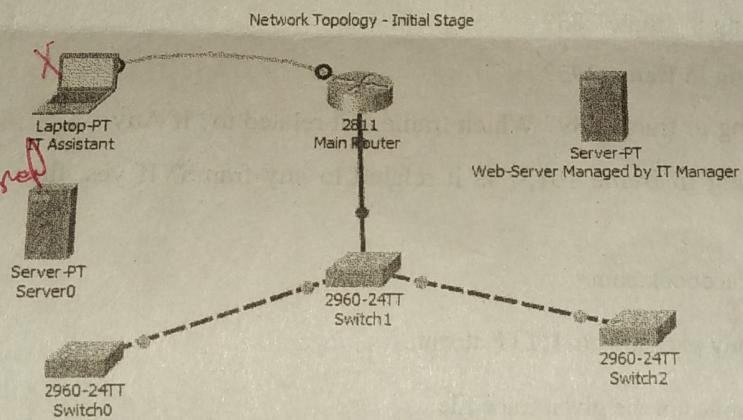


Course Code: CL307	Course Name: COMPUTER NETWORKS LAB
Instructor Name: Awais Ahmed	
Student Roll No.	Section: C
Total-Time: 100-Minutes	Total-Points: 100

**Instructions:**

- Return the question paper.
- Read each question completely before answering it.
- Cheating in any case will lead to F-GRADE directly as per university rules.**
- In case of any ambiguity, you may make assumption. But your assumption should not contradict any statement in the question paper.
- Invigilator is not supposed to help or translate the question.
- Manage your time, each question carries unequal marks.

**QUESTION # 01 Configure and complete the following network as per requirements:**

- a) IT Manager calls and complains to his assistant that he is unable to communicate with anyone. As an IT Assistant, now it's your responsibility to correctly configure the main router remotely.
- b) Marketing Manager may need a service to share files with Finance Manager for approval of budget, create dummy files.
- c) Marketing Manager wants to inform Finance Manager and both clients via email about a new product that they are planning to launch.
- d) Secure the network via telnet or SSH. Password: \_\_\_\_\_

interface s0/0/5 password Cisco login end

Exam → CN LAB Exam

## **X**QUESTION # 02 Socket Programming

- You have to write a chat program that enables real-time communication between 3 Persons. Specifically the program should permit chat sessions between 2 well as 3 persons, In case of 3 persons, messages generated by one should reach the other two (It's a conferencing facility and not an individual chat facility). The chat program needs to allow a user to type messages, which should be conveyed to the other end(s) and displayed at the other end(s). The user interface need not be sophisticated, but should be usable. It can be text-based or can be graphical. (Hint: TCP || UDP Communication).

## **QUESTION #03 Wire Shark**

Open the given "**Capture\_Mid\_Exam**" Wireshark file.

Answer the following questions with respect to that particular file:

1. Which frames are performing first 3-way handshake? How many times 3-way handshake is being performed altogether?
2. What is happening in frame 15? Is it related to any frame? If yes, then write that frame number as well.
3. What is happening in frame 30? Give complete answer corresponding to whatever the request or response is.
4. What is happening in frame 283?
5. What is happening in frame 295?
6. What is happening in frame 789? Which frame is it related to? If Any.
7. What is happening in frame 1015? Is it related to any frame? If yes, then write that frame number as well.
8. Find CNAME for facebook.com
9. Can you filter out any packet from HTTP stream.
10. Count the no of frames in the given trace file.

-----All THE BEST -----