

Lesson Plan

Name of Faculty : Sonam Bajaj, Assistant Professor of CSE
Discipline : Computer Science and Engineering
Semester : 4th (EVEN)
Subject : Computer Network (PC/CSE/42-T)
Lesson Plan Duration : 15 weeks (from March to June 2025)

Work Load (Lecture/Practical) per week (in hours): Lectures-03hours.

Week	Theory		Topic Covered Date and Remarks		
	Lecture Day	Topic (Including Assignment/Test)	Date	HOD	Director-Principal
1 st	1	Data Transmission Component, Data Representation & Data Flow			
	2	Network Topologies, Network Services, Network Categories: LAN,WAN,MAN			
	3	OSI, TCP/IP Reference model			
2 nd	4	Switching Techniques: Packet, Message, Circuit.			
	5	Networking Devices: HUB, Repeater, Bridge			
	6	Modem, Switch, Router & Gateway.			
3 rd	7	Data link Layer design issue.			
	8	Framing & error handling, Flow control protocol: stop & wait			
	9	Framing protocol, error detection & correction protocol.			
4 th	10	Assignment 1st			
	11	Sliding window protocol			
	12	Go back N, Selective repeat.			
5 th	13	Random access Aloha, MAC Sublayer, channel allocation method.			
	14	Slotted Aloha			
	15	CSMA, CSMA-CD			
6 th	16	LAN Standards: Ethernet Fast Ethernet explanation.			
	17	Layered protocol architecture of Fast Ethernet			
	18	Gigabit Ethernet, Layered Protocol Architecture of Gigabit Ethernet			
7 th		1st Minor Test			
8 th	19	Store & Packet Forwarding Switching.			
	20	Connection less, Connection oriented services.			
	21	Routing Algorithms like- shortest path, flooding.			
9 th	22	Distance Vector routing, count to infinity problem.			
	23	Hierarchical & congestion control protocol.			
	24	Overview of IPV4, Frame Format of IPV4.			
10 th	25	Assignment 2nd			
	26	Layered Protocol Architecture of IPV4.IP Addressing of IPV4.			
	27	IP Classes. Overview of IPV6			
11 th	28	Frame Format of IPV6.			
	29	Layered Protocol Architecture of IPV6.			
	30	IP Addressing of IPV6 & CIDR. Introduction of ARP,RARP			
12 th	31	Explanation of ICMP, IRP Protocols.			
	32	UDP Protocols Overview, UDP Protocol Architecture.			
	33	Flow Control & Error Control of Transport Layer.			
13 th	34	Addressing & Multiplexing in Transport Layer.			
	35	TCP Protocol Overview, TCP Protocol Architecture TCP Connection Management.			
	36	Overview of Domain Name System.			
14 th		2nd Minor Test			
15 th	37	Overview of Electronics Mail.			
	38	Application of E-Mail.			
	39	FTP, TELNET, HTTP, SMTP.			