SATISH KISPOTTA

LESSON PLAN

Subject: Computer Network   **Semester**: Fourth   Branch: CSE

Unit Number	Name of the Topic	No of Class Required	Remarks
Unit 1. Basics of Computer Networking	1.1 Definition & history of Computer networks,	1	
	1.2 Applications of various types of Computer Networks Standard Organizations and Protocols	1	
	1.3 Line Configuration, Point to Point connection, Multipoint connection, Network Topology, Bus Topology, Ring Topology, Star Topology, Mesh Topology, Hybrid Topology,	2	
	1.4 Categories of network, Based on Physical scope a) LAN, b) MAN, c) WAN, Based on Connection a) Connection Oriented, b) Connection Less,	2	
	1.5 Quiz conduction, Doubt Class	1	
	1.6 Unit Test	1	
Unit 2. Reference Models for Network Implementation	2.1 OSI model, functions and features of each layer: Physical Layer, Data Link Layer, Network Layer, Transport Layer, Session Layer, Presentation Layer, Application Layer	4	
	2.2 TCP/IP model and its layers, main functions of each layer, feature, and protocol of each layer	3	
	2.3 Quiz conduction, Doubt Class	1	
	2.4 Unit Test	1	
UNIT 3. Transmission Media and Mode	3.1. Communication Channels Characteristics, Band Width, Attenuation, Bit rate and Baud rate,	2	
	3.2 Types of Transmission Media, Guided Media: a) Twisted Pair, b) Coaxial Cable, c) Optical Fiber	2	
	3.3 Un Guided Media: a) Electromagnetic spectrum, b) Radio Transmission, c) Microwave Transmission, d) Infrared Transmission, e) Satellite Communication	3	
	3.4 Mode of Communication Simplex, Half duplex, Full Duplex,	1	
	3.5 Quiz conduction, Doubt Class	1	
	3.6 Unit Test	1	
Unit 4. Networking devices	4.1 Network communication devices. Repeater, Hub, Switch, Bridge, Router, Access Point	2	
	4.2 Gateway, RS 232, RJ 45 &RJ11,	2	
	4.3 NIC, Bluetooth, Wi-fi IEEE 802.11 (b,g,n)	1	
	4.6 Quiz conduction, Doubt Class	1	
	4.7 Unit Test	1	

Unit 5. Network Protocol and Applications	5.1 IP Protocol – IP v4, IP v6, Addressing Schemes, Subnet & masking, DNS, Email	3	
	5.2 FTP, HTTP, TCP & UDP, NETBIOS Protocol, ARP & RARP, ICMP, SMTP	3	
	5.5 Quiz conduction, Doubt Class	1	
	5.6 Unit Test	1	
Total Class Required		42	