Module 7 Summary Exercises

Due Feb 23 at 1:59am **Allowed Attempts** 2

Points 72

Questions 27

Time Limit None

Instructions



Take the Quiz Again

Attempt History

	Attempt	Time	Score	
LATEST	Attempt 1	386 minutes	70.33 out of 72	

(!) Answers will be shown after your last attempt

Score for this attempt: **70.33** out of 72

Submitted Feb 22 at 9:49pm This attempt took 386 minutes.

Question 1	1 / 1 pts
UDP implements network fairness.	
○ True	
False	

Question 2	1 / 1 pts
What are some causes of network congestion? (Check all that apply)	
☑ Typical Internet Usage.	
High utilization.	

Parallel TCP Connections.
☑ Dropped TCP Packets.
Reliable Data Transfer schemes.

Question 3

The rate of CongWin size increase (in terms of MSS) while in TCP's Slow-Start phase is Exponential .

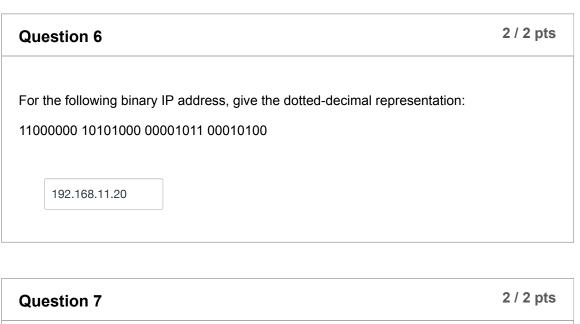
Answer 1:

Exponential

Question 5 2 / 2 pts

Given a effective delay of 17ms when network usage is 81%, what is the effective delay when network usage = 78%? (Give answer is miliseconds, rounded to one decimal place, without units. So for an answer of 0.10423 seconds you would enter "104.2" without the quotes).

14.7



For the following dotted-decimal IP address, give the binary representation:

156.224.141.227

10011100 11100000 10001101 11100011

Question 8

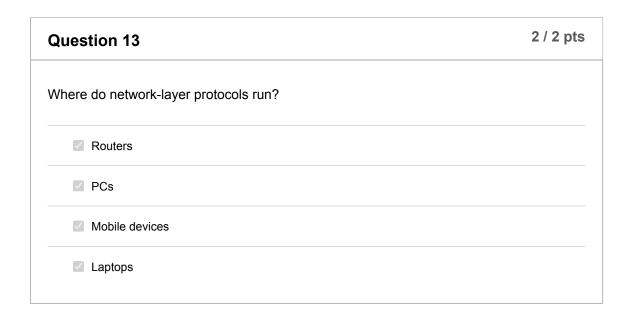
For the following dotted-decimal IP address, give the binary representation:

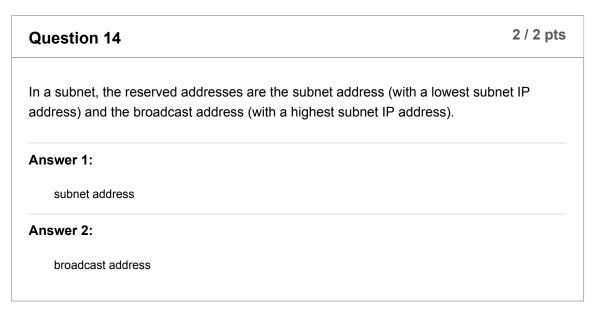
10.108.112.240

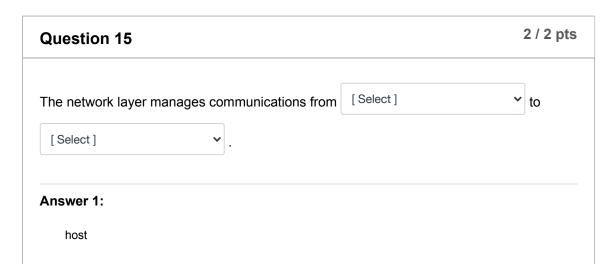
00001010 01101100 01110000 11110000

Question 9	2 / 2 pts
In a datagram network, the responsibilities of the network layer include: (check apply).	all that
congestion control	

packet forwarding	
reliable delivery	
host-to-host communication	
payload error correction	
☐ flow control	
packet routing	
connection setup/takedown	
Question 10	2 / 2 pt
	ccur at an input port.
Answer 1:	ccur at an input port.
Answer 1: can Question 11	2 / 2 pt
Answer 1: can Question 11	2 / 2 pt
Question 11 The Internet Protocol (IP) header may be 21 bytes	2 / 2 pt
Answer 1: can Question 11 The Internet Protocol (IP) header may be 21 bytes True False	2 / 2 pt
Answer 1: can Question 11 The Internet Protocol (IP) header may be 21 bytes True	2 / 2 pt







