Exam Questions 200-301

Cisco Certified Network Associate

https://www.2passeasy.com/dumps/200-301/

NEW QUESTION 1

- (Topic 3)

What are two benefits of FHRPs? (Choose two.)

A. They enable automatic failover of the default gateway.
B. They allow multiple devices to serve as a single virtual gateway for clients in the network.
C. They are able to bundle multiple ports to increase bandwidth.
D. They prevent loops in the Layer 2 network.
E. They allow encrypted traffic.

Answer: AB

NEW QUESTION 2

- (Topic 3)

What causes a port to be placed in the err-disabled state?

A. nothing plugged into the port
B. link flapping
C. shutdown command issued on the port
D. latency

Answer: B

NEW QUESTION 3

- (Topic 3)

What is a function of Opportunistic Wireless Encryption in an environment?

A. offer compression
B. increase security by using a WEP connection
C. provide authentication
D. protect traffic on open networks

Answer: D

NEW QUESTION 4

- (Topic 3)

Which Layer 2 switch function encapsulates packets for different VLANs so that the packets traverse the same port and maintain traffic separation between the VLANs?

A. VLAN numbering
B. VLAN DSCP
C. VLAN tagging
D. VLAN marking

Answer: C

NEW QUESTION 5

- (Topic 3)

R1 as an NTP server must have:
• NTP authentication enabled
• NTP packets sourced from Interface loopback 0
• NTP stratum 2
• NTP packets only permitted to client IP 209.165 200 225

How should R1 be configured?

A)

```
ntp authenticate
ntp authentication-key 2 md5 CISCO123
ntp source Loopback0
nntp access-group server-only 10
ntp master 2
!
access-list 10 permit 209.165.200.225
```

B)

```
ntp authenticate
ntp authentication-key 2 md5 CISCO123
ntp source Loopback0
ntp access-group server-only 10
ntp stratum 2
!
access-list 10 permit udp host 209.165.200.225 any eq 123
```

C)

```
ntp authenticate
ntp authentication-key 2 sha1 CISCO123
ntp source Loopback0
ntp access-group server-only 10
ntp master 2
!
access-list 10 permit udp host 209.165.200.225 any eq 123

D)
ntp authenticate
ntp authentication-key 2 md5 CISCO123
ntp interface Loopback0
ntp access-group server-only 10
```
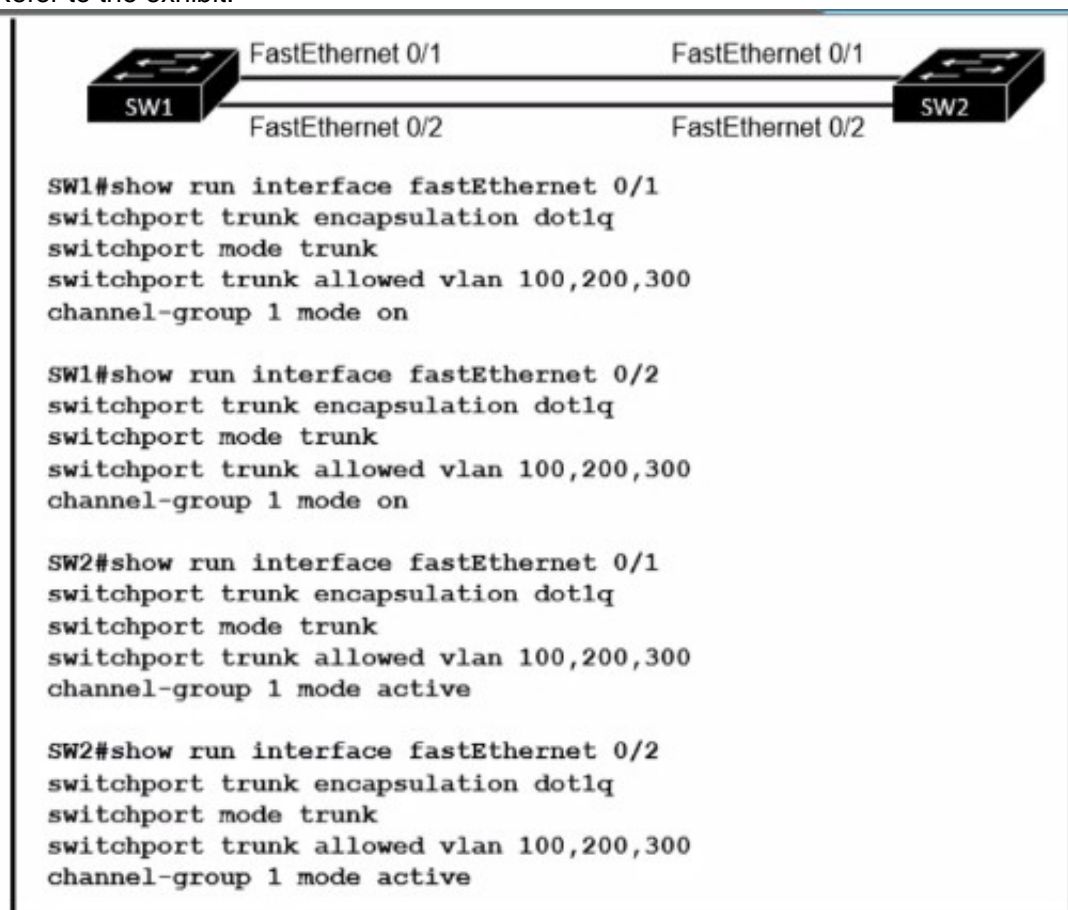
A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

NEW QUESTION 6
- (Topic 3)
Refer to the exhibit.


```
            FastEthernet 0/1          FastEthernet 0/1
   SW1                                                  SW2
            FastEthernet 0/2          FastEthernet 0/2

SW1#show run interface fastEthernet 0/1
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 100,200,300
channel-group 1 mode on

SW1#show run interface fastEthernet 0/2
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 100,200,300
channel-group 1 mode on

SW2#show run interface fastEthernet 0/1
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 100,200,300
channel-group 1 mode active

SW2#show run interface fastEthernet 0/2
switchport trunk encapsulation dot1q
switchport mode trunk
switchport trunk allowed vlan 100,200,300
channel-group 1 mode active
```

An engineer built a new L2 LACP EtherChannel between SW1 and SW2 and executed these show commands to verify the work. Which additional task allows the two switches to establish an LACP port channel?

A. Change the channel-group mode on SW2 to auto
B. Change the channel-group mode on SW1 to desirable.
C. Configure the interface port-channel 1 command on both switches.
D. Change the channel-group mode on SW1 to active or passive.

Answer: D

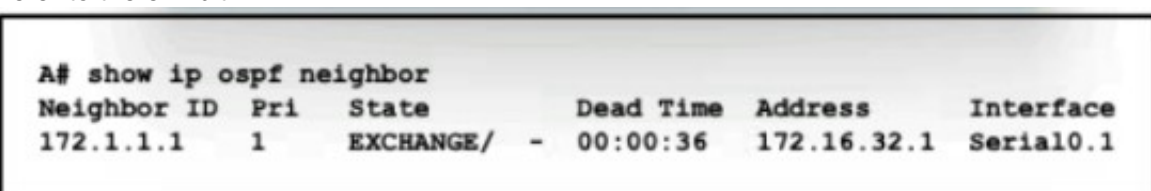**NEW QUESTION 7**
- (Topic 3)
Which protocol uses the SSL?

A. HTTP
B. SSH
C. HTTPS
D. Telnet

Answer: C

NEW QUESTION 8
- (Topic 3)
Refer to the exhibit.


```
A# show ip ospf neighbor
Neighbor ID   Pri    State        Dead Time   Address       Interface
172.1.1.1     1      EXCHANGE/  -  00:00:36    172.16.32.1   Serial0.1
```

An engineer assumes a configuration task from a peer Router A must establish an OSPF neighbor relationship with neighbor 172 1 1 1 The output displays the status of the adjacency after 2 hours. What is the next step in the configuration process for the routers to establish an adjacency?

A. Configure router A to use the same MTU size as router B.
B. Set the router B OSPF ID to a nonhost address.
C. Configure a point-to-point link between router A and router B.
D. Set the router B OSPF ID to the same value as its IP address

Answer: B

NEW QUESTION 9
- (Topic 3)
Which protocol is used for secure remote CLI access?

