2018

MCA 4th Semester Examination

NETWORK LAB.

PAPER—MCA-409

Subject Code—32

(Practical)

Full Marks : 100

Time : 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer any *one* question (Lottery Basis).

1×25

1. Write a client side program such that the client

   (i) Create a TCP socket.

   (ii) Establish a connection with a listening server at a specific address and port.

   (iii) Communicate with server and

   (iv) Close the connection after completion of the communication.

   70

2. Create a TCP server such that the server

   (i) Create a TCP socket, assign a port no. to the socket and allow client connections to be made to that port and

   (ii) Repeatedly accept new socket for each client connection and communicate with them. 70

3. Write a program to construct a UDP client such that the client communicates with a UDP server.

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4. Write a program to construct a server using connectionless protocol. The server simply echoes whatever message it receives back to wherever they came from.   70

5. Construct a broadcast sender which broadcasts message every five seconds to a specified broadcast address.   70

6. Create a receiver which waits to receive a single broadcast message and prints the message.   70

7. Write a program to demonstrate a multicast sender. The sender should multicast a UDP dategram to a specific multicast address every ten seconds.   70

8. Write a program to create a receiver which ioins a multicast group and receives messages sent to that group by a multicast sender.   70

Viva-voce : 20

PNB : 10

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Marks Distribution

- Brief description of the problem : 20%

- Program listing : 50%

- Result & discussion : 30%