

Assignment 1

Name: Anamika Sarker

ID: 23101040

Course: CSE421

Section: 23

Answers to the ques no - 1

(a)

	IP	Port	Mac
Source	16	49152	H
Destination	12	80	J

Registered Port

The destination port type is Registered since the packet is a request being sent from

pc1 to pc3. In the request, the destination port refers to either well know port or registered port not dynamic port.

Answer to the ques. no-2

By remembering and personalizing user interaction.

Web cookies enhance user experience by storing data on user's device which help website to remember user for authorization through session token, personalization content and setting as well as analyze user activity to improve performance, making smooth interaction and fast visiting site etc.

Answer to the ques. no-3

POP3.

John's email client is using POP3 to retrieve emails. POP3 downloads email from the server to the local computer and delete them from the server by default. That's why the messages can't be retrieved by other device.

Answer to the ques. no - 4

Type cName.

If the spelling of `www.google.com` is wrong it will point to the right domain if DNS is configured with a cName which will redirect it to the right domain server.

Answer to the ques. no-5

Using acknowledgment flag and window size.

Flow control in the transport layer prevents the receiver from dropping data segments by ensuring that the sender transmits data at a rate the receiver can handle. It is done by using acknowledgments and window size so the sender stops or slows down when the receiver's window is nearly full, preventing data loss.

Answer to the ques. no-7

(a)

persistent,

for sending = 15 ms

∴ Single rtt = (15+15) ms

for both send
and receive = 30 ms

Total rtt = 480 ms

$$∴ 480 = 30 + (x \times 30)$$

$$∴ x = 15$$

∴ 15 object.

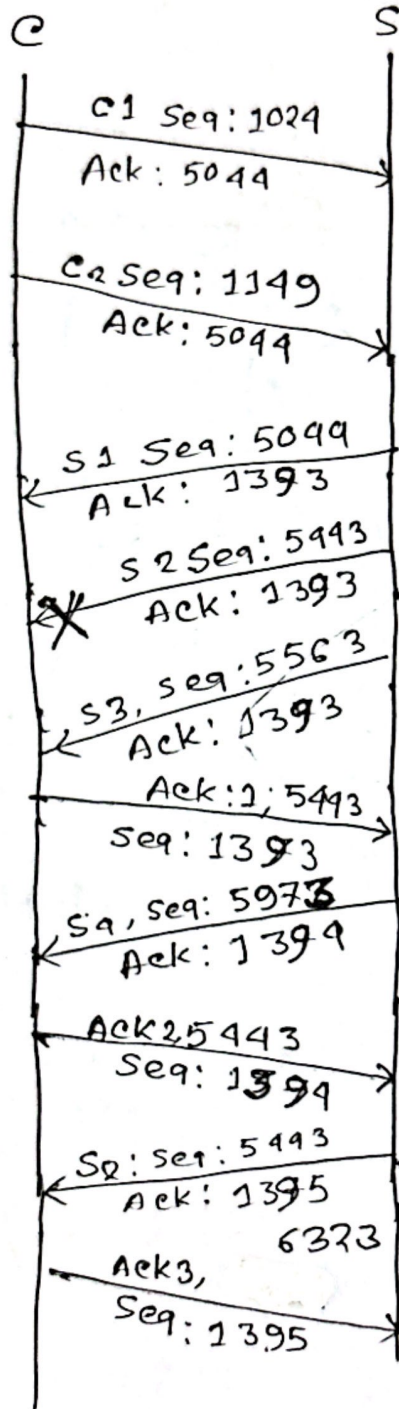
(b)

$$∴ \text{ftp time} = \frac{15 \times 10 \times 8}{80}$$

$$= 15 \text{ s}$$

Answer to the ques. no-8

(a)



$$1024 + 125 - 1 = 1148$$

$$1149 + 244 - 1 = 1392$$

$$5044 + 399 - 1 = 5442$$

$$5443 + 120 - 1 = 5562$$

$$5563 + 410 - 1 = 5972$$

(a) seq: 5563

Ack: 1393

(b) Ack-1,

Ack: 5443

(c) Ack-3,

Ack: 6323

$5443 = 1 - 000 + 5563$

$5563 = 1 - 000 + 5443$

$5563 = 1 - 000 + 5443$

