Assignment-5

COMPUTER NETWORK LAB (CSPC-227)

NIT Jalandhar

Solve all the questions

Create a scenario in which five different groups (CSE, ME, ECE, EEE and CE) of different network are directly connected through intermediate devices. Each group having 2/3 end systems. Given scenario is having atleast 4 different LAN. (USE minimum 4 hub, 2 switch and 3 router). Do the following for the given scenario.

1. Provide the Static IP Address to every end device available in the network.
2. Label each and every device in the network.
3. Label each and every interface with their IP Address.
4. Show the Intra-LAN and inter-LAN communication
5. Analyze the layer wise communication between the devices.
6. Topology used in CSE is STAR
7. Topology used in ECE and ME is Bus
8. Also explain the overall topology of network.
9. Discuss the concept of gateway and provide by default first address as a gateway address.
10. Show data transmission between CSE and ME
11. Show data transmission between ECE and EEE
12. Use static routing between the routers
13. Demonstrate the RIP routing

Note: Number of IP Address required by each group is (CSE-120, ME- 60, EEE- 68, CE-23). Apply sub netting (FLSM, VLSM). IP address allocated by the ISP is 150.10.11.0/26

---------- End ----------