

[Dashboard](#) / [My courses](#) / [COMPUTER NETWORKS-Lecture-1202 - ENCS3320 - Meta](#) / [General](#) / [Quiz1Repeat](#)

Started on	Tuesday, 13 April 2021, 4:49 PM
State	Finished
Completed on	Tuesday, 13 April 2021, 5:24 PM
Time taken	35 mins
Marks	11.75/15.00
Grade	7.83 out of 10.00 (78%)

Question 1

Complete

Mark 1.00 out of 1.00

ISO/OSI reference model has more layers than Internet protocol stack

- a. False
- b. True

The correct answer is: True

Question 2

Complete

Mark 1.00 out of 1.00

Consider two hosts, A and B, connected by a single link of rate 16 Mbps. Suppose that the two hosts are separated by 500 km, and suppose the propagation speed along the link is 200000 km/sec. Host A is to send a packet of size 1500 Bytes to Host B. Find the transmission delay.

- a. 0.0005 seconds
- b. None
- c. 0.012 seconds
- d. 0.00075
- e. 0.0015 seconds
- f. 0.2 seconds

The correct answer is: 0.00075

Question 3

Complete

Mark 1.00 out of 1.00

Suppose users share a 3 Mbps link. Also suppose each user transmits continuously at 1 Mbps when transmitting, but each user transmits only 20 percent of the time. When packet switching is used and there are 5 users, find the probability that all users are sending.

- a. 0.00064
- b. 0.0023
- c. None
- d. 0.008
- e. 0.00032
- f. 0.23

The correct answer is: 0.00032

Question 4

Complete

Mark 1.00 out of 1.00

Network protocols dividing user data into smaller packets, one of the statements about the packet size limits is wrong, which is it?

- a. Experimental work needed to be done in order to find optimal packet size
- b. The larger packets are, the less overhead caused
- c. Packet size affects the end-to-end delay
- d. None
- e. Decreasing the packet size will cause less overhead

The correct answer is: Decreasing the packet size will cause less overhead

Question 5

Complete

Mark 1.00 out of 1.00

Fiber optics cables has a low error rate

- a. True
- b. False

The correct answer is: True

Question 6

Complete

Mark 1.00 out of 1.00

HTTP/3 runs over UDP

- a. False
- b. True

The correct answer is: True

Question 7

Complete

Mark 1.00 out of 1.00

In DNS records the type MX refers to

- a. none
- b. DNS server
- c. P2P server
- d. MAIL server

The correct answer is: MAIL server

Question 8

Complete

Mark 1.00 out of 1.00

HTTP/1.1 runs over UDP

- a. True
- b. False

The correct answer is: False

Question 9

Complete

Mark 0.00 out of 1.00

Which Protocol is used to read an email

- a. IMAP
- b. SMTP
- c. none
- d. FTP

The correct answer is: IMAP

Question 10

Complete

Mark 0.00 out of 1.00

With DASH technique, the videos:

- a. Are transferred with FTP protocol
- b. Are stored with different coding rates
- c. Are transferred with P2P protocol
- d. Are stored with only high-quality format

The correct answer is: Are stored with different coding rates

Question 11

Complete

Mark 0.75 out of 1.00

Consider the following string of ASCII characters that were captured by Wireshark when the browser sent an HTTP GET message (i.e., this is the actual content of an HTTP GET message). The characters <cr><lf> are carriage return and line-feed characters.

Answer the following questions,

```
GET /cs453/index.html HTTP/1.1<cr><lf>Host: gaia
a.cs.umass.edu<cr><lf>User-Agent: Mozilla/5.0 (
Windows;U; Windows NT 5.1; en-US; rv:1.7.2) Gec
ko/20040804 Netscape/7.2 (ax) <cr><lf>Accept:ex
t/xml, application/xml, application/xhtml+xml, text
/html;q=0.9, text/plain;q=0.8,image/png,*/*;q=0.5
<cr><lf>Accept-Language: en-us,en;q=0.5<cr><lf>Accept-
Encoding: zip,deflate<cr><lf>Accept-Charset: ISO
-8859-1,utf-8;q=0.7,*;q=0.7<cr><lf>Keep-Alive: 300<cr>
<lf>Connection:keep-alive<cr><lf><cr><lf>
```

Does the browser request a non-persistent or a persistent connection?

a persistent connection

What is the IP address of the host on which the browser is running?