A. HTTPS
B. HTTP
C. Telnet
D. SSH

Answer: D

NEW QUESTION 10
DRAG DROP - (Topic 3)
Drag and drop the threat-mitigation techniques from the left onto the types of threat or attack they mitigate on the right.

configure the BPDU guard feature	802.1q double tagging
configure the dynamic ARP inspection feature	ARP spoofing
configure the root guard feature	unwanted superior BPDUs
configure a VLAN access control list	unwanted BPDUs on PortFast-enabled interfaces

A. Mastered
B. Not Mastered

Answer: A

Explanation:

configure the BPDU guard feature	configure a VLAN access control list
configure the dynamic ARP inspection feature	configure the dynamic ARP inspection feature
configure the root guard feature	configure the root guard feature
configure a VLAN access control list	configure the BPDU guard feature

NEW QUESTION 10
- (Topic 3)
Refer to the exhibit.

```
Switch#show etherchannel summary
[output omitted]

Group   Port-channel   Protocol     Ports
------+-------------+----------+----------------------
10       Po10(SU)       LACP        Gi0/0(P)    Gi0/1(P)
20       Po20(SU)       LACP        Gi0/2(P)    Gi0/3(P)
```

Which two commands when used together create port channel 10? (Choose two.)

A. int range g0/0-1channel-group 10 mode active
B. int range g0/0-1 chanm.l-group 10 mode desirable
C. int range g0/0-1channel-group 10 mode passive
D. int range g0/0-1 channel-group 10 mode auto
E. int range g0/0-1 channel-group 10 mode on

Answer: AC

NEW QUESTION 14
- (Topic 3)
What is the difference between IPv6 unicast and anycast addressing?

A. IPv6 anycast nodes must be explicitly configured to recognize the anycast address, but IPv6 unicast nodes require no special configuration
B. IPv6 unicast nodes must be explicitly configured to recognize the unicast address, but IPv6 anycast nodes require no special configuration
C. An individual IPv6 unicast address is supported on a single interface on one node but an IPv6 anycast address is assigned to a group of interfaces on multiple nodes.
D. Unlike an IPv6 anycast address, an IPv6 unicast address is assigned to a group of interfaces on multiple nodes

Answer: C

NEW QUESTION 17
- (Topic 3)
Which QoS traffic handling technique retains excess packets in a queue and reschedules these packets for later transmission when the configured maximum bandwidth has been surpassed?

A. weighted random early detection
B. traffic policing
C. traffic shaping
D. traffic prioritization

Answer: C

NEW QUESTION 19
- (Topic 3)
What is an expected outcome when network management automation is deployed?

A. A distributed management plane must be used.
B. Software upgrades are performed from a central controller
C. Complexity increases when new device configurations are added
D. Custom applications are needed to configure network devices

Answer: B

NEW QUESTION 24
- (Topic 3)
What is one reason to implement LAG on a Cisco WLC?

A. to increase security and encrypt management frames
B. to provide link redundancy and load balancing
C. to allow for stateful and link-state failover
D. to enable connected switch ports to failover and use different VLANs

Answer: B

NEW QUESTION 28
- (Topic 3)
A network engineer is configuring a switch so that it is remotely reachable via SSH. The engineer has already configured the host name on the router. Which additional command must the engineer configure before entering the command to generate the RSA key?

A. password password
B. crypto key generate rsa modulus 1024
C. ip domain-name domain
D. ip ssh authentication-retries 2

Answer: C

Explanation:
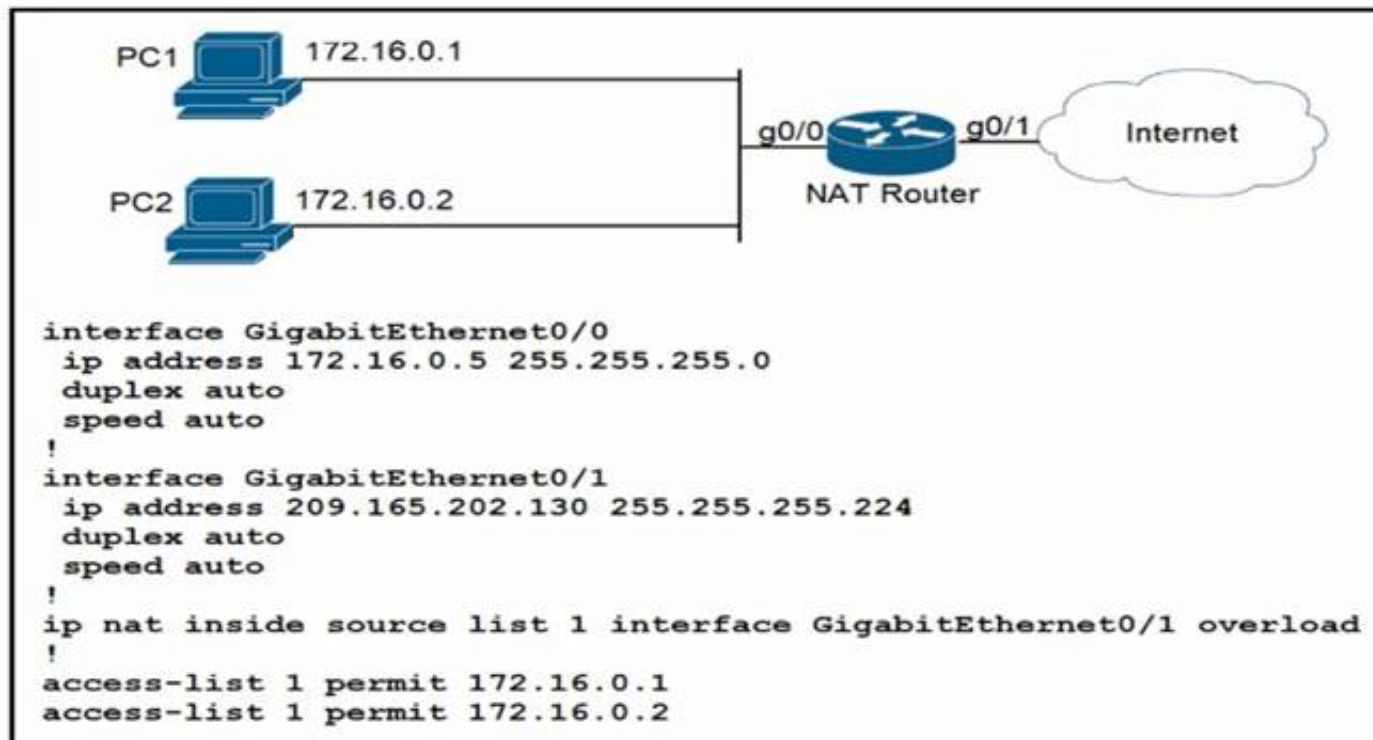 https://www.cisco.com/c/en/us/solutions/small-business/resource-center/networking/how-to-setup-network-switch.html

NEW QUESTION 31
- (Topic 3)
Refer to the exhibit.

```
interface GigabitEthernet0/0
 ip address 172.16.0.5 255.255.255.0
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 209.165.202.130 255.255.255.224
 duplex auto
 speed auto
!
ip nat inside source list 1 interface GigabitEthernet0/1 overload
!
access-list 1 permit 172.16.0.1
access-list 1 permit 172.16.0.2
```

How should the configuration be updated to allow PC1 and PC2 access to the Internet?

A. Modify the configured number of the second access list.
B. Add either the ip nat {inside|outside} command under both interfaces.
C. Remove the overload keyword from the ip nat inside source command.
D. Change the ip nat inside source command to use interface GigabitEthernet0/0.

Answer: B

NEW QUESTION 32
- (Topic 3)
Refer to the exhibit.

```
ip domain-name CNAC.com
!
interface GigabitEthernet0/0/0
 ip address 192.168.1.10 255.255.255.0
 duplex auto
 speed auto
!
line vty 0 15
 login local

R1#show crypto key mypubkey rsa

R1#show ssh
%No SSHv2 server connections running.
%No SSHv1 server connections running.
```

Which two commands must be added to update the configuration of router R1 so that it accepts only encrypted connections? (Choose two)

A. username CNAC secret R!41!4319115@
B. ip ssh version 2
C. line vty 0 4
D. crypto key generate rsa 1024
E. transport input ssh

Answer: DE

NEW QUESTION 35
- (Topic 3)
Which PoE mode enables powered-device detection and guarantees power when the device is detected?