Question 16	2 / 2 pts
In a link between Host A, and Host B, we have three intermediary routers:	
Host A Router Snucky Router Jumpy Router Po Host B	
Host A's first hop router is Router Snucky .	
Answer 1:	
Snucky	
Question 17	2 / 2 pts
A network with a connectionless network layer is called a datagram network .	
Answer 1:	
datagram network	
Question 18	2 / 2 pts
The Internet Protocol (IP) implements data reliability services.	
O True	
False	

2 / 2 pts

Answer 2:

Question 19

A	
Answer 1:	
can	
Question 20	2 / 2 pts
Routing would be more complicated if we used hardware addresses as network addresses.	
True	
○ False	
Question 21	2 / 2 pts
In a subnet, there are reserved IP addresses.	
2	
2	
Question 22	2 / 2 pts
Question 22	
Question 22 When a host in a network needs to obtain a valid IP address for itself, it broadcas	sts a
	sts a
Question 22 When a host in a network needs to obtain a valid IP address for itself, it broadcas 'discover" message that can be handled by a Dynamic Host Configuration Protoc	sts a

Question 23 4 / 4 pts

Upon encountering a router with the following routing table:

Routing Table

Prefix Match			Port	
10011110	00011110	10001111		0
10011110	00011110	10001111	000	1
10011110	00011110	10001111	01	2
10011110	00011110	10001110	0001	3
Default				4

A datagram with the destination IP address 158.30.143.30 would be routed to Port 1.

Answer 1:

Port 1

Question 24 4 / 4 pts

Upon encountering a router with the following routing table:

Routing Table

Prefix Match			Port	
10011110 (00011110	10001111		0
10011110 (00011110	10001111	000	1
10011110 (00011110	10001111	01	2
10011110 (00011110	10001110	0001	3
Default				4

A datagram with the destination IP address 158.30.143.80 would be routed to Port 2 .

Answer 1:

Port 2

Question 25 4 / 4 pts

Upon encountering a router with the following routing table:

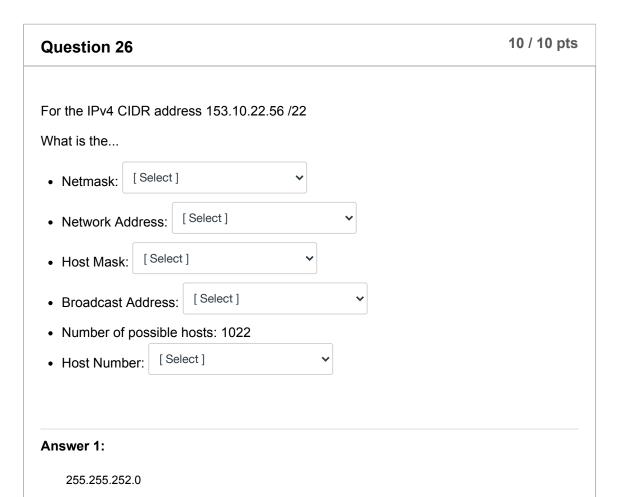
Routing Table

Prefix Match			Port	
10011110	00011110	10001111		0
10011110	00011110	10001111	000	1
10011110 (00011110	10001111	01	2
10011110 (00011110	10001110	0001	3
Default				4

A datagram with the destination IP address 158.30.143.150 would be routed to Port 0 .

Answer 1:

Port 0



Answer 2:			
153.10.20.0			
Answer 3:			
0.0.3.255			
Answer 4:			
153.10.23.255			
Answer 5:			
1022			
Answer 6:			
568			

Partial

8.33 / 10 pts **Question 27** Put the following steps in the correct order for new host "Jetpack" joining a network with a DHCP-enabled server "Rhino". **∨** sends [Select] [Select] [Select] **∼** to **∀** sends [Select] [Select] [Select] [Select] ▼ sends DHCP Request to [Select] **∨** sends [Select] **∽** to [Select] [Select] Answer 1: Jetpack Answer 2:

DHCP Discover
Answer 3:
IP broadcast address
Answer 4:
Rhino
Answer 5:
DHCP Offer
Answer 6:
Jetpack's IP address
Answer 7:
Jetpack
Answer 8:
DHCP Request
Answer 9:
IP broadcast address
Answer 10:
Rhino
Answer 11:
DHCP Ackknowledgement
Answer 12:
Jetpack's IP address

Quiz Score: **70.33** out of 72