

PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY
Department of Electronics & Communication Engineering

LESSON PLAN

Subject Name: -Computer Networks
Year: - 3rd

Subject Code: - ECO-1A
Semester: - 5th

Lecture No	Unit No	Topic	COs Covered
L 1	UNIT-I	UNIT-I: Introduction: Introduction to Computer Networks	CO1
L 2		Protocols and Standards	
L 3		Network Model: OSI Model	
L 4		TCP/IP Protocol Suite	
L 5		Introduction to addressing	
L 6		Physical Layer and Media: Guided & Unguided media	
L 7		Circuit Switching	
L 8		Packet Switching	
L 9		The Telephone System	
L-10		ATM	
L 11	UNIT-II	UNIT-II: The Data Link Layer: Data Link Layer Design issues	CO2
L 12		Data link control: Framing	
L 13		Flow & Error control	
L 14		Noiseless channels	
L15		Noisy channels	
L16		HDLC	
L 17		Point to Point protocols	
L 18		The Medium Access Sublayer: Aloha Protocols	
L 19		LAN Protocols	
L 20		wired LAN's	
L 21	Wireless LAN		
L 22	UNIT-III	UNIT-III: Network Layer: Forwarding, Flow Control	CO3
L 23		Error Control	
L 24		Multicast routing	
L 25		IPv4 addresses and IPv6 addresses	
L 26		Internetworking, SNMP, ARP	
L 27		Transport & Session Layer, Presentation Layer: Flow Control and Congestion Control	

L 28		Transmission Control Protocol – Basic Features	
L 29		Cryptography	
L30	UNIT-IV	UNIT-IV Application Layer: Design issues	CO4
L 31		File Transfer	
L 32		Access And Management	
L 33		Electronic mail,	
L 34		World Wide Web	
L 35		HTTP	
L 36		Revision	

Text Books:

1. Forouzan B.A, Data Communications and Networking, Tata-Mc-Graw Hill.
2. Tanenbaum A.S, Computer Networks, PHI.

Reference Books:

1. Stallings W, Data and Computer Communications, PHI.
2. Leon –Garcia, Computer Networks, Mc Graw Hill

Web resources:

- <http://www.digimat.in/nptel/courses/video/106105081/L25.html>
- <https://archive.nptel.ac.in/courses/106/105/106105081/>
- <https://www.sciencedirect.com/journal/computer-networks>
- <https://www.geeksforgeeks.org/basics-computer-networking/>