

List of Experiments
T.E. (Computer) Sem V
Subject: Computer Network Lab (CSL502)

Title of Experiments

Expt No.	Experiment	Date
1	Study of RJ45 and CAT6 Cabling and connection using crimping tool.	LO1
2	Implementation of Hamming code for Error Detection and correction	LO3
3	Implementation of CRC (Cyclic Redundancy Code) for Error Detection	LO3
4	Simulation of Go Back N flow control Algorithm	LO3
5	Build a simple network topology and configure it for static routing protocol using packet tracer. Setup a network and configure IP addressing, subnetting, masking.	LO2
6	Design VPN and Configure RIP/OSPF using Packet tracer.	LO2
7	WAP to implement of IPv4 addressing concept along with subnet masking	LO3
8	Use basic networking commands in Linux (ping, tracert, nslookup, netstat, ARP, RARP, ip, ifconfig, dig, route)	LO1
9	Use Wire shark to understand the operation of TCP/IP layers: <ul style="list-style-type: none"> • Ethernet Layer: Frame header, Frame size etc. • Data Link Layer: MAC address, ARP (IP and MAC address binding) • Network Layer: IP Packet (header, fragmentation), ICMP (Query and Echo) • Transport Layer: TCP Ports, TCP handshake segments etc. Application Layer: DHCP, FTP, HTTP header formats	LO2
10	Socket programming using TCP or UDP	LO3
Written Assignments		
1	Assignment 1: Write a short note on the following networking devices:1. Repeater 2. Hub 3. Bridge 4. Switches 5. Router 6. Gateways,7. Modem	LO1
2	Assignment 2: 1) Write short note on i)Ethernet ii)IPv6 iii) ssh 2)Explain the purpose of following protocols with their header format: i)ARP ii)ICMP iii)DNS 3)Discuss Persistent and Non-Persistent Protocols used in Transport and Application layers of TCP/IP protocol suite	LO2