A. dynamic
B. static
C. active
D. auto

Answer: B

NEW QUESTION 36
- (Topic 3)

Refer to the exhibit.

```
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
!
hostname R4
!
boot-start-marker
boot-end-marker
!
ip cef
!
interface FastEthernet0/0
 description WAN_INTERFACE
 ip address 10.0.1.2 255.255.255.252
 ip access-group 100 in
!
interface FastEthernet0/1
 description LAN_INTERFACE
 ip address 10.148.2.1 255.255.255.0
 duplex auto
 speed auto
!
ip forward-protocol nd
!
access-list 100 permit eigrp any any
access-list 100 permit icmp any any
access-list 100 permit tcp 10.149.3.0 0.0.0.255 host 10.0.1.2 eq 22
access-list 100 permit tcp any any eq 80
access-list 100 permit tcp any any eq 443
access-list 100 deny ip any any log
```

Which configuration enables DHCP addressing for hosts connected to interface FastEthernetO/1 on router R4?

A. interface FastEthernet0/0 ip helper-address 10.0.1.1iaccess-list 100 permit udp host 10.0.1.1 eq bootps host 10.148.2.1
B. interface FastEthernot0/1 ip helper-address 10.0.1.1!access-list 100 permit tcp host 10.0.1.1 eq 67 host 10.148.2.1
C. interface FastEthernetO/0 ip helper-address 10.0.1.1Iaccess-list 100 permit host 10.0.1.1 host 10.148.2.1 eq bootps
D. interface FastEthernet0/1 ip helper-address 10.0.1.1!access-list 100 permit udp host 10.0.1.1 eq bootps host 10.148.2.1

Answer: B

NEW QUESTION 38
- (Topic 2)
What role does a hypervisor provide for each virtual machine in server virtualization?

A. infrastructure-as-a-service.
B. Software-as-a-service
C. control and distribution of physical resources
D. services as a hardware controller.

Answer: C

Explanation:
 The hypervisor creates and manages virtual machines on a host computer and allocates physical system resources to them.

NEW QUESTION 40
- (Topic 2)
Refer to the exhibit.

```
SW1#show run int gig 0/1
interface GigabitEthernet0/1
  switchport access vlan 11
  switchport trunk allowed vlan 1-10
  switchport trunk encapsulation dot1q
  switchport trunk native vlan 5
  switchport mode trunk
  speed 1000
  duplex full
```

Which action is expected from SW1 when the untagged frame is received on the GigabitEthernet0/1 interface?

A. The frame is processed in VLAN 5.
B. The frame is processed in VLAN 11
C. The frame is processed in VLAN 1
D. The frame is dropped

Answer: A

NEW QUESTION 45
DRAG DROP - (Topic 2)
Drag the descriptions of IP protocol transmissions from the left onto the IP traffic types on the right.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 48
DRAG DROP - (Topic 2)
Drag the descriptions of device management from the left onto the types of device management on the right.

	Cisco DNA Center Device Management
implements changes via an SSH terminal	
manages device configurations on a per-device basis	
monitors the cloud for software updates	
security is managed near the perimeter of the network with firewalls, VPNs, and IPS	Traditional Device Management
uses CLI templates to apply a consistent configuration to multiple devices at an individual location	
uses NetFlow to analyze potential security threats throughout the network and take appropriate action on that traffic	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

	Cisco DNA Center Device Management
implements changes via an SSH terminal	monitors the cloud for software updates
manages device configurations on a per-device basis	uses CLI templates to apply a consistent configuration to multiple devices at an individual location
monitors the cloud for software updates	uses NetFlow to analyze potential security threats throughout the network and take appropriate action on that traffic
security is managed near the perimeter of the network with firewalls, VPNs, and IPS	Traditional Device Management
uses CLI templates to apply a consistent configuration to multiple devices at an individual location	manages device configurations on a per-device basis
uses NetFlow to analyze potential security threats throughout the network and take appropriate action on that traffic	security is managed near the perimeter of the network with firewalls, VPNs, and IPS
	implements changes via an SSH terminal

NEW QUESTION 51
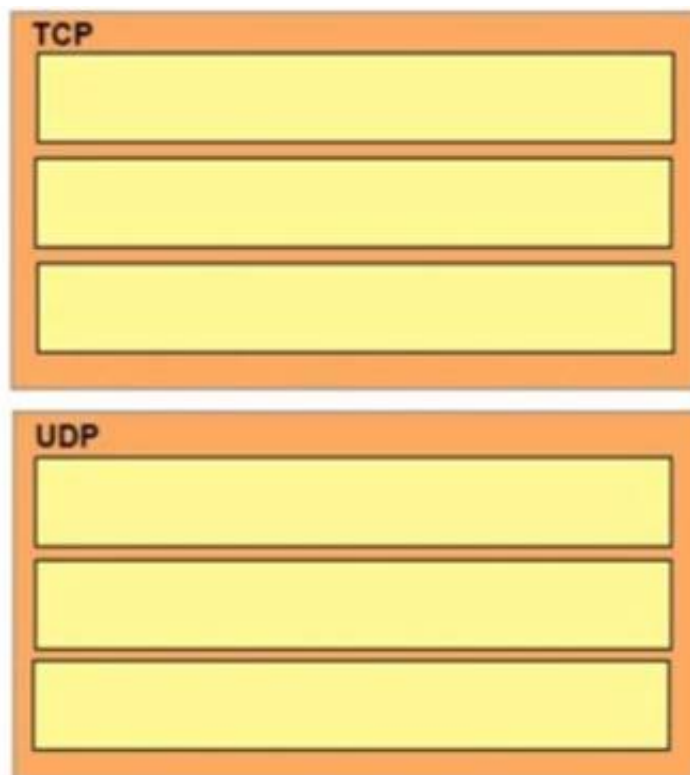- (Topic 2)
Why does a switch flood a frame to all ports?
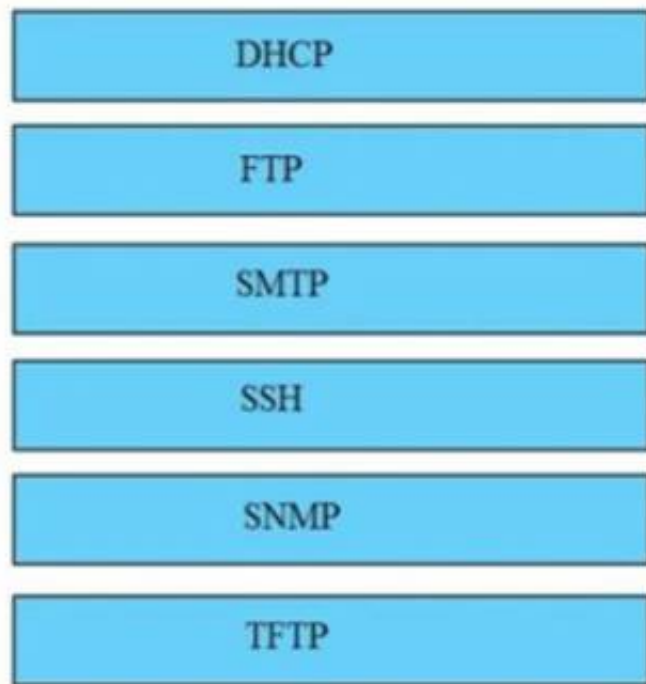
A. The frame has zero destination MAC addresses.
B. The source MAC address of the frame is unknown
C. The source and destination MAC addresses of the frame are the same
D. The destination MAC address of the frame is unknown.

