2015
MCA
4th SEMESTER EXAMINATION
NET WORK LAB
PAPER—MCA-409
(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 (on Lottery basis).

1. Construct a client side TCP script to send and receive some text to a TCP server.

2. Write a server side script which receives a string and echoes it back to a client, using connection oriented method.

3. Write a program to construct a UDP client which accepts a string from a server and displays it.

(Turn Over)
4. Using connection-less service, construct a UDP server which sends a "Hello world" message to the client which communicates with it through a port no. of your choice.

5. Write a program to construct a server which broadcasts the current date and time in every five seconds.

6. Construct a broadcast receiver which accepts a string broadcasted by a broadcast sender.

7. Write a program to create a multicast sender which multicasts a datagram to a specific multicast address every three seconds.

8. Construct a multicast receiver which joins a specified group, receives and prints a single multicast message from the group.

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\begin{align*}
\text{PNB} & : \quad 10 \text{ marks} \\
\text{Viva Voce} & : \quad 20 \text{ marks}
\end{align*}
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**Marks Distribution**

1. Brief Description of the problem : 10%
2. Program listing : 40%
3. Result and Discussion : 30%
4. Viva : 20%