School of Computer Science Engineering and Technology

Course-B. Tech	**Type**- Core
Course Code- CSET207	**Course Name**- COMPUTER NETWORKS
Year- 2024	**Semester**- Even
Date- 15/01/2024	**Batch**- 2022-2025

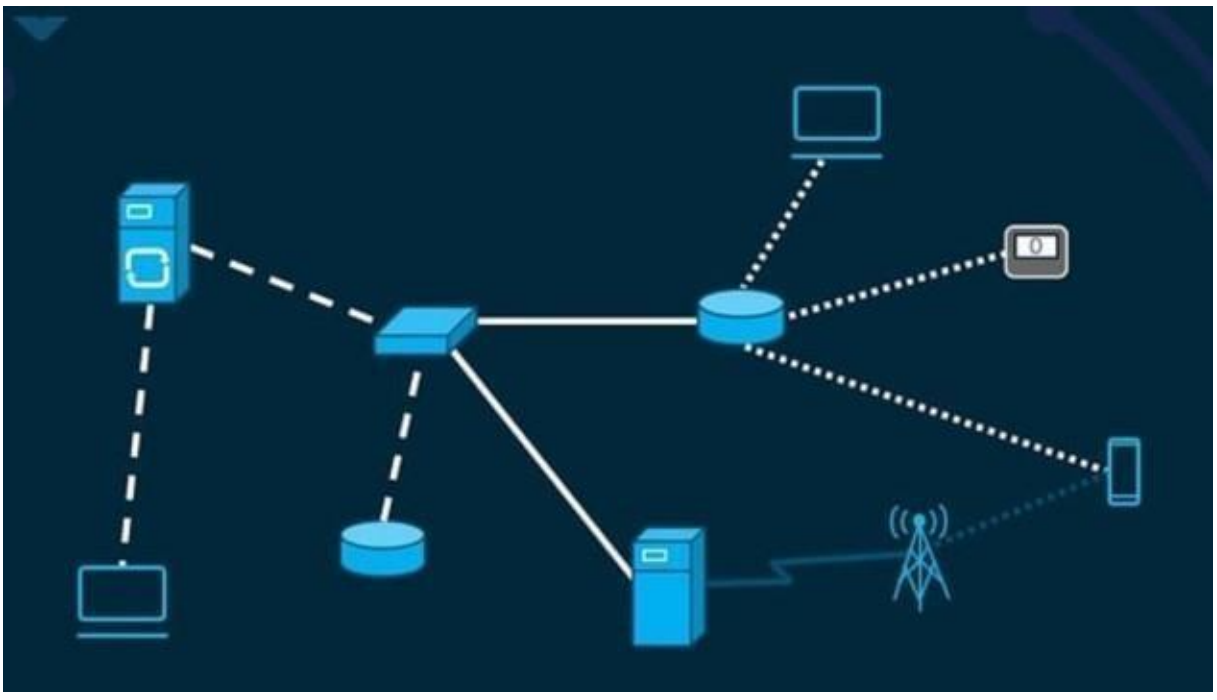
CO-Mapping

	CO1	CO2	CO3
Q1	√		
Q2	√		
Q3	√		
Q4	√	√	

Objectives

1. Students will be able to learn installation of cisco packet tracer (CPT).
2. Students will be able to learn protocol data unit (PDU).
3. Students will be able to learn function various end nodes/devices.

Cisco Packet Tracer is a network design, simulation, and modelling tool for simulating complex networked systems without the use of specialized hardware. Users may build a simulated experienceof Cisco networking devices using the cross-platform visual simulation tool.



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Download Link: https://www.netacad.com/courses/packet-tracer.

To download CPT on your device, register on https://www.netacad.com.

[Click on Introduction to Packet Tracer→signup]

After account verification, Download packet tracer from the resource menu.

Question 1: Installation and Introduction to Packet Tracer. [50 min]

Question 2: Explore the following components/equipment required to design a network topology. [15 min]

- **i.** Network Devices- Hub, Repeater, Switch, and Router.
- **ii.** Network Cables- Understanding Straight Through, Crossover, and default cabling.
- **iii.** End-devices.

Question 3: Establish communication among three PCs using the proper connection types and exchange information among them by sending a Protocol Data Unit (PDU). Assign IP address and subnet mask toall PCs. Run ipconfig command on three PCs to get the IP address and run ping command to check whether the systems are reachable or not. [15 min]

Question 4: Understand and explore PDUs and simulation scenarios. [15 min]

Submission Guidelines:

- **a)** The assignment must be verified by the instructor during the lab (Submission on LMS will onlybe considered once the working topology on Packet Tracer is verified). Submit the .cpt file along with the details in word/pdf in zipped format on LMS within 4 days.
- **b)** Zipped file must be saved as per the format RollNo_Lab# (Example: E21CSE632_Lab1).
- **c)** Write name and enrolment number inside the assignment file. Without it, your submission will not be considered for evaluation.
- **d)** Provide labels for IP addresses, cabling and devices.
- **e)** Submit the assignment in your respective batch's submission link in LMS. Submission in otherbatch's submission portal will not be checked.
- **f)** Late submission will lead to penalty.
- **g)** Plagiarism will lead to negative grading.