

COMPUTER NETWORKS LAB

B.Tech. III Year I Sem.
Course Code: CS506PC

L	T	P	C
0	0	3	2

Course Objectives:

- To Understand the functionalities of various layers of OSI model
- To understand the operating System functionalities

Course Outcomes:

- Ability to understand the encryption and decryption concepts in Linux environment
- Ability to apply appropriate algorithm for the finding of shortest route.
- Ability to configure the routing table

System/ Software Requirement

- Intel based desktop PCs LAN CONNECTED with minimum of 166 MHZ or faster processor with at least 64 MB RAM and 100 MB free disk space

Computer Networks Lab:

1. Implement the data link layer framing methods such as character, character stuffing, and bit stuffing.
2. Implement on a data set of characters the three CRC polynomials – CRC 12, CRC 16 and CRC CCIP .
3. Implement Dijkstra's algorithm to compute the Shortest path thru a graph.
4. Take an example subnet graph with weights indicating delay between nodes. Now obtain Routing table at each node using distance vector routing algorithm
5. Take an example subnet of hosts. Obtain broadcast tree for it.
6. Take a 64 bit playing text and encrypt the same using DES algorithm.
7. Write a program to break the above DES coding
8. Using RSA algorithm encrypts a text data and Decrypt the same.