

Digital Apprenticeship Program



Networks

Q1.) Which of the following is true when describing a unicast address?

- A. Packets addressed to a unicast address are delivered to a single interface.
- B. These are your typical publicly routable addresses, just like a regular publicly routable address in IPv4.
- C. These are like private addresses in IPv4 in that they are not meant to be routed.
- D. These addresses are meant for non routing purposes, but they are almost globally unique so it is unlikely they will have an address overlap.

Q2.) Which of the following describes an industry-wide standard suite of protocols and algorithms that allows for secure data transmission over an IP-based network that functions at the layer 3 Network layer of the OSI model?

- A. HDLC
- B. Cable
- C. VPN
- D. IPSec

Q3.) A default Frame Relay WAN is classified as what type of physical network?

- A. Point-to-point
- B. Broadcast multi-access
- C. Non-broadcast multi-access
- D. Non-broadcast multipoint

Q4.) Which of the following statements are true regarding the command <span

class="command">ip route 172.16.4.0 255.255.255.0 192.168.4.2?

1. The command is used to establish a static route.
2. The default administrative distance is used.
3. The command is used to configure the default route.
4. The subnet mask for the source address is 255.255.255.0.

- A. 1 and 2
- B. 2 and 4
- C. 3 and 4
- D. All of the above

Q5.) Which switching technology reduces the size of a broadcast domain??

- A. ISL
- B. 802.1Q
- C. VLANs
- D. STP

Q6.) When a new trunk link is configured on an IOS-based switch, which VLANs are allowed over the link?

- A. By default, all VLANs are allowed on the trunk.
- B. No VLAN's are allowed, you must configure each VLAN by hand.
- C. Only configured VLAN's are allowed on the link.
- D. Only extended VLAN's are allowed by default.

Q7.)What is the frequency range of the IEEE 802.11a standard?.

- A. 2.4Gbps
- B. 5Gbps
- C. 2.4GHz
- D. 5GHz

Q8.) In Cisco's Unified Wireless Solution, what is the split-MAC architecture?

- A. The split-MAC architecture uses MAC addresses to create a forward/filter table and break up collision domains.
- B. The split-MAC architecture allows the splitting of 802.11 protocol packets between the AP and the controller to allow processing by both devices.
- C. The split-MAC architecture uses MAC addresses on the wireless network and IP addresses on the wired network.
- D. The split-MAC architecture uses MAC addresses to create a forward/filter table and break up broadcast domains.

Q9.) You telnet into a remote device and type `debug ip rip`, but no output from the `debug` command is seen. What could the problem be?

- A. You must type the `show ip rip` command first.
- B. IP addressing on the network is incorrect.
- C. You must use the `terminal monitor` command.
- D. Debug output is sent only to the console.

Q10.) Routers operate at layer _____. LAN switches operate at layer _____. Ethernet hubs operate at layer _____. Word processing operates at layer _____.

- A. 3, 3, 1, 7
- B. 3, 2, 1, none
- C. 3, 2, 1, 7
- D. 3, 3, 2, none

Q11.) A receiving host has failed to receive all of the segments that it should acknowledge. What can the host do to improve the reliability of this communication session?

- A. Send a different source port number.
- B. Restart the virtual circuit.
- C. Decrease the sequence number.
- D. Decrease the window size.

Q.12) What command do you type to save the configuration stored in RAM to NVRAM?

- A. Router(config)#copy current to starting
- B. Router#copy starting to running
- C. Router(config)#copy running-config startup-config
- D. Router#copy run startup

Q13.) Which of the following access lists will allow only HTTP traffic into network 196.15.7.0?

- A. Router(config)#copy current to starting
- B. Router#copy starting to running
- C. Router(config)#copy running-config startup-config
- D. Router#copy run startup
- E. access-list 110 permit www 196.15.7.0 0.0.0.255

Q14.) You want to create a standard access list that denies the subnet of the following host: 172.16.198.94/19. Which of the following would you start your list with?

- A. access-list 10 deny 172.16.192.0 0.0.31.255
- B. access-list 10 deny 172.16.0.0 0.0.255.255
- C. access-list 10 deny 172.16.172.0 0.0.31.255
- D. access-list 10 deny 172.16.188.0 0.0.15.255

Q15.) A network administrator is connecting hosts A and B directly through their Ethernet interfaces, as shown in the illustration. Ping attempts between the hosts are unsuccessful. What can be done to provide connectivity between the hosts?

1. A crossover cable should be used in place of the straight-through cable.
2. A rollover cable should be used in place of the straight-through cable.
3. The subnet masks should be set to 255.255.255.192.
4. A default gateway needs to be set on each host.
5. The subnet masks should be set to 255.255.255.0.

- A. 1 only
- B. 2 only
- C. 3 and 4 only
- D. 1 and 5 only
- E. 2 and 5 only

Q16.) What protocol is used to find the hardware address of a local device?

- A. RARP
- B. ARP
- C. IP
- D. ICMP

Q17.) If you use either Telnet or FTP, which is the highest layer you are using to transmit data?

- A. Application
- B. Presentation
- C. Session
- D. Transport

Q18.) Which are considered the methods of NAT?

- 1. Static
- 2. IP NAT pool
- 3. Dynamic
- 4. NAT double-translation
- 5. Overload

- A. 1 and 6
- B. 3 only
- C. 1, 3 and 5
- D. All of the above

Q19.) What does a VLAN do?

- A. Acts as the fastest port to all servers.
- B. Provides multiple collision domains on one switch port.
- C. Breaks up broadcast domains in a layer 2 switch internetwork.
- D. Provides multiple broadcast domains within a single collision domain.

Q20.) What is a stub network?

- A. A network with more than one exit point.
- B. A network with more than one exit and entry point.
- C. A network with only one entry and no exit point.
- D. A network that has only one entry and exit point.