Started on	Saturday, 2 November 2024, 6:19 PM
State	Finished
Completed on	Saturday, 2 November 2024, 6:23 PM
Time taken	4 mins 25 secs
Marks	22.00/25.00
Grade	**88.00** out of 100.00

Question **1**

Incorrect

Mark 0.00 out of 1.00

The most common binary data encoding on the Internet – at least below the application layer – is big-endian encoding.

Select one:

○ True

◉ False ✖

Question **2**

Correct

Mark 1.00 out of 1.00

What is the purpose of the preamble in an Ethernet frame?

Select one:

○ a. It is used as a pad for data

○ b. It identifies the source address

○ c. It marks the end of timing information

◉ d. It is used for timing synchronization with alternating patterns of ones and zeros ✔

○ e. It identifies the destination address

Your answer is correct.

Question 3

Correct

Mark 1.00 out of 1.00

Wi-Fi designers can improve throughput through a variety of techniques, including:

Select one:

- a.   Improved radio modulation techniques
- b.   Improved error-correcting codes
- c.   Increasing the channel width
- d.   Allowing multiple spatial streams via multiple antennas
- e.   All of the above ✔

Your answer is correct.

Question 4

Correct

Mark 1.00 out of 1.00

What version of IP is the most common in the world?

Select one:

- a.   IPv3
- b.   IPng
- c.   IPv5
- d.   IPv6
- e.   IPv4 ✔

Your answer is correct.

Question 5

Correct

Mark 1.00 out of 1.00

Which is an important characteristic of UDP?

Select one:

- ○ a.   acknowledgement of data delivery
- ● b.   minimal delays in data delivery ✔
- ○ c.   high reliability of data delivery
- ○ d.   same order data delivery
- ○ e.   flow control

Your answer is correct.

Question 6

Correct

Mark 1.00 out of 1.00

No matter the available bandwidth, every TCP connection must go through the slow-start phase.

Select one:

- ● True ✔
- ○ False

Question 7

Correct

Mark 1.00 out of 1.00

In a baseband transmission, the entire bandwidth of the cable is consumed by a single signal. In broadband transmission, signals are sent on multiple frequencies, allowing multiple signals to be sent simultaneously.

Select one:

- ● True ✔
- ○ False

Question 8

Correct

Mark 1.00 out of 1.00

ARP-cache entries eventually expire and the timeout interval is on the order of:

Select one:

- ○ a. 1 day
- ○ b. 1 hour
- ○ c. a few seconds
- ● d. from half a minute to a few minutes ✔

Your answer is correct.

Question 9

Correct

Mark 1.00 out of 1.00

The TCP Persist Timer is used to poll when the window size is zero. This timer is used by:

Select one:

- ● a. the sender side ✔
- ○ b. the receiver side
- ○ c. both the sender and the receiver sides
- ○ d. the socket owner application

Your answer is correct.

Question 10

Correct

Mark 1.00 out of 1.00

The Routing Information Protocol (RIP) is an intra-domain routing protocol based on _____ routing

Select one:

- ● a. distance vector ✔
- ○ b. link state
- ○ c. path vector
- ○ d. OSPF
- ○ e. path state

Your answer is correct.

Question 11

Correct

Mark 1.00 out of 1.00

What is the primary reason for the development of IPv6?

Select one:

- a.   security
- b.   header format specification
- c.   expanded addressing capabilities ✔
- d.   addressing simplifications

Your answer is correct.

Question 12

Incorrect

Mark 0.00 out of 1.00

Which HTTP header is used by the server to inform the client about **how** it agrees to use the persistent connection?

Select one:

- a.   Cache-Control
- b.   Connection ✖
- c.   Keep-Alive
- d.   Content-Length

Your answer is incorrect.

Question 13

Correct

Mark 1.00 out of 1.00

Switches are used to connect distant LANs whereas a Router is most often used to connect individual computers.

Select one:

- ○ True
- ● False ✔

Question 14

Correct

Mark 1.00 out of 1.00

Internet Service Providers (ISPs) always connect to one another directly via high-speed links.

Select one:

○ True

◉ False ✔

Question 15

Correct

Mark 1.00 out of 1.00

The degeneration of a signal over distance on a network cable is called attenuation.

Select one:

◉ True ✔

○ False

Question 16

Correct

Mark 1.00 out of 1.00

The Internet Checksum is usually better than CRC at detecting transposition errors.

Select one:

○ True

◉ False ✔

Question 17

Correct

Mark 1.00 out of 1.00

WEP Wi-Fi encryption is still considered very strong nowadays.

Select one:

○ True

◉ False ✔

Question 18

Correct

Mark 1.00 out of 1.00

If the IPv4 "Don't Fragment" (DF header flag) is set to 1 by the sender, then a router must not fragment the packet and must _____ instead.

Select one:

- a. forward it unchanged
- b. return it to sender
- c. truncate it
- d. drop it ✔

Your answer is correct.

Question 19

Correct

Mark 1.00 out of 1.00

UDP ports are considered a shared namespace with TCP ports. Therefore, 2 processes cannot share the same port number even if one process is using UDP and the other is using TCP.

Select one:

- True
- False ✔

Question 20

Correct

Mark 1.00 out of 1.00

Fast Ethernet introduced the concept of full-duplex Ethernet which is entirely collision-free.

Select one:

- True ✔
- False

Question 21

Correct

Mark 1.00 out of 1.00

The Border Gateway Protocol's primary goal is to provide support for choosing routes based on:

Select one:

- ○ a. fastest link available
- ○ b. link reliability
- ● c. administrative input ✔
- ○ d. lowest cost links

Your answer is correct.

Question 22

Incorrect

Mark 0.00 out of 1.00

What OSI layer identifies the communicating applications?

Select one:

- ○ a. Layer 1
- ○ b. Layer 2
- ○ c. Layer 3
- ○ d. Layer 4
- ● e. Layer 5 ✖

Your answer is incorrect.

Question 23

Correct

Mark 1.00 out of 1.00

What is a possible effect of improperly applying a connector to a network cable?

Select one:

- ○ a. Data will be forwarded to the wrong node.
- ○ b. An improper signaling method will be implemented for data transmitted on that cable.
- ● c. Data transmitted through that cable may experience signal loss. ✔
- ○ d. Data bits will get inverted.

Your answer is correct.

Question 24

Correct

Mark 1.00 out of 1.00

ATM Adaptation Layer AAL 5 uses a CRC-32 checksum and is able to detect lost ATM cells.

Select one:

⦿ True ✔

◯ False

Question 25

Correct

Mark 1.00 out of 1.00

Manchester encoding is principally designed to

Select one:

⦿ a.   Ensure that a transition occurs in the centre of each bit period ✔

◯ b.   Increase the bandwidth of a signal transmitted on the medium

◯ c.   Have more than one symbol per bit period

◯ d.   Ensure that the line remains balanced