Answer: B
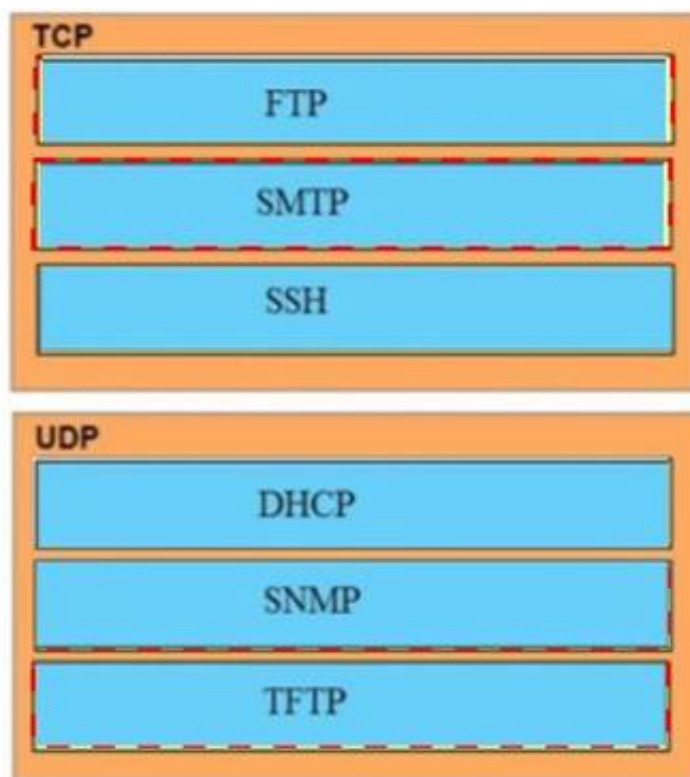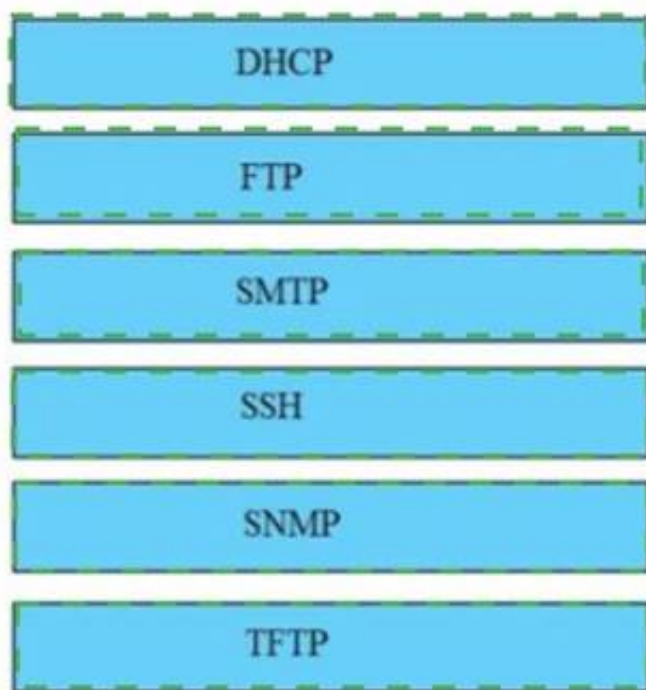
NEW QUESTION 52
DRAG DROP - (Topic 2)
Drag and drop the application protocols from the left onto the transport protocols that it uses on the right

TCP		UDP
DHCP		
FTP		
SMTP		
SSH		
SNMP		
TFTP		

A. Mastered
B. Not Mastered

Answer: A

Explanation:

		TCP	UDP
DHCP		FTP	DHCP
FTP		SMTP	SNMP
SMTP		SSH	TFTP
SSH			
SNMP			
TFTP			

NEW QUESTION 56
- (Topic 2)
When the active router in an HSRP group fails, what router assumes the role and forwards packets?

A. backup
B. standby
C. listening
D. forwarding

Answer: B

NEW QUESTION 61
- (Topic 2)
Which command must be entered to configure a DHCP relay?

A. ip helper-address
B. ip address dhcp
C. ip dhcp pool
D. ip dhcp relay

Answer: A

NEW QUESTION 66
- (Topic 2)
Which two outcomes are predictable behaviors for HSRP? (Choose two)

A. The two routers share a virtual IP address that is used as the default gateway for devices on the LAN.
B. The two routers negotiate one router as the active router and the other as the standby router
C. Each router has a different IP address both routers act as the default gateway on the LAN, and traffic is load balanced between them.D The two routers synchronize configurations to provide consistent packet forwarding
D. The two routed share the same IP address, and default gateway traffic is load-balanced between them

Answer: AB

NEW QUESTION 69
- (Topic 2)
Which function is performed by DHCP snooping?

A. propagates VLAN information between switches
B. listens to multicast traffic for packet forwarding
C. provides DDoS mitigation
D. rate-limits certain traffic

Answer: A

NEW QUESTION 74
- (Topic 2)
What makes Cisco DNA Center different from traditional network management applications and their management of networks?

A. It omits supports auto-discovery of network elements in a greenfield deployment.
B. It modular design allows someone to implement different versions to meet the specific needs of an organization
C. It abstracts policy from the actual device configuration
D. It does not support high availability of management functions when operating in cluster mode

Answer: C

NEW QUESTION 75
- (Topic 2)
Refer to the exhibit.
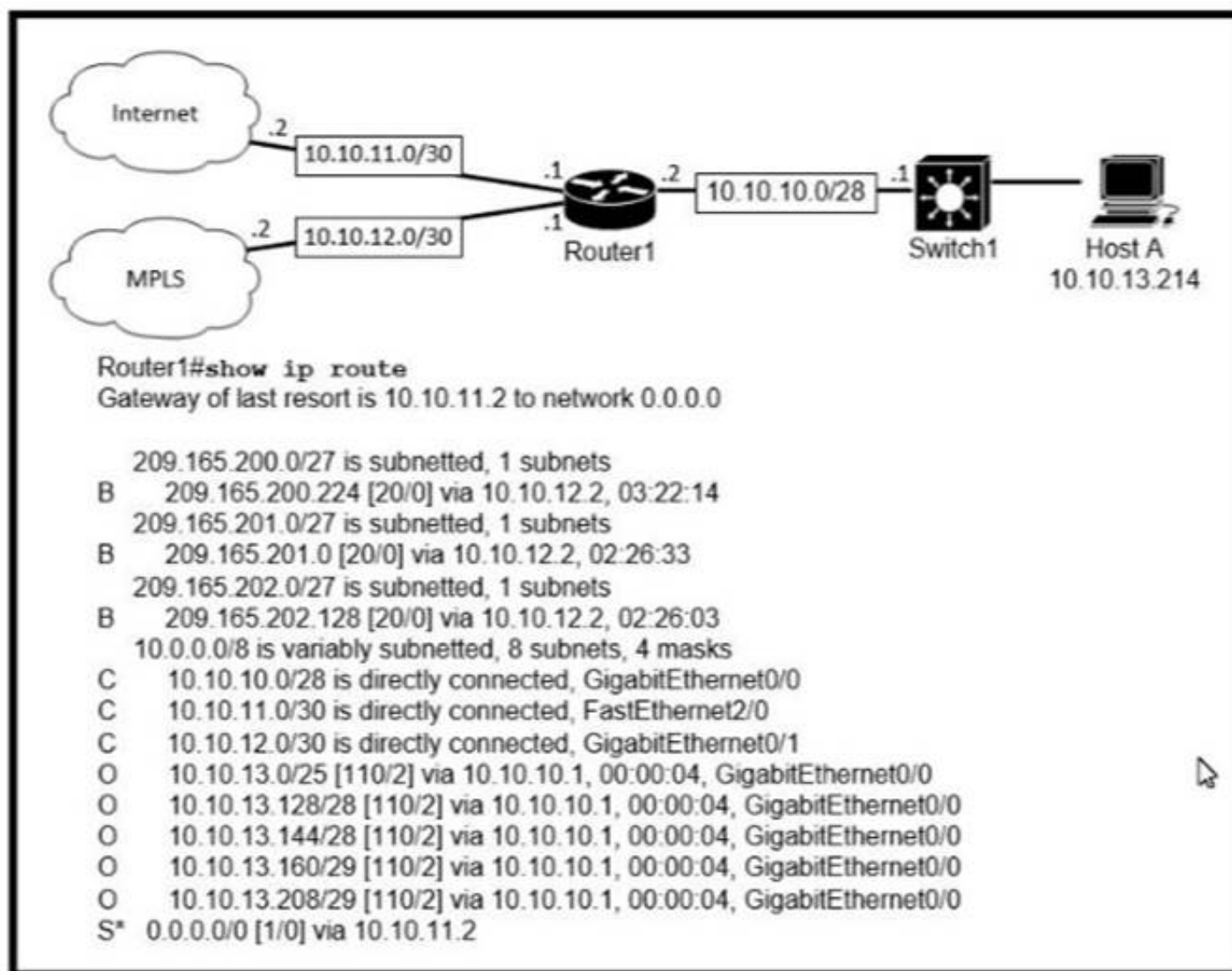
Which prefix does Router 1 use for traffic to Host A?