192.168.1.1

What is the URL of the document requested by the browser?

http://gaia.cs.umass.edu/cs453/index.html

What version of HTTP is the browser running?

HTTP/1.1

The correct answer is:

Does the browser request a non-persistent or a persistent connection? → a persistent connection,

What is the IP address of the host on which the browser is running? → This piece of information is not given,

What is the URL of the document requested by the browser? → http://gaia.cs.umass.edu/cs453/index.html,

What version of HTTP is the browser running? → HTTP/1.1

Question 12

Complete

Mark 1.00 out of 1.00

Consider distributing a file of $F = 2$ Gbytes to 100 users. The server has an upload rate of $u_s = 30$ Mbps, and each user has a download rate of $d_i = 2$ Mbps and an upload rate of 700kbps. What is minimum distribution time for clientserver

- a. 6666.667 seconds
- b. none
- c. 8000 seconds
- d. 66666.667 seconds
- e. 16000 seconds
- f. 800000 seconds
- g. 53333.33 seconds

The correct answers are: 53333.33 seconds, none

Question 13

Complete

Mark 1.00 out of 1.00

Consider distributing a file of $F = 2$ Gbytes to 100 users. The server has an upload rate of $u_s = 30$ Mbps, and each user has a download rate of $d_i = 2$ Mbps and an upload rate of 700kbps. What is minimum distribution time for P2P distribution.

- a. 6666.667 seconds
- b. 8000 seconds
- c. 800000 seconds
- d. none
- e. 53333.33 seconds
- f. 16000 seconds
- g. 66666.667 seconds

The correct answers are: none, 16000 seconds

Question 14

Complete

Mark 1.00 out of 1.00

Consider sending over HTTP/2 a Web page that consists of one video clip, and four images. Suppose that the video clip is transported as 2000 frames, and each image has three frames. If frames are interleaved, how many frame times are needed until all five images are sent.

- a. 18 Frame
- b. 15 Frames
- c. None
- d. 5 Frames
- e. 2016 Frame
- f. 2015 Frame

The correct answers are: 18 Frame, 15 Frames

Question 15

Complete

Mark 0.00 out of 1.00

Two distinct Web pages (for example, www.birzeit.edu/research.html and www.birzeit.edu/students.html) can be sent over the same persistent connection.

- a. True
- b. False

The correct answer is: True

◀ Announcements

Jump to...

Project1 ▶

[Data retention summary](#)

[Dashboard](#) / [My courses](#) / [COMPUTER NETWORKS-Lecture-1202 - ENCS3320 - Meta](#) / [General](#) / [Quiz#2](#)

Started on	Tuesday, 4 May 2021, 4:10 PM
State	Finished
Completed on	Tuesday, 4 May 2021, 4:33 PM
Time taken	23 mins 19 secs
Marks	10.67/14.00
Grade	7.62 out of 10.00 (76%)

Question 1

Complete

Mark 1.00 out of 1.00

Suppose that a Web server runs in Host C on port 80. Suppose this Web server uses persistent connections, and is currently receiving requests from two different Hosts, A and B.

All of the requests being sent through the same socket at Host C?

- a. True
- b. False

The correct answer is: False

Question 2

Complete

Mark 0.00 out of 1.00

Suppose Host A is sending Host B a large file over a TCP connection. The number of unacknowledged bytes that A sends cannot exceed the size of the receive buffer.

- a. False
- b. True

The correct answer is: True

Question 3

Complete

Mark 1.00 out of 1.00

One of the followings is not a service of Transport layer

- a. Port multiplexing
- b. Reliability
- c. Routing
- d. Flow control

The correct answer is: Routing

Question 4

Complete

Mark 1.00 out of 1.00

Host A is sending Host B a large file over a TCP connection. Assume Host B has no data to send Host A. Host B will not send acknowledgments to Host A because Host B cannot piggyback the acknowledgments on data.

- a. False
- b. True

The correct answer is: False

Question 5

Complete

Mark 1.00 out of 1.00

Consider Go-Back-N with window size 4, if packet#1 is lost and all other packets and ACKs are received correctly. which packets should be resend?

- a. no packets will be resent.
- b. none.
- c. Only packet#2 will be resent.
- d. packet#1 and all packets after packet#1 within the window will be resent.

