Question 1

Not yet answered

Marked out of 1.00

All Ethernet devices also agree on a broadcast address of all 1's: a packet sent to the broadcast address will be delivered to all attached hosts.

Select one:

○ True

○ False

Question 2

Not yet answered

Marked out of 1.00

In bridged LANs, the _____ algorithm creates a topology in which each LAN can be reached from any other LAN through one path only.

Select one:

○ a.   binary tree

○ b.   unary tree

○ c.   routing

○ d.   shortest path

○ e.   spanning tree

Question 3

Not yet answered

Marked out of 1.00

Bandwidth delay is more significant than propagation delay within a small LAN.

Select one:

○ True

○ False

Question 4

Not yet answered

Marked out of 1.00

What is the fundamental alternative to datagram stateless forwarding?

Select one:

- ○ a.   Packet switching
- ○ b.   Routing
- ○ c.   Flooding
- ○ d.   Virtual circuits

Question 5

Not yet answered

Marked out of 1.00

The Wi-Fi 5 GHz band (vs. 2.4 GHz) has increased ability to penetrate walls, often resulting in a higher effective range.

Select one:

○ True

○ False

Question 6

Not yet answered

Marked out of 1.00

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

Select one:

○ True

○ False

Question 7

Not yet answered

Marked out of 1.00

Gigabit Ethernet 1000Base-T uses the following encoding:

Select one:

- ○ a.   Manchester
- ○ b.   AMI
- ○ c.   4B/5B
- ○ d.   PAM-5

Question 8

Not yet answered

Marked out of 1.00

What characteristic of UTP cable helps reduce the effects of interference?

Select one:

○ a.   the metal braiding in the shielding

○ b.   the reflective cladding around core

○ c.   the twisting of the wires in the cable

○ d.   the insulating material in the outer jacket

○ e.   the type of metal used for the wires

Question 9

Not yet answered

Marked out of 1.00

The reverse address resolution protocol (RARP) allows a host to discover its Internet address when it knows only its physical address.

Select one:

○ True

○ False

Question 10

Not yet answered

Marked out of 1.00

Which of the following is a characteristic of single-mode fiber-optic cable?

Select one:

○ a.   generally uses LEDs as the light source

○ b.   no longer in use

○ c.   uses relatively larger core with multiple light paths

○ d.   is cheaper than multi-mode fiber

○ e.   generally uses semiconductor lasers as the light source

Question 11

Not yet answered

Marked out of 1.00

At the LAN layer, traffic-engineering mechanisms are historically/generally limited.

Select one:

○ True

○ False

Question 12

Not yet answered

Marked 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 13

Not yet answered

Marked out of 1.00

A network cable lies in the _____ layer.

Select one:

○ a.   Network

○ b.   Transport

○ c.   Data Link

○ d.   MAC

○ e.   Physical

Question 14

Not yet answered

Marked out of 1.00

All else being equal, the data rate achievable with a radio signal is proportional to:

Select one:

○ a.   the signal power

○ b.   the distance to the receiver

○ c.   the width of the frequency band

○ d.   the number of sub-channels

Question 15

Not yet answered

Marked 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 **16**

Not yet answered

Marked out of 1.00

Ethernet switches have incorporated a switch-to-switch protocol to construct a subset of the switch-connections graph that has no loops and yet allows reachability of every host. This protocol is called:

Select one:

○ a.   Ethernet Learning Algorithm

○ b.   Multicast

○ c.   Spanning Tree

○ d.   VLAN protocol

Question **17**

Not yet answered

Marked 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

Question **18**

Not yet answered

Marked out of 1.00

What are the frequency bands used by Wi-Fi 802.11n
?

Select one:

○ a.   5 GHz exclusively

○ b.   2.4 GHz exclusively

○ c.   2.4 GHz and 5 GHz

○ d.   None of the above

Question 19

Not yet answered

Marked out of 1.00

Which of the following is not a key element of a protocol

Select one:

○ a.   Syntax

○ b.   Entities

○ c.   Semantics

○ d.   Timing

Question 20

Not yet answered

Marked 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.