A. 10.10.10.0/28
B. 10.10.13.0/25
C. 10.10.13.144/28
D. 10.10.13.208/29

Answer: D

Explanation:
 Host A address fall within the address range. However, if more than one route to the same subnet exist (router will use the longest stick match, which match more specific route to the subnet). If there are route 10.10.13.192/26 and 10.10.13.208/29, the router will forward the packet to /29 rather than /28.

NEW QUESTION 80

- (Topic 2)
Which statement correctly compares traditional networks and controller-based networks?

A. Only traditional networks offer a centralized control plane
B. Only traditional networks natively support centralized management
C. Traditional and controller-based networks abstract policies from device configurations
D. Only controller-based networks decouple the control plane and the data plane

Answer: D

Explanation:
Most traditional devices use a distributed architecture, in which each control plane is resided in a networking device. Therefore they need to communicate with each other via messages to work correctly.In contrast to distributed architecture, centralized (or controller-based) architectures centralizes the control of networking devices into one device, called SDN controller

NEW QUESTION 84
- (Topic 2)
Refer to Exhibit.
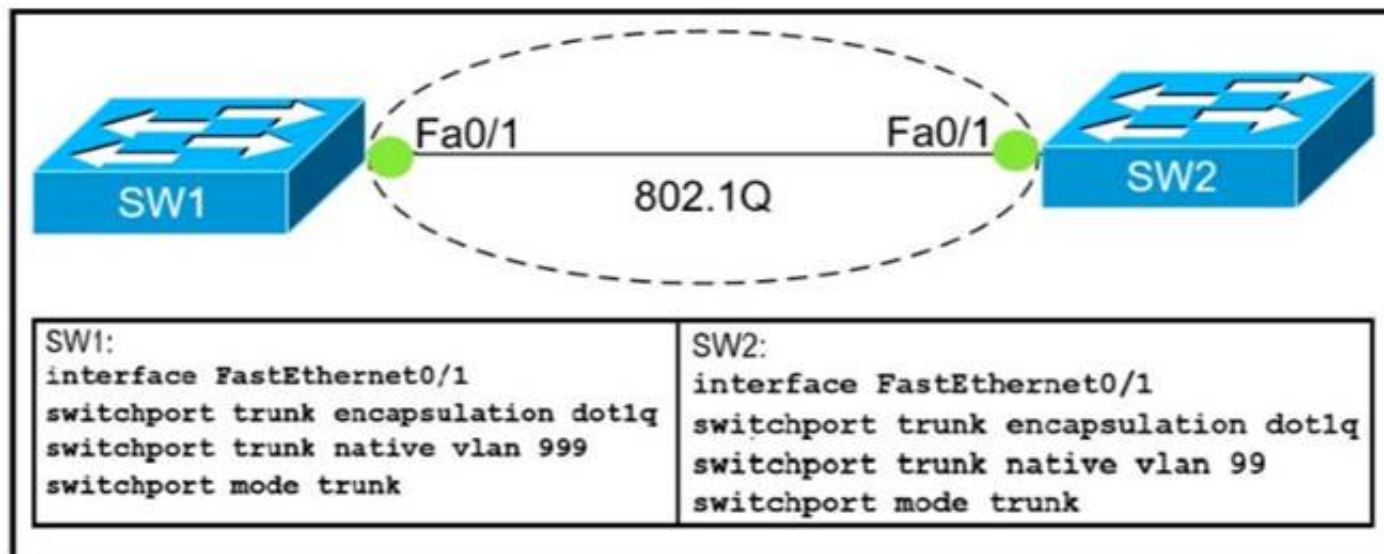
Which action do the switches take on the trunk link?

A. The trunk does not form and the ports go into an err-disabled status.
B. The trunk forms but the mismatched native VLANs are merged into a single broadcast domain.
C. The trunk does not form, but VLAN 99 and VLAN 999 are allowed to traverse the link.
D. The trunk forms but VLAN 99 and VLAN 999 are in a shutdown state.

Answer: B

Explanation:
The trunk still forms with mismatched native VLANs and the traffic can actually flow between mismatched switches. But it is absolutely necessary that the native VLANs on both ends of a trunk link match; otherwise a native VLAN mismatch occurs, causing the two VLANs to effectively merge.
For example with the above configuration, SW1 would send untagged frames for VLAN 999. SW2 receives them but would think they are for VLAN 99 so we can say these two VLANs are merged.

NEW QUESTION 89
- (Topic 2)
Which statement about Link Aggregation when implemented on a Cisco Wireless LAN Controller is true?

A. To pass client traffic two or more ports must be configured.
B. The EtherChannel must be configured in "mode active"
C. When enabled the WLC bandwidth drops to 500 Mbps
D. One functional physical port is needed to pass client traffic

Answer: D

Explanation:
Reference: https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-2/config-guide/b_cg82/b_cg82_chapter_010101011.html

NEW QUESTION 94
- (Topic 2)
Which action is taken by a switch port enabled for PoE power classification override?

A. When a powered device begins drawing power from a PoE switch port a syslog message is generated
B. As power usage on a PoE switch port is checked data flow to the connected device is temporarily paused
C. If a switch determines that a device is using less than the minimum configured power it assumes the device has failed and disconnects
D. Should a monitored port exceeds the maximum administrative value for power, the port is shutdown and err-disabled

Answer: D

Explanation:
Reference: https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst6500/ios/12-2SX/configuration/guide/book/power_over_ethernet.pdf
PoE monitoring and policing compares the power consumption on ports with the administrative maximum value (either a configured maximum value or the port's default value). If the power consumption on a monitored port exceeds the administrative maximum value, the following actions occur:– A syslog message is issued.– The monitored port is shut down and error-disabled.– The allocated power is freed.

NEW QUESTION 95
- (Topic 2)
What prevents a workstation from receiving a DHCP address?

A. DTP
B. STP
C. VTP
D. 802.10

Answer: B

NEW QUESTION 97
- (Topic 2)
What are two characteristics of a public cloud Implementation? (Choose two.)

A. It is owned and maintained by one party, but it is shared among multiple organizations.
B. It enables an organization to fully customize how It deploys network resources.
C. It provides services that are accessed over the Internet.
D. It Is a data center on the public Internet that maintains cloud services for only one company.
E. It supports network resources from a centralized third-party provider and privately- owned virtual resources

Answer: CE

Explanation:
Private cloud is cloud infrastructure operated solely for a single organization, whether managed internally or by a third party, and hosted either internally or externally. Most public-cloud providers offer direct-connection services that allow customers to securely link their legacy data centers to their cloud-resident applications.

NEW QUESTION 101
- (Topic 2)
What are two descriptions of three-tier network topologies? (Choose two)

A. The core and distribution layers perform the same functions
B. The access layer manages routing between devices in different domains
C. The network core is designed to maintain continuous connectivity when devices fail.
D. The core layer maintains wired connections for each host
E. The distribution layer runs Layer 2 and Layer 3 technologies

Answer: CE

NEW QUESTION 103
- (Topic 2)
Which set of action satisfy the requirement for multifactor authentication?

A. The user swipes a key fob, then clicks through an email link
B. The user enters a user name and password, and then clicks a notification in an authentication app on a mobile device
C. The user enters a PIN into an RSA token, and then enters the displayed RSA key on a login screen
D. The user enters a user name and password and then re-enters the credentials on a second screen

Answer: B

Explanation:
This is an example of how two-factor authentication (2FA) works:1. The user logs in to the website or service with their username and password.2. The password is validated by an authentication server and, if correct, the user becomes eligible for the second factor.3. The authentication server sends a unique code to the user's second-factor method (such as a smartphone app).4. The user confirms their identity by providing the additional authentication for their second-factor method.

NEW QUESTION 106
- (Topic 2)
A wireless administrator has configured a WLAN; however, the clients need access to a less congested 5-GHz network for their voice quality. What action must be taken to meet the requirement?

A. enable AAA override
B. enable RX-SOP
C. enable DTIM
D. enable Band Select

Answer: D

NEW QUESTION 109
- (Topic 2)
Which type of traffic is sent with pure iPsec?

