



DHA SUFFA UNIVERSITY
Department of Computer Science
Final Semester Examination-Fall 2024

Class/Section: BS-SE-5B
Course Instructor: Wilayat shah

Date: 30/1/2025
Time Allowed: 2 hours
Max Marks: 30

Question 1:

You are the IT manager of your university. You had requested the University for Three Switches and one router to be bought. The university has three departments, IT Admission and computer science.

Each department is assigned five workstations. You have to create three networks with the help of only one router and three switches. So that all five workstations of every department can share data.

All three networks should be different from each other.

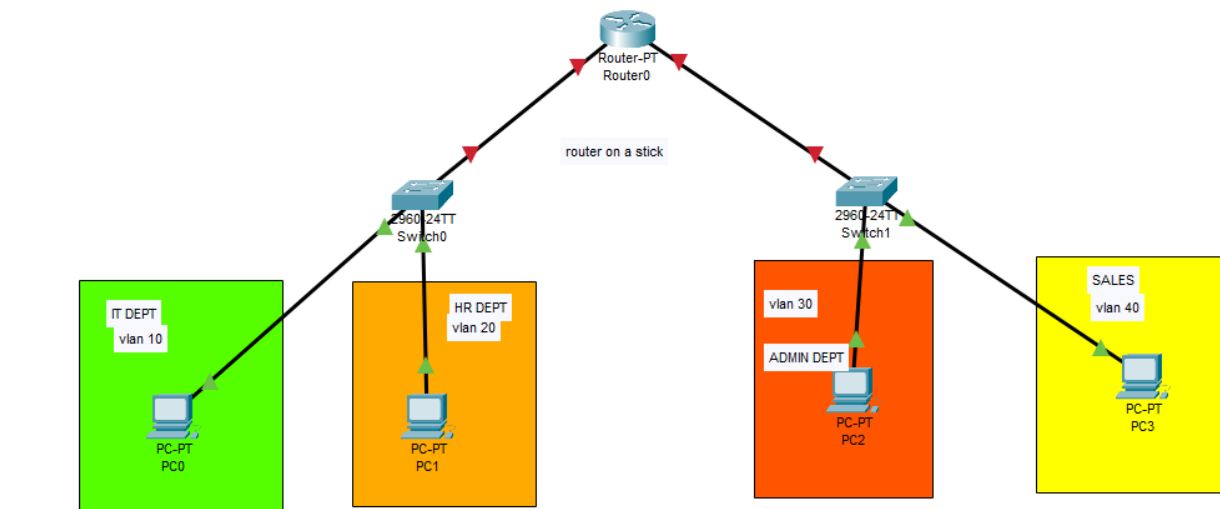
Label the networks with different colors and also label default gateway addresses and network ip addresses.

Pc's should get IP addresses from DHCP (ROUTER) automatically.

Exclude the ip address range from 2 to 10 .

Question 2:

Configure this topology. Create 4 different VLANs using the Router-on-a-Stick method. After configuration, all VLANs should be able to communicate with each other.





Question 3:

Suppose you are working as an IT System Administrator in a reputable higher education institute in Pakistan, your responsibility is to implement, configure and maintain computer network-based Systems.

In this regard, you have been assigned the task of designing and configuring a bus Topology network Using Cisco Packet Tracer. The network will consist of five routers, two switches, a pc, one webserver and one DNS server. Pc should be connected to router1 via a switch and both servers (web and DNS server should be connected to router 5 via switch). Each router should be assigned Unique IP Addresses and your objective is to implement static routes to enable communication between all the devices in the network.

Finally, you should be able to access the web server from PC1

(Label the devices with your name (i-e name1 name 2 name 3...) and IP addresses Connect router to router via serial cables)

(Configure the routers using CLI).

Label the topology and add a screenshot of the configuration on the router.

Attach all the screenshots of each question in order, ensuring they are visible. Finally, upload both the screenshots and the Packet Tracer files to the LMS.



