

2018

M.Sc. 1st Seme. Examination

COMPUTER SCIENCE

PAPER—COS-192

(Practical)

Full Marks : 50

Time : 2 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.

Computer Networks Lab.

Answer any one question.

(On the basis of a lucky draw)

- 1. Write a client side script to send a text message to a server which is listening on port 6789 using TCP. The client should be able to get and display the response provided by the server.**
- 2. Write a server side program which accepts a message from a client and echoes back the same message to that client. The underlying protocol should be TCP.**

(Turn Over)

3. Use a connection less protocol to construct an echo server which listens and accepts a message from a client on a particular port and reply back to the client.
4. Using a connection less protocol, create a client which communicates with a server on a specific port.
5. Write a program to construct a broadcast sender which sends messages to all nodes in a broadcast IP address.
6. Write a program to create a broadcast receiver which accepts all messages broadcasted by a broadcast sender to a specific port address.
7. Write a program to demonstrate a multicast sender.
8. Write a program to construct a multicast receiver which receives a message, sent to a group by a multicast sender.
9. Write a program to determine the class of an (IPv4) IP address provided at runtime.
10. Write a program to determine the number of subnets from a subnet mask.

Distribution of marks

Program	10
Execution	20
Discussion & Accuracy	5
Viva Voce	10
PNB	5
Total	50