

1. Host device sends a data packet to a web server via the HTTP protocol. What is used by the network layer to pass the data stream to the proper application on the server?

- sequence number
- acknowledgment
- source ip address
- destination ip address

2. Which transport layer feature is used to guarantee session establishment?

- UDP ACK flag
- TCP 3-way handshake
- UDP sequence number
- TCP port numbe

3. During a TCP session, a destination device sends an acknowledgment number to the source device. What does the acknowledgment number represent?

- the total number of bytes that have been received
- one number more than the sequence number
- the last sequence number that was sent by the source
- the following byte that the destination expects to receive

4. Which three TCP header fields are not used to confirm receipt of data? (choose three)

- FIN flag
- SYN flag
- checksum
- sequence number
- acknowledgment number

5. What does a client do when it has UDP datagrams to send?

- It queries the server to see if it is ready to receive data.
- It sends a simplified three-way handshake to the server.
- It sends to the server a segment with the SYN flag set to synchronize the conversation.
- It just sends the datagrams.

6. What does a client application select for a TCP or UDP source port number?

- a random value in the well-known port range
- a random value in the range of the registered ports
- a predefined value in the well-known port range
- a predefined value in the range of the registered ports

7. What are two features of ARP? (Choose two.)

- If a host is ready to send a packet to a local destination device and it has the IP address but not the MAC address of the destination, it generates an ARP broadcast.
- An ARP request is sent to all devices on the Ethernet LAN and contains the IP address of the destination host and its multicast MAC address.
- When a host is encapsulating a packet into a frame, it refers to the MAC address table to determine the mapping of IP addresses to MAC addresses.
- If no device responds to the ARP request, then the originating node will broadcast the data packet to all devices on the network segment.
- If a device receiving an ARP request has the destination IPv4 address, it responds with an ARP reply.

8. What are two potential network problems that can result from ARP operation? (Choose two.)

- Manually configuring static ARP associations could facilitate ARP poisoning or MAC address spoofing.
- On large networks with low bandwidth, multiple ARP broadcasts could cause data communication delays.
- Network attackers could manipulate MAC address and IP address mappings in ARP messages with the intent of intercepting network traffic.
- Large numbers of ARP request broadcasts could cause the host MAC address table to overflow and prevent the host from communicating on the network.
- Multiple ARP replies result in the switch MAC address table containing entries that match the MAC addresses of hosts that are connected to the relevant switch port

9. When would a switch record multiple entries for a single switch port in its MAC address table?

- when a router is connected to the switch port
- when multiple ARP broadcasts have been forwarded
- when another switch is connected to the switch port
- when the switch is configured for Layer 3 switching

10. A network administrator issues the following commands on a Layer 3 switch:

```
DLS1(config)# interface f0/3
DLS1(config-if)# no switchport
DLS1(config-if)# ip address 172.16.0.1 255.255.255.0
DLS1(config-if)# no shutdown
DLS1(config-if)# end
```

What is the administrator configuring?

- a routed port
- a switched virtual interface
- a Cisco Express Forwarding instance
- a trunk interface

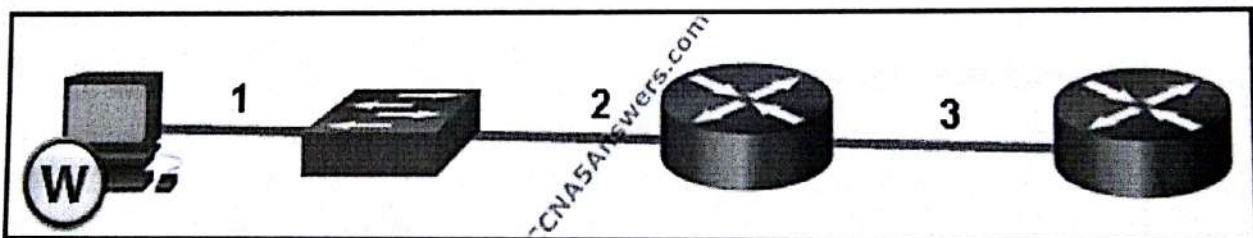
11. What statement illustrates a drawback of the CSMA/CD access method?

- Deterministic media access protocols slow network performance.
- It is more complex than non-deterministic protocols.
- Collisions can decrease network performance.
- CSMA/CD LAN technologies are only available at slower speeds than other LAN technologies.

12. Which layer of the OSI model is responsible for specifying the encapsulation method used for specific types of media?

- application
- transport
- data link
- physical

13. Refer to the exhibit. The PC is connected to the console port of the switch. All the other connections are made through FastEthernet links. Which types of UTP cables can be used to connect the devices??



- 1 – rollover, 2 – crossover, 3 – straight-through
- 1 – rollover, 2 – straight-through, 3 – crossover
- 1 – crossover, 2 – straight-through, 3 – rollover
- 1 – crossover, 2 – rollover, 3 – straight-through

14. What are three incorrect statement of using fiber optic cabling rather than copper cabling?(choose three

- It is usually cheaper than copper cabling.
- It is able to be installed around sharp bends.
- It is easier to terminate and install than copper cabling.
- It is able to carry signals much farther than copper cabling.

15. What is the purpose of the FCS field in a frame?

- to obtain the MAC address of the sending node
- to verify the logical address of the sending node
- to compute the CRC header for the data field
- to determine if errors occurred in the transmission and reception

16. After making configuration changes, a network administrator issues a copy running-config startup-config command in a Cisco switch. What is the result of issuing this command?

- The new configuration will be stored in flash memory.
- The current IOS file will be replaced with the newly configured file.
- The new configuration will be stored in NVRAM.
- The configuration changes will be removed and the original configuration will be restored.

17. Which address on a PC does not change, even if the PC is moved to a different network?

- IP address
- default gateway address
- MAC address
- logical address

18. What will happen if the default gateway address is correctly configured on a host?

- The host cannot communicate with other hosts in the local network.
- The switch will not forward packets initiated by the host.
- The host will have to use ARP to determine the correct address of the default gateway.
- The host cannot communicate with hosts in other networks.
- A ping from the host to 127.0.0.1 would not be successful.
- The host can communicate with hosts in other networks.

19. What is contained in the trailer of a data-link frame?

- logical address
- physical address
- data
- error detection

20. Which address on a PC that can be changed, even if the PC is moved to a different network?

- IP address
- default gateway address
- MAC address
- logical address