BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CSE322 (Computer Networks Sessional), July 2018 Term
Packet Trace Online, Section A2, December 4, 2018

Time: 1 hour   **Marks: 20**
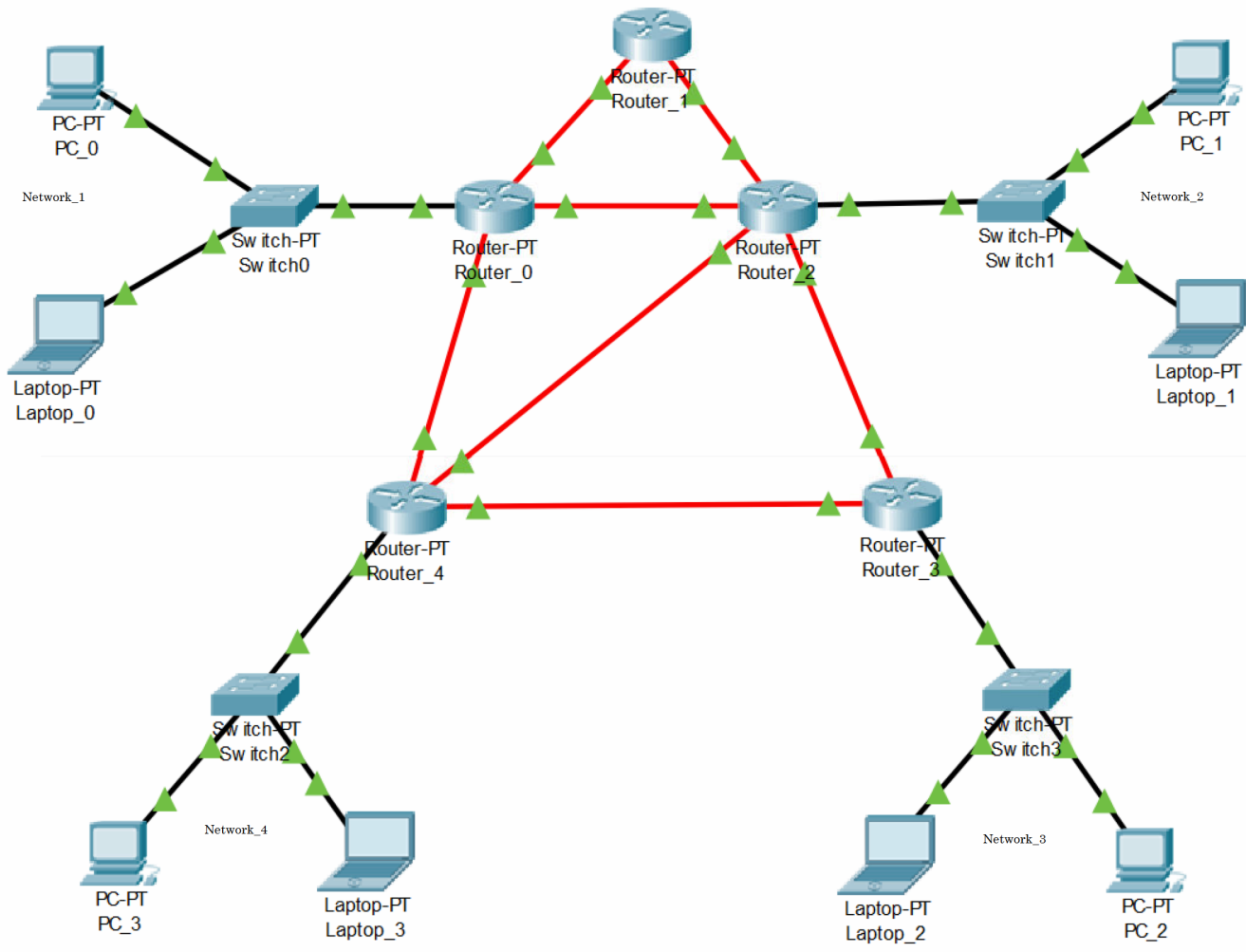
Network Topology

Figure 1: Network Topology

Requirements

You need to configure the network according shown in the preceding section to the following specifications:

1. Design the topology on Cisco Packet Tracer according to Figure 1 .

2. Configure the network appropriately to enable communication among all the devices.

3. All the configured IP addresses must be in the range 172.0.0.0-192.255.255.255.

4. All the subnet masks must be of length 24.

PHASE 1 (16 Marks)
Tasks

1. Assign unique network addresses to all the subnets.

2. Configure all the hosts/PCs and router interfaces with appropriate unique IP addresses from respective subnets.

3. Make sure all router interfaces are turned on.

4. Configure dynamic routing protocol to ensure connectivity among all subnets. You can not use any static route.

Evaluation

1. Show that the network is connected. Ping between any pair of devices (i.e., PCs or Router interfaces) must be successful.

2. Show the routing table of Router_2.

PHASE 2 (4 Marks)
Tasks

1. Modify the routing configuration in such a way that al the packets from Network_1 pass through Router_1.

2. Modify the routing configuration in such a way that any packet from Network_2 destined for Network_3 or Network_4 pass through Router_4.

N.B. You are not allowed to disconnect any cable or shutdown any interface. You are not also allowed to use static route to satisfy the given constraint.

Evaluation

1. Using simulation mode show the path traversed by packets from PC_0 of Network_1 to PC_1 of Network_2.

2. Using simulation mode show the path traversed by packets from PC_1 of Network_2 to Laptop_2 of Network_3.