Experiment 1

Aim: Study of basic network concepts

Objectives:

To learn basics of:

1. The nature of networks
2. The TCP/IP layer model
3. IP, TCP, and UDP protocols
4. Firewalls and proxy servers
5. The Internet

Exercises:

1. Explain the following terms:
    a. Network
    b. Host and node
    c. Protocols
    d. The Internet
    e. Ports
2. Define packet-switched network. What are its advantages?
3. Explain the layers of a network described in TCP/IP model with diagram.
4. Describe TCP, IP and UDP.
5. What do you mean by IP address?
6. Explain the use of the following protocols:
    a. FTP
    b. SSH
    c. Telnet
    d. whois
    e. smtp
    f. time
    g. HTTP
    h. NNTP
    i. IMAP
    j. finger
7. What are firewalls and proxy servers?
8. What is Client/Server model?