



U14ITP602 - Computer Networks Laboratory - Cycle Sheet

Week #	Experiment / Hour	Description
1 Basics of Networking	1.1 / 1	Study of different types of Network cables and implementing the cross-wired cable and straight through cable using clamping tool.
	1.2 / 2	Study of Network Devices in detail. <i>Repeater, Hub, Switch, Bridge, Route, Gate Way</i>
	1.3 / 3	Study of network IP.
2 Network Commands	2.1 / 1	Setting up a LAN.
	2.2 / 2	Study of basic network and network configuration commands.
	2.3 / 3	Write a C program to perform the following: Display all the IP addresses and the alias Host name of “www.google.com”. Display the name of the host whose IP address is “192.168.0.15”.
3 Network C programming	3.1 / 1	Write a C program to perform the following: Display the port number associated with a network service and protocol. Display the network service associated with a port and protocol.
	3.2 / 2	Implement the simple version of “nslookup” utility in C.
	3.3 / 3	Study of TCP and UDP – Socket Program

4	4.1 / 1	Design TCP iterative Client and Server application to reverse the given input sentence.
	4.2 / 2	Design a TCP concurrent Server to convert a given text into upper case using multiplexing system call “select”.
	4.3 / 3	Design TCP Client and Server application to transfer file.
5	5.1 / 1	Design UDP concurrent Client and Server application to reverse the given input sentence.
	5.2 / 2	Design a UDP concurrent Server to echo given set of sentences using Poll functions.
	5.3 / 3	Design UDP Client Server to transfer a file.
6 Test Week	Internal I Test Week	
7	7.1/ 1	Study of Packet Tracer – Basics
	7.2/ 2	Configure a Network topology using packet tracer software.
	7.3/ 3	Configuring Wireless LAN.
8	8.1/ 1	Study of DHCP / FTP / HTTP
	8.2/ 2	Configure a Network using Link State Routing protocol.
	8.3/ 3	Configure a Network using Distance Vector Routing protocol.
9	9.1/ 1	Study of Sub-netting and super netting using Packet Tracer
	9.2/ 2	Study of ARP / RARP
	9.3/ 3	Study of Network Trouble Shooting
10	10.1/ 1	RSA Algorithm Implementation

Cryptography (JAVA)	10.2/ 2	Trans positional & Substitution Cipher Implementation
	10.3/ 3	Vernam Cipher Implementation
11 JAVA or C Simulation Programs	11.1/ 1	Hamming Code
	11.2/ 2	CRC & Check Sum
	11.3/ 3	Congestion Control
12 Test Week	Internal II Test Week	

- Each week will have a surprise challenging QUIZ / Program for Bonus points
- Each week will be evaluated for 3 points and each internal tests will be evaluated for 10 points.
- Record / Observation and Assessment sheet will be maintained online.