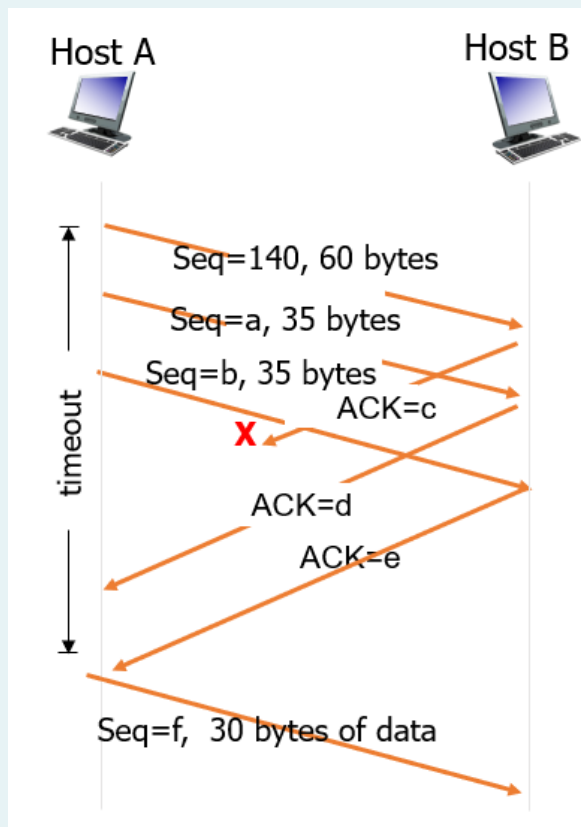
The correct answer is: packet#1 and all packets after packet#1 within the window will be resent.

Question 6

Complete

Mark 0.67 out of 1.00

Consider the TCP connection in the figure.



what is the value of f?

140



what is the value of d?

235



what is the value of a?

200



The correct answer is:

what is the value of f? → 270,

what is the value of d? → 235,

what is the value of a? → 200

Question 7

Complete

Mark 0.00 out of 1.00

consider a shared link and TCP, it is possible to get more bandwidth, if a browser opens several parallel connections.

- a. False
- b. True

The correct answer is: True

Question 8

Complete

Mark 1.00 out of 1.00

Consider SR protocol with 10 sequence number, the largest window size should not exceed

- a. 512
- b. 2
- c. 1023
- d. 1
- e. 1024
- f. None

The correct answers are: 512, 2, None

Question 9

Complete

Mark 1.00 out of 1.00

Suppose Host A sends two TCP segments back to back to Host B over a TCP connection. The first segment has sequence number 50; the second has sequence number 90. How much data is in the first segment?

- a. 50
- b. 90
- c. 10
- d. None
- e. 1
- f. 40

The correct answer is: 40

Question 10

Complete

Mark 1.00 out of 1.00

QUIC protocol tries to reduce the required RTTs.

- a. True
 b. False

The correct answer is: True

Question 11

Complete

Mark 1.00 out of 1.00

Suppose that the last SampleRTT in a TCP connection is equal to 1 sec. The current value of TimeoutInterval for the connection will necessarily be > 1 sec.

- a. False
 b. True

The correct answer is: False

Question 12

Complete

Mark 1.00 out of 1.00

The size of the TCP rwnd never changes throughout the duration of the connection.

- a. True
 b. False

The correct answer is: False

Question 13

Complete

Mark 1.00 out of 1.00

Suppose a process in Host C has a UDP socket with port number 6789. Suppose both Host A and Host B each send a UDP segment to Host C with destination port number 6789.

Both of these segments be directed to the same socket at Host C?

- a. True
- b. False

The correct answer is: True

Question 14

Complete

Mark 0.00 out of 1.00

Suppose Host A sends two TCP segments back to back to Host B over a TCP connection. The first segment has sequence number 50; the second has sequence number 90. Suppose that the first segment is lost but the second segment arrives at B. In the acknowledgment that Host B sends to Host A, what will be the acknowledgment number?

- a. None
- b. 40
- c. 50
- d. 90
- e. 10
- f. 1

The correct answer is: 50

◀ Project1

Jump to...

