## CS 17L2 Network and Operating Systems Lab

## **Internal Examination - portions**

| 1  | Crimping EIA/TIA 568 A/B                                                                 |
|----|------------------------------------------------------------------------------------------|
| 2  | Creating VLAN using terminal commands. CISCO / HP switch                                 |
| 3  | CRC error checking. Client and Server at different machines.                             |
| 4  | Error Correction using Hamming code. Client and Server at different machines.            |
| 5  | Huffman cod-Encoding and decoding                                                        |
| 6  | Run length encoding.                                                                     |
| 7  | LZW – encoding and decoding.                                                             |
| 8  | RSA algorithm – implementation.                                                          |
| 9  | Generate md5 checksum for a given string.                                                |
| 10 | Generate SHA1 message digest for a given string.                                         |
| 11 | iptable – firewall, routing, opening and closing ports, block IP, block URL, block text, |
|    | block MAC,allow from MAC,FTP,UDP,SSH,Telent protocols, ACL etc.                          |
| 12 | ARP and RARP testing.                                                                    |
| 13 | Packet capture and analysis using libpcap.                                               |
| 14 | Create a simple web server .                                                             |
| 15 | Simulate Linux commands – Is,cp,mv and grep                                              |
| 16 | Program using Linux system calls                                                         |
| 17 | Comparison of scheduling algorithms – FCFC,SJF,Priority,Roud robin                       |
| 18 | IPC using –pipes, share memory and queues                                                |
| 19 | Semaphore – producer-consumer problem.                                                   |
| 20 | CSMA/CD simulation.                                                                      |