31/7/24

Practical – 3

Aim:

To Study the packet tracer tool installation and User interface overview.

d) Analyse the behaviour of network devices using CISCO packet tracer Simulator.

1. From the network component box, Click and drag and drop the below components:
   a) 4 Generic PCs and One HUB
   b) 4 Generic PCs and One Switch

2. Click on Connections:
   a. Click on copper straight - t
   b. Select One of the PC and connect it to HUB using the cable. The link LED should glow in green, indicating that the link is up. Similarly connect remaining 3 PCs to the HUB.
   c. Similarly Connect 4 PCs to the Switch using copper Straight - through cable.

3. Click on the PCs connected to hub go to the desktop tab, click on IP configuration, and enter an IP address and Subnet mask. Here the default gateway and DNS server information is not needed as there are only two end devices in the network.

Click on the PDU from the common tool bar,

a) Drag and drop it on one of PC and then drop it on another PC connected to the HUB.

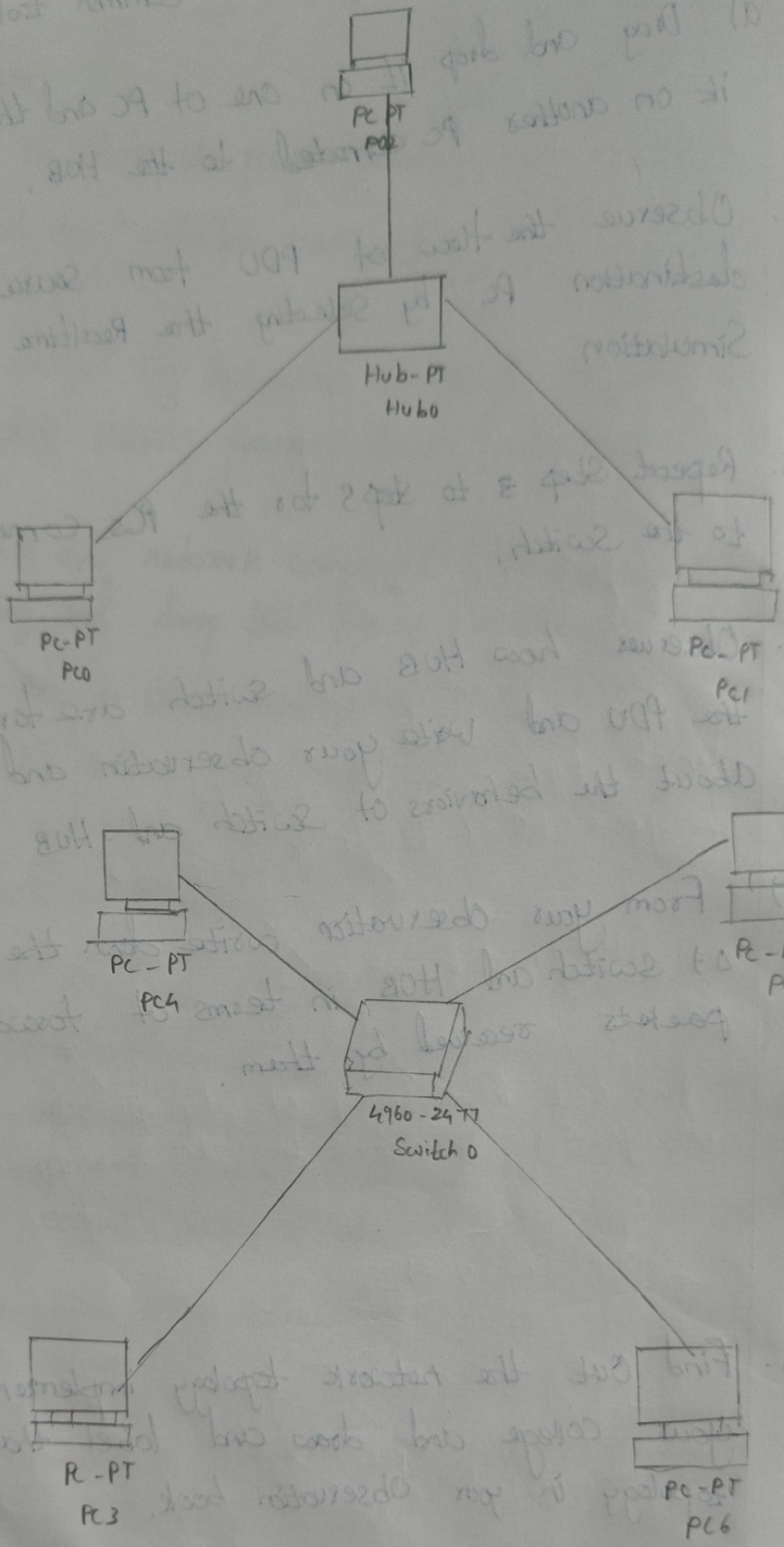
4. Observe the flow of PDU from source PC to destination PC by selecting the Realtime mode of Simulation

