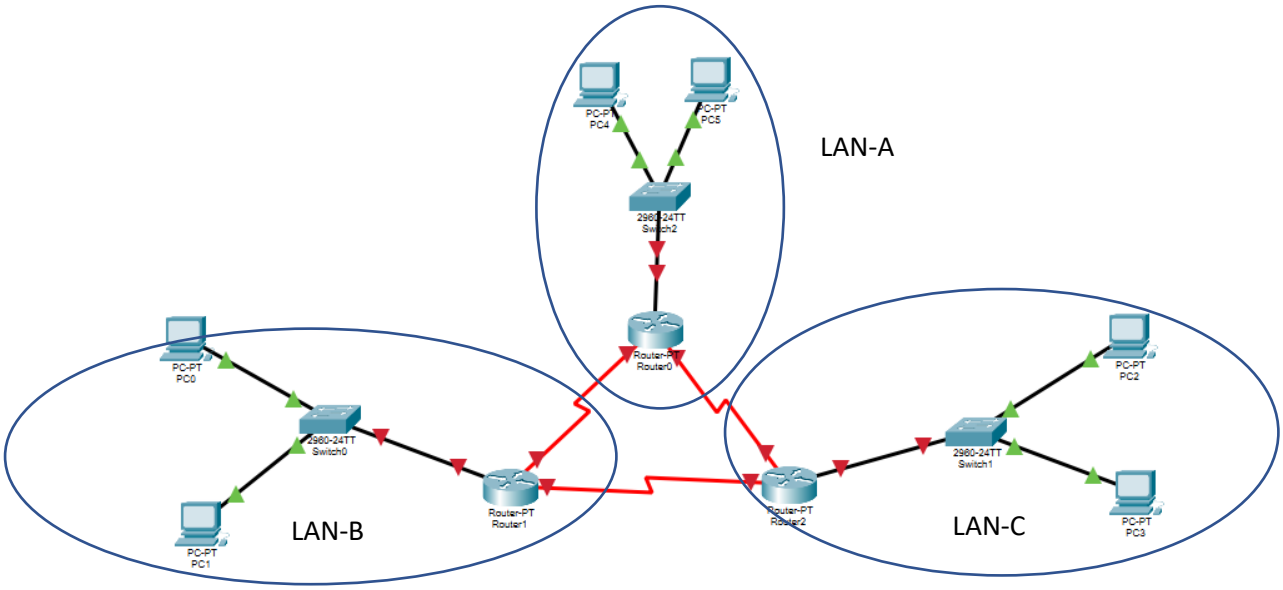
EAST WEST UNIVERSITY
Department of Computer Science and Engineering
B.Sc. in Computer Science and Engineering Program
Lab Test, Spring 2021 Semester

Course:	**CSE405 Computer Networks, Section-4**
Instructor:	**Dr. Maheen Islam, Associate Professor CSE Department**
Full Marks:	**40**
Time:	**60 Minutes**

Topology Diagram



Objectives

- Subnet an address space based on the host requirements.
- Assign host addresses to devices.
- Configure devices with IP addressing.
- Configure routing tables
- Verify the addressing configuration.

Background / Preparation

In this activity, you will subnet the private address space **192.168.128.0/20** to provide enough host addresses for the three LANs attached to the router. You will then assign valid host addresses to the appropriate devices and interfaces. Next, you will test connectivity to verify your IP address implementation. Finally, you will configure the routing tables statically so that each device in the network can send packets to all other devices.

Step 1: Subnet an address space based on the host requirements.

You are given the private address space **192.168.128.0/20**. Subnet this address space based on the following requirements:

- **LAN-A** needs enough addresses for **100** hosts.
- **LAN-B** needs enough addresses for **40** hosts.
- **LAN-C** needs enough addresses for **50** hosts.

Step 2: Assign host addresses to devices.

Step 3: Configure devices with IP addressing.

Step 3: Configure routers with static routing table

Step 4: Verify the addressing configuration and packet transmission from each of the device to all other devices.