PUNE INSTITUTE OF COMPUTER TECHNOLOGY

DHANKAWADI, PUNE –43

SCHEDULE OF LAB EXPERIMENTS
ACADEMIC YEAR: 2025- 2026

Date: 01/07/2025

Department: Computer Engineering　　　　Subject code:310247
Class: T.E.　　　　Semester: **I**
Subject Name: **CNSL**　　　　Exam. scheme: **TW-25, OR-25**
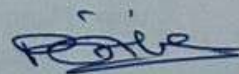
Expt. No.	Problem Statement	Last Date for performance
A1	Setup a wired LAN using Layer 2 Switch. It includes preparation of cable, testing of cable using line tester, configuration machine using IP addresses, testing using PING utility and demonstrating the PING packets captured traces using Wireshark Packet Analyzer Tool.	05/07/2025
A2	Setup a WAN which contains wired as well as wireless LAN by using a packet tracer tool. Demonstrate transfer of a packet from LAN 1 (wired LAN) to LAN2 (Wireless LAN).	15/07/2025
A3	Write a program for error detection and correction for 7/8 bits ASCII codes using Hamming Codes or CRC.	22/07/2025
A4	Write a program to simulate Go back N and Selective Repeat Modes of Sliding Window Protocol in Peer-to-Peer mode.	26/07/2025
B1	Write a program to demonstrate Sub-netting and find Subnet masks.	02/08/2025
B2	Write a program to implement Link state / Distance vector routing protocol to find suitable path for transmission.	16/08/2025
B3	Use packet Tracer tool for configuration of 3 router network using one of the following protocol RIP/OSPF/BGP.	30/08/2025
B4	Write a program using TCP socket for wired network for following a. Say Hello to Each other b. File transfer c. Calculator	13/09/2025

B5	Write a program using UDP Sockets to enable file transfer (Script, Text, Audio and Video one file each) between two machines.	24/09/2025
C1	Write a program for DNS lookup. Given an IP address as input, it should return URL and vice-versa.	01/10/2025
C2	Installing and configure DHCP server and write a program to install the software on remote machine.	08/10/2025
C3	Study and Analyze the performance of HTTP, HTTPS and FTP protocol using Packet tracer tool.	12/10/2025
C4	To study the SSL protocol by capturing the packets using Wireshark tool while visiting any SSL secured website (banking, e-commerce etc.).	19/10/2025
C5	To study the IPsec (ESP and AH) protocol by capturing the packets using Wireshark tool.	25/10/2025

Subject Coordinator

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