A. broadcast packets from a switch that is attempting to locate a MAC address at one of several remote sites
B. multicast traffic from a server at one site to hosts at another location
C. spanning-tree updates between switches that are at two different sites
D. unicast messages from a host at a remote site to a server at headquarters

Answer: D

Explanation:
 "The original poster makes a correct observation that EIGRP does not work in a pure IPSEC environment. IPSEC was designed to process unicast traffic.

NEW QUESTION 110
- (Topic 2)
What are two benefits of using the PortFast feature? (Choose two)

A. Enabled interfaces are automatically placed in listening state
B. Enabled interfaces come up and move to the forwarding state immediately
C. Enabled interfaces never generate topology change notifications.
D. Enabled interfaces that move to the learning state generate switch topology change notifications
E. Enabled interfaces wait 50 seconds before they move to the forwarding state

Answer: AB

NEW QUESTION 112
- (Topic 2)
Which mode must be set for APs to communicate to a Wireless LAN Controller using the Control and Provisioning of Wireless Access Points (CAPWAP) protocol?
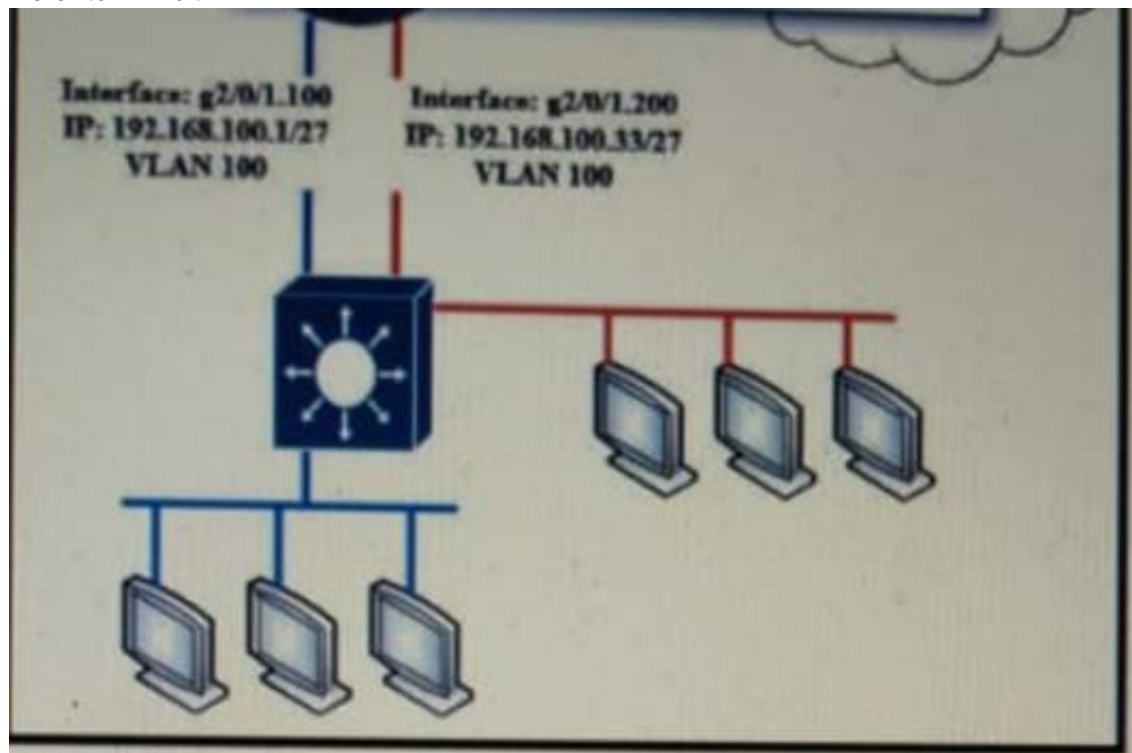
A. bridge
B. route
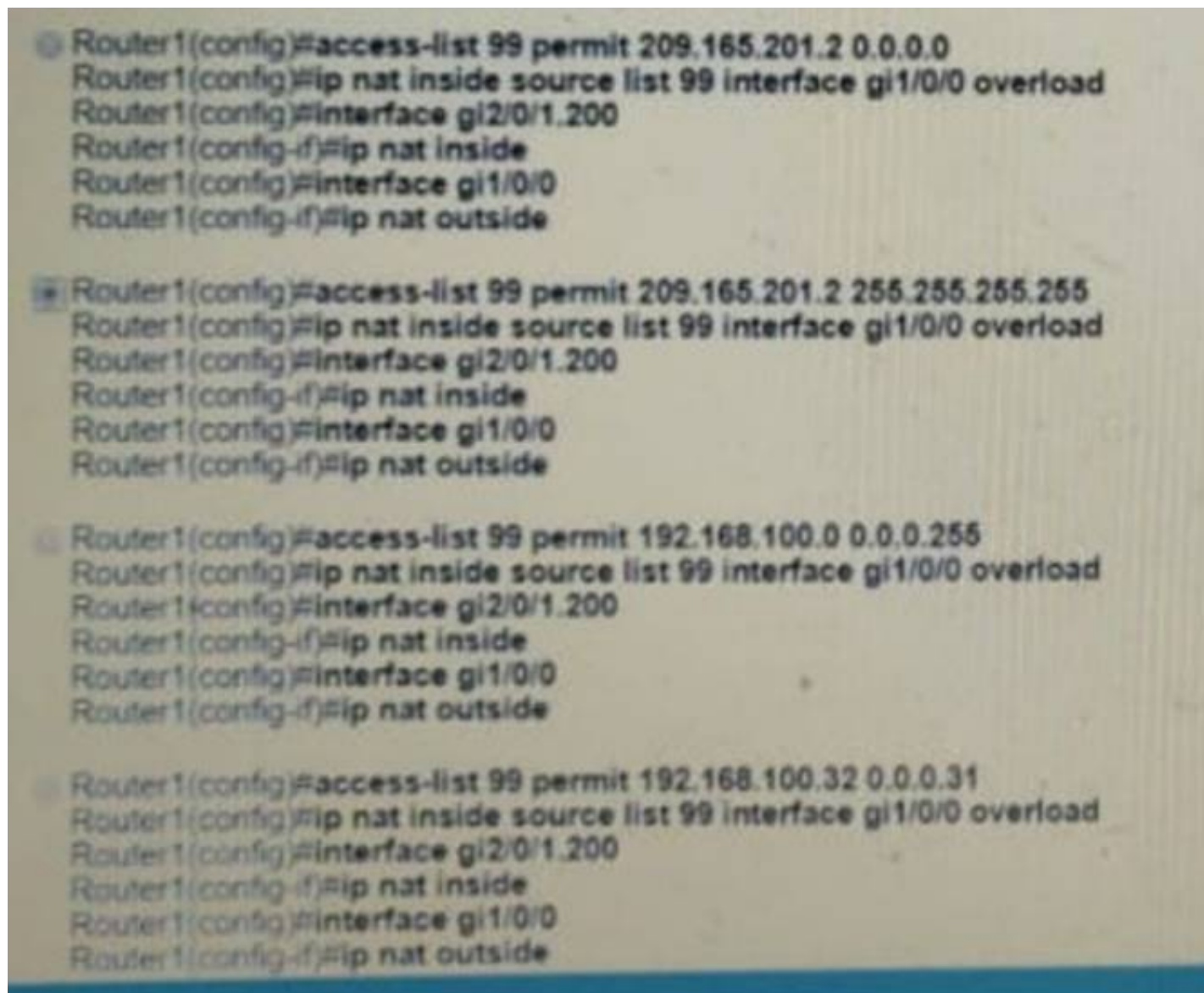C. autonomous
D. lightweight

Answer: D

NEW QUESTION 115
- (Topic 2)
Refer to Exhibit.

