IT Project Questions

1. Show the routing table for one of the routers? How many dynamic routes (RIP or OSPF) you have?

    - we will use #show Ip route command, in order to see the routing table.
    - We have 3 routers, one with RIP and the second with OSPF and the last with both RIP&OSPF

2. What is a passive-interface (show it in one of your routers)

    - A passive-interface is a term used in routing protocols to describe an interface on a router that does not participate in the routing protocol. In other words, the router does not send or receive routing updates on a passive interface. However, the network that the specified interface belongs to is still advertised in routing updates that are sent out across other interfaces.
    - To show it write the command #show Ip protocol command.

3. Which routing protocol you have used in your topology. (Show this through the suitable command)

    - We used RIP&OSPF
    - To show it write #show Ip protocol.

4. Which new VLANs you have created on your switches. (Show VLANs)

    - We created 4 VLANs (CS – nursing – engineering – faculty/staff)
    - To show VLANs write the command #show VLAN brief.

5. For switches what is the difference between mode access and mode trunk. Show interface Trunk.

    - "Mode access" is configured as an access port, which means it is associated with a single VLAN. An access port does not allow traffic from multiple VLANs to pass through it.
    - "Mode trunk" is configured as a trunk port, which means it is used to carry traffic from multiple VLANs. This configuration is useful for connecting switches to each other, allowing communication between different VLANs on different switches.
    - In summary, the main difference between mode access and mode trunk is that access ports are used to connect to individual devices on a single VLAN, while trunk ports are used to pass traffic from multiple VLANs between switches.
    - To show interface trunk write the command # show interface Trunk.

6. What is the default router? Show it.

    - We used router0 & router1 as a default router, to forward any unknown destination address traffic.
    - To show the default router use the command #show Ip route.

7. What is the DHCP? And what did you do with server?

    - DHCP (Dynamic Host Configuration Protocol) is a networking protocol used to automatically assign and generate an IP addresses to devices connected to a network.

8. How did we create a successful connection?

    - By using OSPF&RIP.

9. Why did we use RIP&OSPF protocols? And why did we used them together in one of the routers?

    - To connect the routers with each other and the LANs.
    - Since we used 2 different protocols in the same network, we used RIP&OSPF together on router0 in order to connect the whole network.

10. Why did you use “redistribution”?

    - So we can advertise the protocols to each other, otherwise it will fail to establish a connection since we use a 2 different protocols together “RIP&OSPF”.

11. How many networks in routers (0 – 1 – 2)?

    - Router0: 3 networks.
    - Router1: 1 network, and 2 subnetworks.
    - Router2: 2 networks.

12. Test the ping between hosts from different networks using the command **PING**.