Quiz3 ▶

[Data retention summary](#)

[Dashboard](#) / [My courses](#) / [COMPUTER NETWORKS-Lecture-1202 - ENCS3320 - Meta](#) / [General](#) / [Quiz3](#)

Started on Tuesday, 25 May 2021, 4:16 PM

State Finished

Completed on Tuesday, 25 May 2021, 4:45 PM

Time taken 28 mins 45 secs

Grade 14.00 out of 20.00 (70%)

Question 1

Complete

Mark 1.50 out of 2.00

What advantages and disadvantages does Crossbar switching fabric has over Bus switching fabric?

The Advantages:
It solves the bottleneck limitation by increasing the number of buses (exploiting parallelism),

Question 2

Complete

Mark 1.50 out of 2.00

What is Generalized forwarding and how it is useful?

Each router contains a flow table to calculate where every input must go for any output port (match) and choose

Question 3

Complete

Mark 2.00 out of 2.00

Briefly explain how NAT works (1 point) and what is the purpose of it (1 point)?

It converts the local address to global one and vice versa (helps IPv4 address space exhaustion).

It provides more addresses.

Question 4

Complete

Mark 0.00 out of 1.00

What is routing and what is forwarding?

Routing

Forwarding

The correct answer is:

Routing → Is when routers work together to build up their routing tables,

Forwarding → Is when a router decides the direction in which a packet is redirected based on the routing table

Question 5

Complete

Mark 2.00 out of 3.00

For a host with IP address 206.12.55.30/23, what is the network IP address, what is the host portion of the address, and what is the broadcast address?

In binary numbers, what is the host portion of the address

what is the network IP address?

what is the broadcast address?

The correct answer is:

In binary numbers, what is the host portion of the address → xxxxxxxx.xxxxxxxx.xxxxxxx1.00011110,

what is the network IP address? → 206.12.54.0,

what is the broadcast address? → 206.12.55.255

Question 6

Complete

Mark 1.00 out of 1.00

Link the network layers with name given to its packets

Transport layer

Network layer

The correct answer is:

Transport layer → Segment,

Network layer → Datagram

Question 7

Complete

Mark 2.00 out of 2.00

Assume a host sends 40 bytes of data encapsulated in a TCP/IP packet, what percentage of the datagram will be overhead?

- a. 33%
- b. 25%
- c. 10%
- d. 50%

The correct answer is: 50%

Question 8

Complete

Mark 2.00 out of 2.00

For a host with IP address 206.12.55.30/23, would it need a router in order to communicate with host 206.12.54.40/23?

- a. Yes
- b. No

The correct answer is: No

Question 9

Complete

Mark 0.00 out of 1.00

If a router has 4 different ports, how many input and output queues should it have?

- a. 8
- b. 1
- c. 4
- d. 2

The correct answer is: 8

Question 10

Complete

Mark 0.00 out of 1.00

If you knew that a particular Network Interface Card (NIC) requires an IP address, what does that tell you about the NIC?

- a. It must have a Physical Layer
- b. It must have a Data Link Layer
- c. It must have a Network Layer
- d. It must have a Transport Layer

The correct answers are:

It must have a Physical Layer,

It must have a Network Layer,

It must have a Data Link Layer

Question 11

Complete

Mark 1.00 out of 1.00

What field in the IP header can be used to ensure that a packet is forwarded through no more than N routers?

- a. Fragment offset
- b. Ver
- c. Time to Live
- d. Length
- e. Header checksum

The correct answer is: Time to Live

Question 12

Complete

Mark 0.00 out of 1.00

What is the Network Layer's forwarding decision based on?

- a. Based on MAC address and IP prefix match
- b. Based on the IP address and Port number
- c. It is flexible, could be MAC address, IP, or Port number
- d. Based on the longest IP prefix match

The correct answer is: Based on the longest IP prefix match

Question 13

Complete

Mark 1.00 out of 1.00

When does HOL occur?

- a. When two packets arrive at the same input port, later one is HOled
- b. When two packets coming from different input are bound to the same output port
- c. When two packets arrive at different input ports and bounded to different output ports
- d. When two packets arrive at the same input port at the same time

The correct answers are: When two packets coming from different input are bound to the same output port, When two packets arrive at the same input port at the same time, When two packets arrive at the same input port, later one is HOled, When two packets arrive at different input ports and bounded to different output ports

[◀ Quiz#2](#)Jump to... [Project2 ▶](#)[Data retention summary](#)