cache memory, shadow memory, EDO RAM etc.	
Specifications of a latest Pentium -III based, motherboard (CUWE-RM)	(5-6)
Buses Study of Bus Standards: Brief study of various bus standards: ISA, EISA, VL, PCI, PCMCIA etc	(7-9)
Display Cards & Monitors	(10-14)
Description of different types of display cards Monitors: CRT construction and working, vertical stage, horizontal state, 9 pin input type-monitor, block diagram & description of color monitor.	
Specifications & Troubleshooting guide for a latest color monitor Flat vision 38 cm model 38F1	(15-16)
Drive Systems	(17-19)
Various parts of FDD, types of floppies, geometry of floppy, various recording formats, interface signals, floppy drive alignment track 0, and adjustment, formatting of floppies.	
Types of hard disk drives, IDE, EIDE, SCSI, Geometry of hard disk drive, Interface signal, tape drives, DVD, introduction to RMD, various concepts of hard disk drives, types of formatting, partitioning and handling of hard disk drive.	(20-24)
First Test	
Zip drive functioning, CD drive and CD writer functioning, handling and repair.	(26-27)

Mouse and keyboard (wired and wireless): Types, basic functioning, interfacing and installation.	(28-29)
Introduction To Microprocessors/Microcomputers Introduction to digital computer, microcomputer organization, machine language, architecture of an 16-Bit generic microprocessor,	(30-34)
simplified memory organization, DMA, interrupts, 8086/8088 architecture and instruction set, steps for program development for 8086/8088.	
Features of Microprocessor: Introduction to 80286, 80386, 80486, numeric processor 80387, various version of 80386 and 80486 viz. 80386SX, 80386DX, 80486SX, 80486DX-2, 80486 DX-4, and their comparisons.	(35-40)
Pentium Class of Processors Pentium processor, Pentium Pro processor, Pentium MMX processor, Pentium – II, Celeron processor, Pentium – III processor, Pentium-IV	(41-58)
Processor, Introduction to Server class processor.  Review	(49)
Final Test	(50)