

TUTORIAL-3

- 1) TCP model was working from 1973 in many organizations still ISO comes up with OSI internetworking reference model in 1984. However, implementation of OSI has not been done and everybody selected TCP. Discuss the reason for selection of TCP over OSI. Also, provide the mapping of TCP layers to OSI layers.
- 2) You are working as a Network Administrator in Umbrella group. One day your boss gives you a task to create a network of 8 nodes and instruct you to connect the new network with existing network. In the inventory of Umbrella group plenty number of desktop's, routers, switches, Hub's, laptop's, twisted pair cables, RJ-45 sockets are available. Make a design of your proposed network and provide the list of devices you will select with their respective counts.
- 3) Provide which Ethernet cable you select for following pairs:
 - A) Switch to switch
 - B) Hub to hub
 - C) Host to switch or hub
 - D) Host to host
 - E) Hub to switch
 - F) Router to switch or hub
 - G) Router direct to host
 - H) Router to Router via Fast Ethernet ports
- 4) Router, switch, and hub are three important devices by which you can add more users in one network. Provide the different scenarios for which you will select these three devices to add more users in your network.