

1

Which IEEE specification defines Wi-Fi technology?

- ☐ 802.3
 - ☐ 802.5
 - ☐ 802.7
 - ☒ 802.11
 - ☐ 802.13
 - ☐ 802.15
-

2

What is true regarding media access control? (Choose three.)

- ☒ Ethernet utilizes CSMA/CD
 - ☒ defined as placement of data frames on the media
 - ☐ contention-based access is also known as deterministic
 - ☐ 802.11 utilizes CSMA/CD
 - ☒ Data Link layer protocols define the rules for access to different media
 - ☐ controlled access contains data collisions
-

3

Which characteristics describe carrier sense multiple access collision detect (CSMA/CD)? (Choose three.)

- ☐ reliable
 - ☐ point-to-point
 - ☒ nondeterministic
 - ☐ connection-oriented
 - ☒ collision environment
 - ☒ first-come, first-served approach
-

4

Which options are properties of contention-based media access for a shared media? (Choose three.)

- ☒ non-deterministic
 - ☒ less overhead
 - ☐ one station transmits at a time
 - ☒ collisions exist
 - ☐ devices must wait their turn
 - ☐ token passing
-

5

What determines the method of media access control? (Choose two.)

- ☐ network layer addressing
- ☒ media sharing
- ☐ application processes
- ☒ logical topology
- ☐ intermediary device function

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What is true concerning physical and logical topologies?

- ☐ The logical topology is always the same as the physical topology.
- ☐ Physical topologies are concerned with how a network transfers frames.
- ☐ Physical signal paths are defined by Data Link layer protocols.
- ☒ Logical topologies consist of virtual connections between nodes.

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Which of the following are sublayers of the Data Link layer?

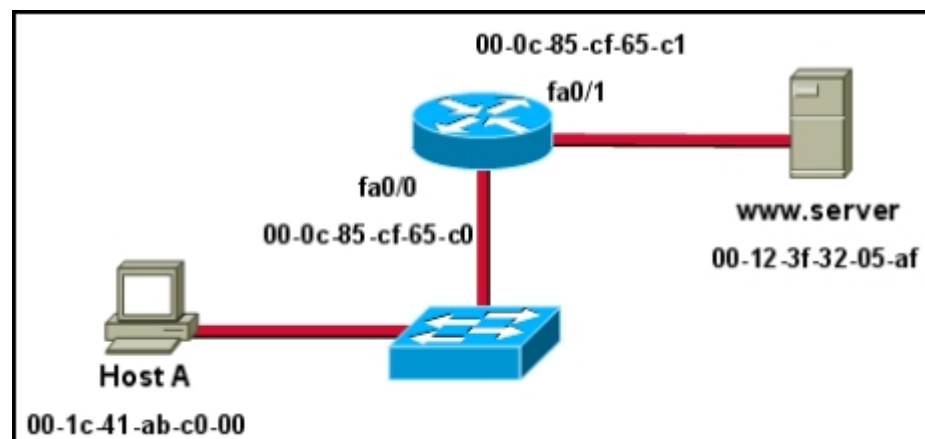
- ☐ ACL, LMC
- ☐ MAC, LAC
- ☒ MAC, LLC
- ☐ OSI, LLC

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Which features describe the concept of Carrier Sense Multiple Access with Collision Detection? (Choose two.)

- ☐ collisionless environment
- ☒ non-deterministic
- ☐ deterministic
- ☒ uses first-come, first-served approach
- ☐ uses a token to transmit data

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Refer to the exhibit. Assuming that the network in the exhibit is converged meaning the routing tables and ARP tables are complete, which MAC address will Host A place in the destination address field of Ethernet frames destined for www.server?

- ☐ 00-1c-41-ab-c0-00
- ☒ 00-0c-85-cf-65-c0
- ☐ 00-0c-85-cf-65-c1
- ☐ 00-12-3f-32-05-af

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

- ☐ is used as a pad for data
 - ☐ identifies the source address
 - ☐ identifies the destination address
 - ☐ marks the end of timing information
 - ☒ is used for timing synchronization with alternating patterns of ones and zeros
-

11

What are three characteristics of valid Ethernet Layer 2 addresses? (Choose three.)

- ☒ They are 48 binary bits in length.
 - ☐ They consist of four eight-bit octets of binary numbers.
 - ☒ They are generally represented in hexadecimal format.
 - ☐ They are represented as decimal values for convenience.
 - ☐ They must be changed when an Ethernet device is added or moved within the network.
 - ☒ They are considered physical addresses.
-

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A network administrator has been asked to provide a graphic representation of exactly where the company network wiring and equipment are located in the building. What is this type of drawing?

- ☐ logical topology
 - ☒ physical topology
 - ☐ cable path
 - ☐ wiring grid
 - ☐ access topology
-

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Which three factors should be considered when implementing a Layer 2 protocol in a network? (Choose three.)

- ☐ the Layer 3 protocol selected
 - ☒ the geographic scope of the network
 - ☐ the PDU defined by the transport layer
 - ☒ the physical layer implementation
 - ☒ the number of hosts to be interconnected
-

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Which three session options does PPP offer? (Choose three.)

- ☒ multilink
 - ☐ multipoint connectivity
 - ☒ compression
 - ☐ error checking
 - ☒ authentication
 - ☐ fastlink
-

15

Which statements describe the logical token-passing topology? (Choose two.)

- ☐ Network usage is on a first come, first serve basis.
 - ☒ Computers are allowed to transmit data only when they possess a token.
 - ☐ Data from a host is received by all other hosts.
 - ☒ Electronic tokens are passed sequentially to each other.
 - ☐ Token passing networks have problems with high collision rates.
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