

DCHN-21
Networking Basics
Module III

Topic	Lecture No.
Introduction To Networking: What is networking? Local area Network (LAN) Metropolitan Area Networks (MAN) and wide Area Networks. Network management, Network elements.	(1-2)
Seven layer OSI model, TCP/IP model	(3-4)
Topologies, installation of physical networks-HUB, Switches	(5-6)
Cable types, NOS, NIC, connectors, crimping, Net BIOS.	(7-11)
Transmission Media And Networking Connectivity Network interface cards- Ethernet, ArcNet, Cabling Concepts – thin Ethernet, thick Ethernet, Coaxial cables, STP, UTP, Fiber optic.	(12-15)
T Connectors, BNC connectors, barrel connectors, terminators,	(16-18)
Introduction to Repeaters, Bridges, Routers	(19-21)
Networking Topologies – Bus, Star, Token Ring, Mesh etc	(22-24)
First Test	
Wireless Networking Fundamental, RF behaviors, principles, modulations, antennas- types, coverage areas & mounting, cables and connectors, organizations,.	(26-29)
Frequency ranges & channels, IEEE-802.11g & b, network module, wireless hardware- wireless LAN card, Access point, workgroup bridge, client server devices, residential gateways, enterprise gateways, etc	(30-32)
Network architectural- connecting a wireless LAN under various NOS, Authentication & association, SSID, SID, internet server, file server, print server with wireless and wired network	(33-37)

General Troubleshooting And Maintenance	(38-43)
Type of maintenance: Preventive and break down maintenance, assembly and disassembly of PC and its various parts, startup problems, run problems their identification and remedy,	
Problem of keyboard, displays, printers, FDD's, HDD's, SMPS motherboard, their identification and remedy.	(44-48)
Review	(49)
Final Test	(50)