CSE 320 (Data Communication) | Summer 2023

QUIZ 1 | SECTION- 01

Set A

Student ID: Full Marks: 15 Name: Duration: 25 minutes

[No extra sheet will be provided. Write your answer to the questions in the delivered pages.] [Figures on the right denote the marks of the corresponding question.]

1. Match the following to one or more layers of the **OSI Model**: [5]

a) Route determination	
b) Converting the data from Bangla to Chinese	
c) Adding Synchronization bits	
d) Responsibility for handling frames between adjacent nodes	
e) Process-level error detection & control	

2. Answer the following questions in brief.

a. What is a PDU? Write its full form & the names of PDUs at each layer of OSI. [2]

b. Draw a hybrid topology with a mesh network connecting four ring networks, having three hosts each. [3]

c. **Label** the frames (1 & 2) shown below in Figure No. 1 with appropriate port, IP and MAC addresses. The sender Host A has two applications running: FTP with port number 51024 and accessing the web server with port number 52348. Frame 1 is coming from the TEST web server to HOST A and Frame 2 is intended for the web server from Host A. Web server uses port number 80 to send data to clients. *(Include the device name or interface for indicating MAC addresses. **An interface is of format sx/y or fax/y).***
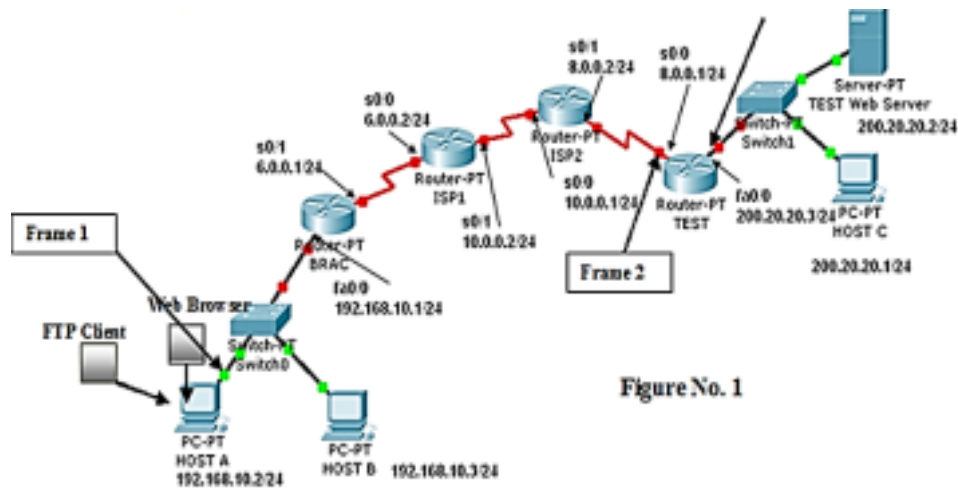
[5]

Figure No. 1

Frame 1	D.MAC	S.MAC	D.IP	S.IP	D.Port	S.Port

Frame 2	D.MAC	S.MAC	D.IP	S.IP	D.Port	S.Port