C.V. RAMAN POLYTECHNIC, BBSR

Department of Computer Science & Engineering

LESSON PLAN

Session (2025-2026)

Discipline: Computer Science & Engineering	**Semester: 4th, Summer/2025**	**Name of the Teaching Faculty:** **Mr. Amardeep Das** **Email ID: amardeep@cvrp.edu.in**
Subject: Computer Networks, Theory-03	**No. Of Days / Week :03**	**Start Date: 22.12.2025** **End Date: 18.04.2026**

Week	Class Day	Theory Topics
1st	1st	**Unit-1:** Introduction to computer networks
	2nd	Network Models, The layer architecture
	3rd	OSI Reference Model
2nd	1st	OSI Reference Model
	2nd	The layer architecture
	3rd	TCP/IP Model
3rd	1st	TCP/IP Model
	2nd	4LayerofTCP/IP suite
	3rd	**Unit-2: Physical Layer** Transmission Media–Principles and issues
4th	1st	Wired Media-Coaxial, UTP
	2nd	STP, Fiber Optic Cables -Single Mode & Multimode

	3rd	Wireless Media–HF, VHF, UHF, Microwave, Ku Band
5th	1st	WIFI 802.11 a/b/g/n/ac
	2nd	CellularData-2G,3G,4G, &5G
	3rd	Network topologies
6th	1st	Network topologies
	2nd	**Unit-3: Data Link Layer** Design issues
	3rd	DLL protocols (Ethernet, WLAN, Bluetooth)
7th	1st	Switching Techniques
	2nd	Switching Techniques
	3rd	VLAN
8th	1st	**Unit-4: Network Layer** Design issues
	2nd	Internet Protocols (IPv4)
	3rd	Internet Protocols (IPv6)
9th	1st	Routing–principles and issues
	2nd	Routing Algorithms: Distance-vector
	3rd	Link-state
10th	1st	Routing Protocols: RIP
	2nd	Routing Protocols: OSPF
	3rd	**Unit-5: Transport Layer** Design issues
11th	1st	UDP
	2nd	TCP
	3rd	TCP
12th	1st	**Unit-6: Application Layer** Design Issues

	2nd	DNS
	3rd	DHCP
13th	1st	SNMP
	2nd	FTP &TFTP
	3rd	SMTP
14th	1st	WWW, Telnet & SSH
	2nd	**Unit-7: Network Devices** NIC
	3rd	Hub
15th	1st	Switch-Core, Distribution & Access Switches
	2nd	Router
	3rd	WiFi Access-Point & Wireless LAN Controller

Concerned Faculty **H.O.D**