Which configuration must be applied to the router that configures PAT to translate all addresses in VLAN 200 while allowing devices on VLAN 100 to use their own IP addresses?

```
Router1(config)#access-list 99 permit 209.165.201.2 0.0.0.0
Router1(config)#ip nat inside source list 99 interface gi1/0/0 overload
Router1(config)#interface gi2/0/1.200
Router1(config-if)#ip nat inside
Router1(config)#interface gi1/0/0
Router1(config-if)#ip nat outside

Router1(config)#access-list 99 permit 209.165.201.2 255.255.255.255
Router1(config)#ip nat inside source list 99 interface gi1/0/0 overload
Router1(config)#interface gi2/0/1.200
Router1(config-if)#ip nat inside
Router1(config)#interface gi1/0/0
Router1(config-if)#ip nat outside

Router1(config)#access-list 99 permit 192.168.100.0 0.0.0.255
Router1(config)#ip nat inside source list 99 interface gi1/0/0 overload
Router1(config)#interface gi2/0/1.200
Router1(config-if)#ip nat inside
Router1(config)#interface gi1/0/0
Router1(config-if)#ip nat outside

Router1(config)#access-list 99 permit 192.168.100.32 0.0.0.31
Router1(config)#ip nat inside source list 99 interface gi1/0/0 overload
Router1(config)#interface gi2/0/1.200
Router1(config-if)#ip nat inside
Router1(config)#interface gi1/0/0
Router1(config-if)#ip nat outside
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: D

NEW QUESTION 116
- (Topic 2)
The SW1 interface g0/1 is in the down/down state. Which two configurations are valid reasons for the interface conditions?(choose two)

A. There is a duplex mismatch
B. There is a speed mismatch
C. There is a protocol mismatch
D. The interface is shut down
E. The interface is error-disabled

Answer: BE

NEW QUESTION 117
- (Topic 2)
What Is a syslog facility?

A. Host that is configured for the system to send log messages
B. password that authenticates a Network Management System to receive log messages
C. group of log messages associated with the configured severity level
D. set of values that represent the processes that can generate a log message

Answer: C

Explanation:
Cisco Community – Difference between logging level and logging facility Post by ahmednaas
"The logging facility command basically tells the syslog server where to put the log message. You configure the syslog server with something like:
local7.debug /var/adm/local7.log
Now, when you use the "logging facility local7" on your device, all messages with severity "debug" or greater should be saved in /var/adm/local7.log."
Example: on a switch, any process (CDP, SNMP, etc.) can generate a log message. On a syslog server, the logging facility is the place where all received messages with the same priority level are stored.

NEW QUESTION 119
- (Topic 2)

```
            Router1                                  Router2

                                          Gi1/1
                            Gi1/1

Router1(config)#interface GigabitEthernet1/1
Router1(config-if)#description ***Connection to Router2***
Router1(config-if)#ip address 10.10.10.1 255.255.255.252
Router1(config-if)#ip ospf hello-interval 5
Router1(config)#router ospf 1000
Router1(config-router)#router-id 1.1.1.1
Router1(config-router)#network 10.10.10.0 0.0.0.3 area 0

Router2(config)#interface GigabitEthernet1/1
Router2(config-if)#description ***Connection to Router1***
Router2(config-if)#ip address 10.10.10.2 255.255.255.252
Router2(config)#router ospf 1001
Router2(config-router)#router-id 2.2.2.2
Router2(config-router)#network 10.10.10.0 0.0.0.3 area 0
Router2(config-router)#passive-interface default
Router2(config-router)#no passive-interface GigabitEthernet1/1
```

Refer to the exhibit. After the configuration is applied, the two routers fail to establish an OSPF neighbor relationship. what is the reason for the problem?

A. The OSPF router IDs are mismatched.
B. Router2 is using the default hello timer.
C. The network statement on Router1 is misconfigured.
D. The OSPF process IDs are mismatched.

Answer: B

NEW QUESTION 121
- (Topic 2)
which IPv6 address block forwards packets to a multicast address rather than a unicast address?

A. 2000::/3
B. FC00::/7
C. FE80::/10
D. FF00::/12

Answer: D

NEW QUESTION 123
- (Topic 2)
Which two primary drivers support the need for network automation? (Choose two.)

A. Eliminating training needs
B. Increasing reliance on self-diagnostic and self-healing
C. Policy-derived provisioning of resources
D. Providing a ship entry point for resource provisioning
E. Reducing hardware footprint

Answer: CD

NEW QUESTION 127
- (Topic 2)
A device detects two stations transmitting frames at the same time. This condition occurs after the first 64 bytes of the frame is received interface counter increments?

A. collision
B. CRC
C. runt
D. late collision

Answer: D

Explanation:
https://www.cisco.com/c/en/us/support/docs/interfaces-modules/port-adapters/12768-eth-collisions.html

NEW QUESTION 131
- (Topic 2)
Refer to the exhibit.

```
      10.0.0.0/24 is subsetted, 1 subnets
C        10.0.0.0 is directly connected, FastEthernet0/1
C     172.160.0/16 is directly connected, FastEthernet0/0
D     192.168.0.0/24 [90/30720] via 172.16.0.2, 00:00:03, FastEthernet0/0
```

Which route type does the routing protocol Code D represent in the output?

A. internal BGP route
B. /24 route of a locally configured IP
C. statically assigned route
D. route learned through EIGRP

Answer: D

NEW QUESTION 135
- (Topic 2)
Where does wireless authentication happen?

A. SSID
B. radio
C. band
D. Layer 2

Answer: D

NEW QUESTION 140
- (Topic 2)
A router running EIGRP has learned the same route from two different paths. Which parameter does the router use to select the best path?

A. cost
B. adminstrative distance
C. metric
D. as-path

Answer: C

Explanation:
 If a router learns two different paths for the same network from the same routing protocol, it has to decide which route is better and will be placed in the routing table. Metric is the measure used to decide which route is better (lower number is better). Each routing protocol uses its own metric.For example, RIP uses hop counts as a metric, while OSPF uses cost.

NEW QUESTION 145
- (Topic 2)
Which port type supports the spanning-tree portfast command without additional configuration?

A. access ports
B. Layer 3 main Interfaces
C. Layer 3 suninterfaces
D. trunk ports

Answer: A

NEW QUESTION 150
- (Topic 2)
Refer to the exhibit.

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.246 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.246, Serial0/1/0
     is directly connected, Serial0/1/0
     172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
S    172.16.3.0/24 [1/0] via 207.165.200.250, Serial0/0/0
O    172.16.3.0/28 [110/84437] via 207.165.200.254, 00:00:28, Serial0/0/1
     207.165.200.0/24 is variably subnetted, 6 subnets, 2 masks
C    207.165.200.244/30 is directly connected, Serial0/1/0
L    207.165.200.245/32 is directly connected, Serial0/1/0
C    207.165.200.248/30 is directly connected, Serial0/0/0
L    207.165.200.249/32 is directly connected, Serial0/0/0
C    207.165.200.252/30 is directly connected, Serial0/0/1
L    207.165.200.253/32 is directly connected, Serial0/0/1
```

A packet is being sent across router R1 to host 172.163.3.14. To which destination does the router send the packet?

A. 207.165.200.246 via Serial0/1/0
B. 207.165.200.254 via Serial0/0/1
C. 207.165.200.254 via Serial0/0/0
D. 207.165.200.250 via Serial/0/0/0

Answer: B

NEW QUESTION 152
- (Topic 2)
Which JSON data type is an unordered set of attribute- value pairs?

A. array
B. string
C. object
D. Boolean

Answer: C

NEW QUESTION 156
- (Topic 2)
What is a function of a Layer 3 switch?

A. move frames between endpoints limited to IP addresses
B. transmit broadcast traffic when operating in Layer 3 mode exclusively
C. forward Ethernet frames between VLANs using only MAC addresses
D. flood broadcast traffic within a VLAN

Answer: A

NEW QUESTION 161
- (Topic 2)
Which type of organization should use a collapsed-core architecture?

A. large and requires a flexible, scalable network design
B. large and must minimize downtime when hardware fails
C. small and needs to reduce networking costs currently
D. small but is expected to grow dramatically in the near future

Answer: C

Explanation:
 A collapsed-core architecture is a limited investment for a small company, and may be efficient and productive for a limited time.

NEW QUESTION 165
- (Topic 2)
Which QoS tool is used to optimize voice traffic on a network that is primarily intended for data traffic?

A. FIFO
B. WFQ
C. PQ
D. WRED

Answer: C

NEW QUESTION 170
- (Topic 2)
Which result occurs when PortFast is enabled on an interface that is connected to another switch?

A. Spanning tree may fail to detect a switching loop in the network that causes broadcast storms
B. VTP is allowed to propagate VLAN configuration information from switch to switch automatically.
C. Root port choice and spanning tree recalculation are accelerated when a switch link goes down
D. After spanning tree converges PortFast shuts down any port that receives BPDUs.