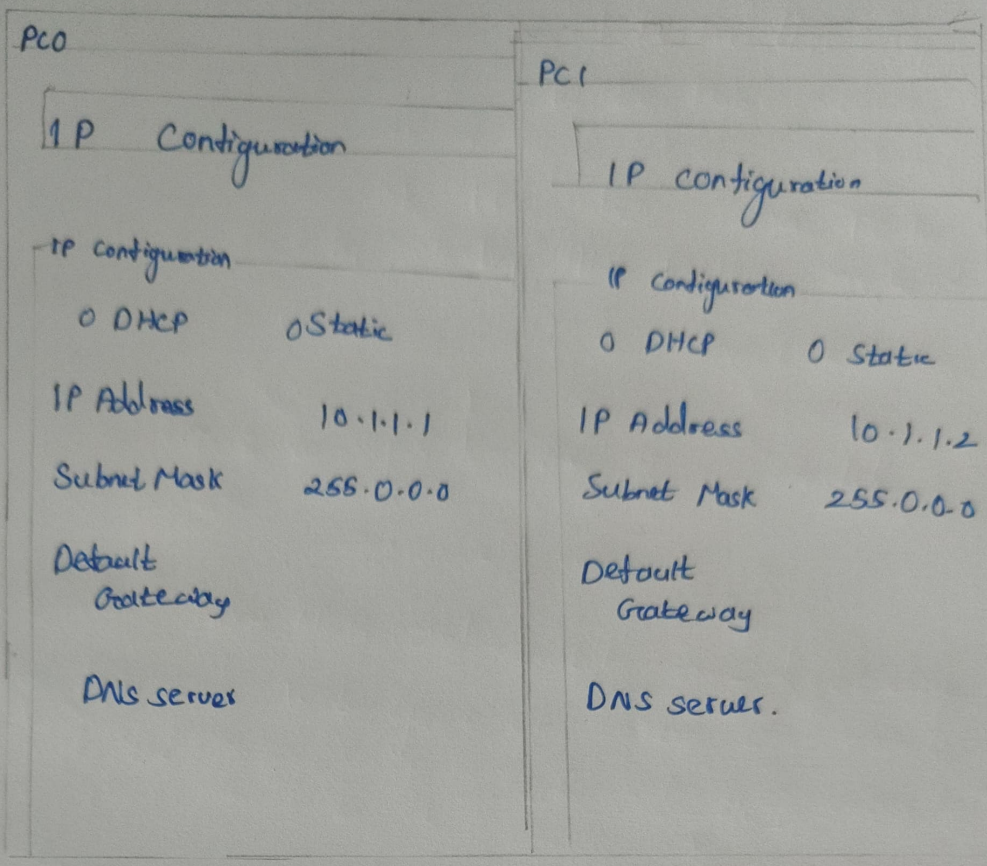
5. Repeat Step 3 to steps for the PCs connected to the switch.

6. Observes how HUB and switch are forwarding the PDU and write your observation and conclusion about the behaviors of switch and HUB

a) From your observation write down the behavior of switch and HUB in terms of forwarding the packets received by them.

b. Find Out the network topology implemented in your college and draw and label that topology in your observation book.


PC-PT
PC2
Hub-PT
Hub0
PC-PT
PC0
PC-PT
PC1
PC-PT
PC4
PC-PT
PC5
4960-24TT
Switch 0
PC-PT
PC3
PC-PT
PC6



a) From your observation write down the behaviours of Switch and HUB in terms of following the packets received by them

HUB:

a) The HUB forwards data packets to each an every connected computer

Switch:

It forwards the data to specified destination

b) Find out the network topology implemented in your college and draw and label the topology in observation.

Mesh topology is used in our college

Result:

Thus the study of packet tracer tool installation and user interface overview has been done successfully.

3/12