

# **Computer Networks Lab**

## **BE-IT 2<sup>nd</sup> Year 2<sup>nd</sup> Semester**

### **Assignments: Network tools & Socket Programming**

1. Learn the following network commands (in Linux platform) with suitable options (if applicable):

- |                |                          |
|----------------|--------------------------|
| a. ifconfig    | q. system-config-network |
| b. traceroute  | r. bmon                  |
| c. ping        | s. ssh                   |
| d. dig         | t. tcpdump               |
| e. telnet      | u. dstat                 |
| f. nslookup    | v. dhclient              |
| g. netstat     | w. nload                 |
| h. scp         | x. iftop                 |
| i. w           | y. ip                    |
| j. nmap        | z. route                 |
| k. ifup/ifdown | aa. iptables             |
| l. route       | bb. sftp                 |
| m. host        | cc. socat                |
| n. arp         | dd. rsync                |
| o. ethtool     | ee. wget                 |
| p. iwconfig    | ff. curl                 |

2. Write the following socket programs in C/C++ for communicating between two machines (as client and server) connected in a network:

- a. Stream socket
- b. Datagram socket
- c. Raw/unnamed socket