

Government Engineering College Idukki
Department of Computer Science and Engineering
CSL322 Networking Lab – 2024-25

Lab Cycle

1. Network Simulation using CISCO Packet Tracer.
2. Familiarization of Linux networking commands.
3. Familiarization of System Calls for Linux Network Programming
 - a. Implementation of TCP echo server
 - b. Implementation of UDP echo server
4. Write a TCP client-server program with the following functionality:
 - a. The client reads a string as input from the user and sends it to the server.
 - b. The server reverses the string and sends it back to the client.
5. Write a UDP client-server program with the following functionality:
 - a. The client reads two numbers from the user and sends them to the server.
 - b. The server adds the numbers and sends back the sum to the client.
6. Implementation of *get* and *put* commands of the File Transfer Protocol (FTP).
7. Implementation of Link state routing
8. Implementation of distance vector routing algorithm
9. Implementation of Stop and Wait flow control algorithm.
10. Implementation of Go-Back-N ARQ protocol.
11. Understanding TCP 3-way handshake using Wireshark.
12. Multi-client UDP server using epoll.
13. Study of NS-2 network simulator.