Faculty of informatics

Computer networks lab

MCA III SEM AY- 2021-2022

1. Understanding and using of commands like ifconfig, finger, traceroute.

2. Understanding and using of commands like netstat, ping, arp, telnet.

3. Configure a network using Distance vector Routing protocol.

4. Configure a network using Link state vector Routing protocol.

5. Study of network IP.

6. Implementation of Connection-Oriented Service using standard ports.

7. Implementation of Connection-Oriented Iterative Echo-Server.

8. Implementation of Connection-Oriented date and time (TCP Date and Time Server Program)

9. Implementation of Connection-Oriented character generation using user-defined ports.

10. Implement Connection of computers in Local Area Network.

11. Implementation of Connectionless Iterative Echo-server.

12. Implementation of Connectionless date and time.

13. Implementation of Connectionless character generation using user-defined ports.

14. Program for connection-oriented Iterative Service in which server reverses the string sent by the client and sends it back.

15. Implementation of DNS.

16. Implementation of Connection-Less Service using standard ports.

17. Program for connection-oriented Iterative service in which server changes the case of the strings sent by the client and sends back (Case Server).

18. Implementation of student grade server.

19. Implementation of authentication server.

20. Program for file access using sockets.

21. Program for Remote Command Execution using sockets.

22. Program for Connection-Oriented Iterative service in which server calculates the net salary of an employee based on the following details sent by the client. i) basic ii) hra iii) da iv) net-salary=basic+ hra+ da- pt- epf.

23. Program for Connection-Concurrent Iterative service in which server calculates the net salary of an employee based on the following details sent by the client. i) basic ii) hra iii) da iv) net-salary=basic+ hra+ da- pt- epf.

24. Program for Connection-less Iterative service in which server calculates the net salary of an employee based on the following details sent by the client. i) basic ii) hra iii) da iv) net-salary=basic+ hra+ da- pt- epf.

25. Write a program for error detecting code using CRC-CCITT (16-bits).

26. Write a program for distance vector algorithm to find suitable path for transmission.

27. Implement the program using as message queues or FIFO as IPC channels.

28. Write a program for congestion control using Leaky bucket algorithm.

29. Write a program for Hamming code.

30. Write a program for error detecting code using CRC-CCITT (8-bits).