## National University of Computer and Emerging Sciences



# **Quiz** *for* **Computer Networks - Lab**

(CL -3001)

Course Instructor: Ms. Saba Tariq

Lab Instructor: Mr. Usama Khan

Section: BCS-5G

Semester: Fall 2024

Department of Computer Science FAST-NU, Lahore, Pakistan

### Quiz

#### Quiz STATEMENT 1: Steps to create a network using cisco packet tracer:

- 1. Take 16 GENERIC PC'S (total 16 PCs, 4 on each network) that will be connected by X number of SWITCHES 2950-24, Use drag and drop method. All the devices can be found in the bottom bar.
- 2. Connect all of them with **COPPER STRAIGHT** through cable.
- **3.** If 2 computers want to communicate in a network they must have the same type of subnet mask (they must have their network bits the same). So Assign IP addresses to the PCs. Different network of addresses for both sides.
  - a. Double click on PC
  - b. Go to desktop tab and click "ip configuration"
  - c. Insert ip of the 1<sup>st</sup> pc, subnet will automatically generate and leave the gateway right now.
  - d. You need to limit yourself **to one class of private addresses**, if you want to computers to talk with each other within a network

#### 4. Connecting Network With One Router

- a. Connect ONE GENERIC ROUTER
- b. Connect It With Switch 0 from fast Ethernet 0/0
- c. Connect It With Switch 1 from fast Ethernet 1/0
- d. Use Copper straight through cable

#### 5. Router connected with the network 1 from fast Ethernet 0/0

- a. Double click on router
- b. Go to "config" tab
- c. Click fast Ethernet 0/0.
  - d. Insert ip of the class as the network 1 have, subnet will automatically generate make sure port status on
- e. Add corresponding gateway in all PCs

#### 6. Router connected with the network 2 from fast Ethernet 1/0

- a. Double click on router
- b. Go to "config" tab
- c. Click fast Ethernet 1/0.
  - d. Insert ip of the class as the network 2 have, subnet will automatically generate make sure port status on
- e. Add corresponding gateway in all PCs
- **7. Pinging:** Go to the command prompt of any pc and ping any address in the network. If the address is correct you should get the reply packet from that PC.
- **8. <u>Simulation Mode:</u>** You can also go to simulation mode and make the real packet travel from one PC to another PC.

Note: Reiterate the same for other switches accordingly.