

**Indian Institute of Information Technology,
Allahabad. Course: Computer Networks
Batch: B.Tech (IT) Section B
Lab Assignment #1 Lab**

1. Install LINUX in your computer. Please refer Beej's Guide to Network Programming Using Internet Sockets for implementing your programs. The copy of the document is attached herewith for your reference.

2. Go through the man pages of following system routines and explore different parameters used. Submit a brief summary too.

- 1. man**
- 2. socket**
- 3. Bind**
- 4. Connect**
- 5. listen**
- 6. Accept**
- 7. send**
- 8. recv**
- 9. sendto**
- 10. recvfrom**
- 11. close**
- 12. shutdown**
- 13. fork**

Hint: In the command prompt you have to type `man socket` to see man page of socket system call. For example

`$man socket`

3. Implement linked list and all its operation and demonstrate with suitable input/output operations.

4. Write a simple client-server program that provides chat facility. Your application allows a user on one machine to type in and send text to a user on another machine. (Hint: Computer Networks by Davie and Peterson; page no. 45)