## CS 506 NETWORK PROGRAMMING LAB (0-0-6: 3)

## Laboratory Exercises:

- 1. Basic client server socket programming in tcp/udp using C and Java.
- 2. Implementation of Inter Process Communication (IPC).
- 3. Simulation Experiments for protocol and topology performances using NS-2 or any other network simulator.
- 4. Software defined networking applications using Openflow controllers and Mininet.
- 5. Virtual networking, cloud based networking experiments.

## **References:**

- 1. An Introduction to Network Programming with Java, by Jan Graba, Springer publication
- 2. Java network programming, O'Reilly publication, E.R. Herold
- 3. Unix network programming, vol. 1, R. Stevens, Prentice Hall
- 4. Unix network programming, vol. 2: IPC, R. Stevens, Prentice Hall
- 5. Openflow tutorials and cloud set-up tutorials will be taken from related web-sites.