SUMAIYA HOSSAIN SUROVI <sumaiya.hossain.surovi1@g.bracu.ac.bd>

CSE320 Assignment 1 [SFQ | Summer 2024]

1 message

Google Forms <forms-receipts-noreply@google.com>
To: sumaiya.hossain.surovi1@g.bracu.ac.bd

Tue, Jun 25, 2024 at 11:51 PM

Google Forms

Thanks for filling out CSE320 Assignment 1 [SFQ | Summer 2024]

Here's what was received.

CSE320 Assignment 1 [SFQ | Summer 2024]

The form can be submitted only **once**. You **cannot edit** your responses after submitting. So be careful before pressing submit

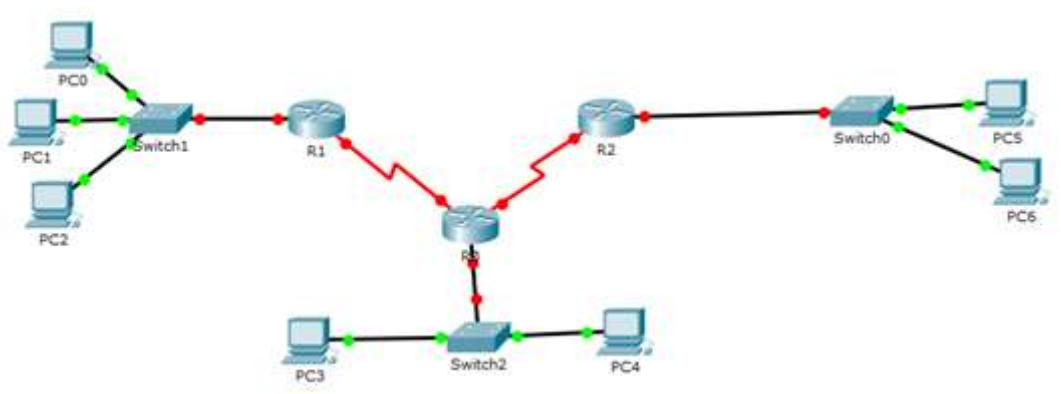
Your email (**sumaiya.hossain.surovi1@g.bracu.ac.bd**) was recorded when you submitted this form.

Suppose, a university has four buildings. Each building has a computer lab and an administrative office. There are 3 nodes in each lab and 4 nodes in each office. **Identify** and **draw** the hybrid network that satisfies the following criteria:
1. Both the lab and office can communicate with each other as they are connected centrally. If one gets disconnected, the other remains active.
2. The devices in both lab and office use a central backbone line and are connected using multipoint connections only.
3. Dedicated point to point connection is used to connect buildings with each other.

Submitted files

Answer - SUMAIYA HOSSAIN SUROVI.pdf

In the diagram below, R1, R2 and R3 are three routers. How many local area networks (LANs) do you think the topology has and why? If PC1 wants to send data to PC4, then what is the first hop that the data has to go from source PC1?



Which of the following statements are true?

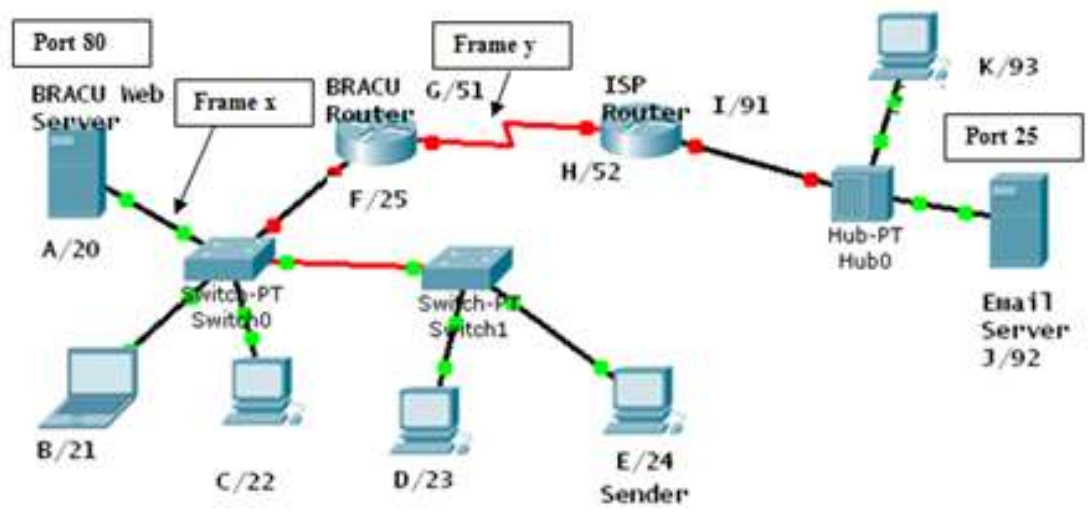
- [x] Half-Duplex mode allows data to flow in both directions
- [ ] Hub is an end-device
- [x] Services provide information is response to a request
- [ ] WANs are found in small office or institutional buildings
- [x] Lower the jitter, higher the effectiveness of a system

- [ ] Turning on an AC using a remote is a Multipoint connection

Select the correct layers of the OSI models that match the below mentioned functions:

	Application	Presentation	Session	Transport	Network	Data Link	Physical
route determination	○	○	○	○	◉	○	○
establishing secure connection	○	○	○	○	○	◉	○
adding source and destination logical address	○	○	○	○	◉	○	○
responsibility for handling frames between adjacent nodes	○	○	○	○	○	◉	○
using algorithms to protect data	○	◉	○	○	○	○	○
keeping track of user session on a browser	○	○	◉	○	○	○	○
identifying different processes	◉	○	○	○	○	○	○
converting bits to signals for sending over media	○	○	○	○	○	○	◉
converting French to English on a website	○	◉	○	○	○	○	○

The frame x is intended for the BRACU Web server and frame y is coming from the Email Server. Consider the alphabets as physical and numbers as logical addresses. Port numbers for the servers are already mentioned, and for clients use the Dynamic port range. You need to figure out from the provided information and topology, which end device is the sender/receiver.



Source Port **(Write your answers for both frames; use a single space in between)**

50,000 25

Destination Port **(Write your answers for both frames; use a single space in between)**

80 51,000

Source IP **(Write your answers for both frames; use a single space in between)**

24 92

Destination IP **(Write your answers for both frames; use a single space in between)**

20 93

Source MAC **(Write your answers for both frames; use a single space in between)**

E J

Destination MAC **(Write your answers for both frames; use a single space in between)**

A K