CN Practical

1	Demonstrate the different types of topologies and types of transmission media by using a packet tracer tool. • Star Topology • Ring Topology • Bus Topology • Mesh Topology

2	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).

3	Use packet Tracer tool for configuration of 3 router networks using one of the following protocols RIP/OSPF/BGP.

4	Write a program to demonstrate Sub-netting and find subnet masks.

5	Socket Programming using **C/C++/Java**. TCP Client, TCP Server

6	Socket Programming using **C/C++/Java**. UDP Client, UDP Server

7	Write a program using TCP socket for wired network for following Say Hello to Each other

8	Write a program using TCP socket for wired network for following File transfer

9	Write a program using UDP Sockets to enable file transfer.

10	Study and Analyze the performance HTTP & FTP protocol

11	Installing and configuring DHCP server and assign IP addresses to client machines using DHCP server using Cisco packet tracer

12	Write a program for DNS lookup. Given an IP address input, it should return URL and viceversa

13	To study the SSL protocol by capturing the packets using Wireshark tool while visiting any SSL secured website (banking, e-commerce etc.).

14	Capture packets using Wireshark and accomplish the following and save the output in file: a. Capture all TCP traffic to/from Facebook, during the time when you log in to your Facebook account Capture all HTTP traffic to/from Facebook (other website), when you log in to your Facebook account b. Write a DISPLAY filter expression to count all TCP packets captured under item #1) that have the flags SYN, PSH, and RST set. Show the fraction of packets that had each flag set. c. Count how many TCP packets you received from / sent to Facebook (other website), and how many of each were also HTTP packets.

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