

EX. NO: 03

DATE: 24-4-25

STUDY OF PACKET TRACKER

INSTALLATION & USER INTERFACE

OVERVIEW

AIM:

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

To understand environment of Cisco packet tracker to design simple network.

Installation:

Windows - Download from nobacd.com. from packet tracker setup 6.0.1.exe, accept license, choose location & install.

User Interface:

- menu-bar: open, save, print, preferences.
- main tool bar: shortcuts: open, save, zoom, undo/redo.
- logical / physical tabs: switch between logical & physical views.
- workspace: create topology and run simulation.
- common tool bar: select, move, delete, note, PDU tools.
- real time simulation tabs: switch modes, control time, capture packets.
- network design and analysis:
- drag components \Rightarrow 4 PCs + 1 hub, 4 PCs + 1 switch
- use copper straight-through cable to connect PCs to hub & switch.
- assign IP & subnet mask [Desktop \Rightarrow IP configuration]
- send PDU [message icon] between PCs; observe in Realtime mode.
- repeat for switch network.

OBSERVATION AND CONCLUSION:

HUB: Broadcasts data to all ports \rightarrow more collisions, less efficient.

Switch: Sends data only to the destination port \rightarrow faster and efficient.

STUDENT OBSERVATION:

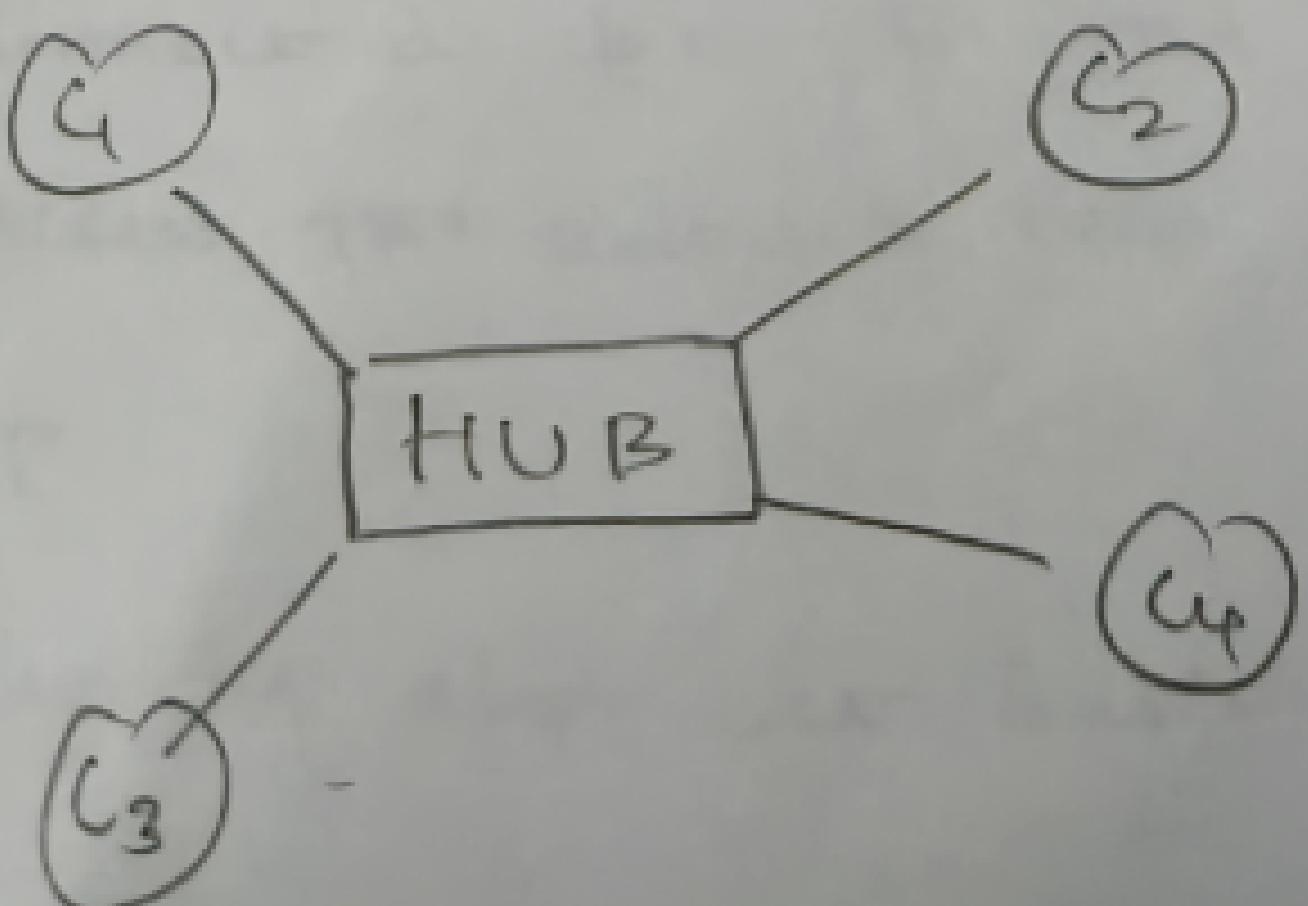
- From your observation write your behaviour of switch and hub in term of forwarding the packets received by them.

HUB: Broadcasts incoming packets to all connected devices regardless of the destination, causing unnecessary traffic.

Switch: It forwards packets only to the specific device based on its MAC address table, making communication more efficient.

- Find out the network topology and implemented in college and draw a label that topology is observation rate.

The most commonly used network topology in college campus is

Star topology:

RESULT :

Thus we connected PCs to hubs and switcher and observed how data travel through the network , using packet tracer tool.

Ques 125 / P