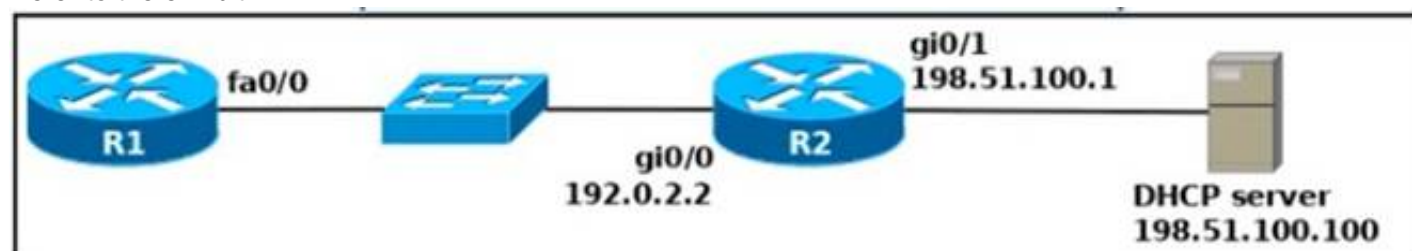**Answer:** A

Explanation:
 Enabling the PortFast feature causes a switch or a trunk port to enter the STP forwarding-state immediately or upon a linkup event, thus bypassing the listening and learning states.
Note: To enable portfast on a trunk port you need the trunk keyword "spanning-tree portfast trunk

NEW QUESTION 172
- (Topic 2)
Refer to the exhibit.

An engineer deploys a topology in which R1 obtains its IP configuration from DHCP. If the switch and DHCP server configurations are complete and correct. Which

two sets of
commands must be configured on R1 and R2 to complete the task? (Choose two)

A. R1(config)# interface fa0/0R1(config-if)# ip helper-address 198.51.100.100
B. R2(config)# interface gi0/0R2(config-if)# ip helper-address 198.51.100.100
C. R1(config)# interface fa0/0 R1(config-if)# ip address dhcp R1(config-if)# no shutdown
D. R2(config)# interface gi0/0 R2(config-if)# ip address dhcp
E. R1(config)# interface fa0/0R1(config-if)# ip helper-address 192.0.2.2

Answer: BC

NEW QUESTION 174
- (Topic 2)
Refer to the exhibit.
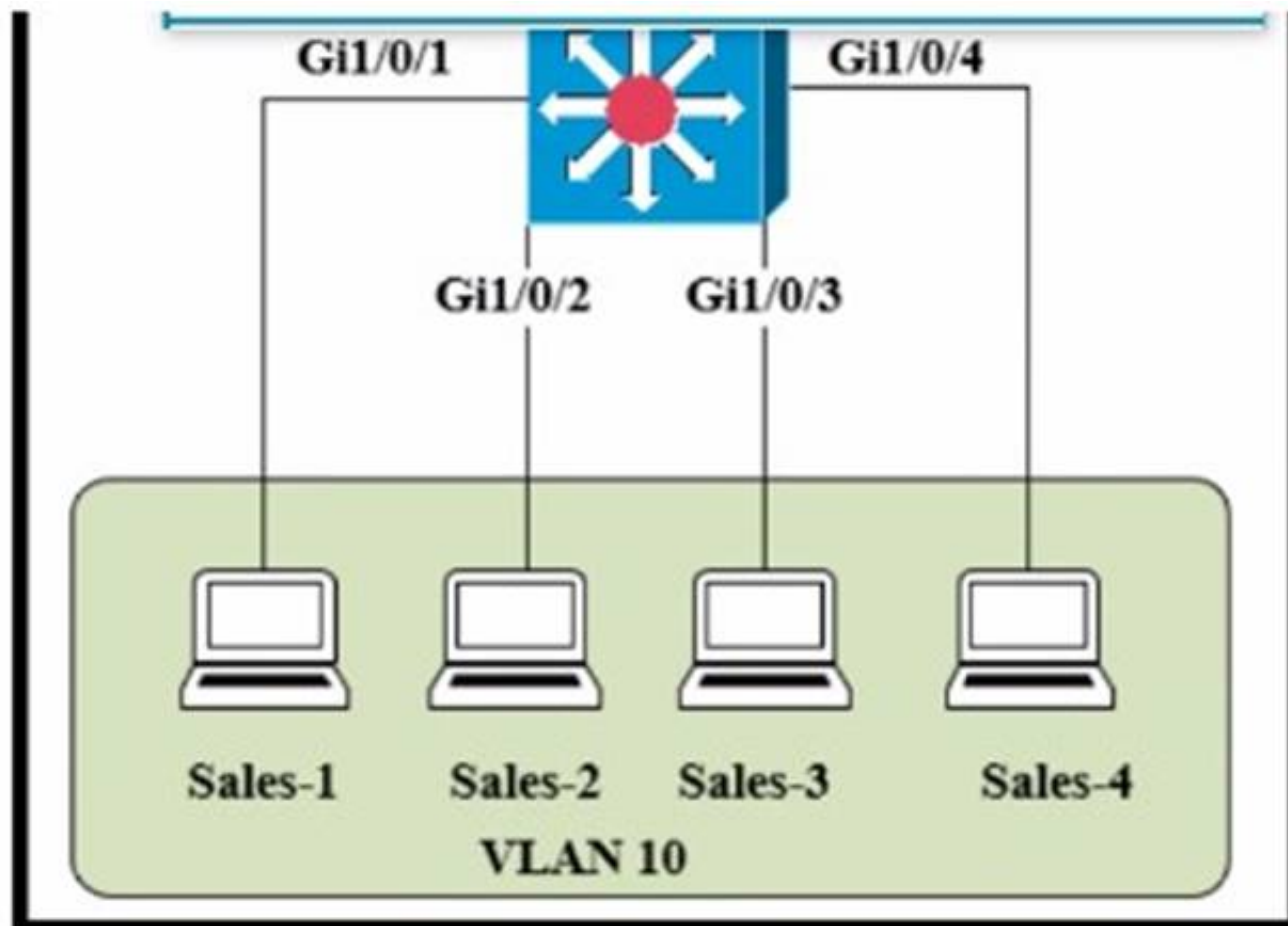
The entire contents of the MAC address table are shown. Sales-4 sends a data frame to Sales-1.

What does the switch do as it receives the frame from Sales-4?

A. Perform a lookup in the MAC address table and discard the frame due to a missing entry.
B. Insert the source MAC address and port into the forwarding table and forward the frame to Sales-1.
C. Map the Layer 2 MAC address to the Layer 3 IP address and forward the frame.
D. Flood the frame out of all ports except on the port where Sales-1 is connected.

Answer: B

Explanation:
 https://www.ciscopress.com/articles/article.asp?p=3089352&seqNum=6

NEW QUESTION 178
- (Topic 1)
Which access layer threat-mitigation technique provides security based on identity?

A. Dynamic ARP Inspection
B. using a non-default native VLAN
C. 802.1x
D. DHCP snooping

Answer: C

NEW QUESTION 181

- (Topic 2)
A network administrator enabled port security on a switch interface connected to a printer. What is the next configuration action in order to allow the port to learn the MAC address of the printer and insert it into the table automatically?

A. enable dynamic MAC address learning
B. implement static MAC addressing.
C. enable sticky MAC addressing
D. implement auto MAC address learning

Answer: C

NEW QUESTION 184
DRAG DROP - (Topic 2)
Drag and drop the descriptions from the left onto the configuration-management technologies on the right.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Ansible:– uses SSH for remote device communication– uses YAML for fundamental configuration elements
Chef:– uses TCP port 10002 for configuration push jobs– uses Ruby for fundamental configuration elements
Puppet:– fundamental configuration elements are stored in a manifest– uses TCP 8140 for communication
The focus of Ansible is to be streamlined and fast, and to require no node agent installation.Thus, Ansible performs all functions over SSH. Ansible is built on Python, in contrast to the Ruby foundation of Puppet and Chef.TCP port 10002 is the command port. It may be configured in the Chef Push Jobs configuration file .This port allows Chef Push Jobs clients to communicate with the Chef Push Jobs server.Puppet is an open-source configuration management solution, which is built with Ruby and offers custom Domain Specific Language (DSL) and Embedded Ruby (ERB) templates to create custom Puppet language files, offering a declarative-paradigm programming approach.A Puppet piece of code is called a manifest, and is a file with .pp extension.

NEW QUESTION 187
DRAG DROP - (Topic 1)
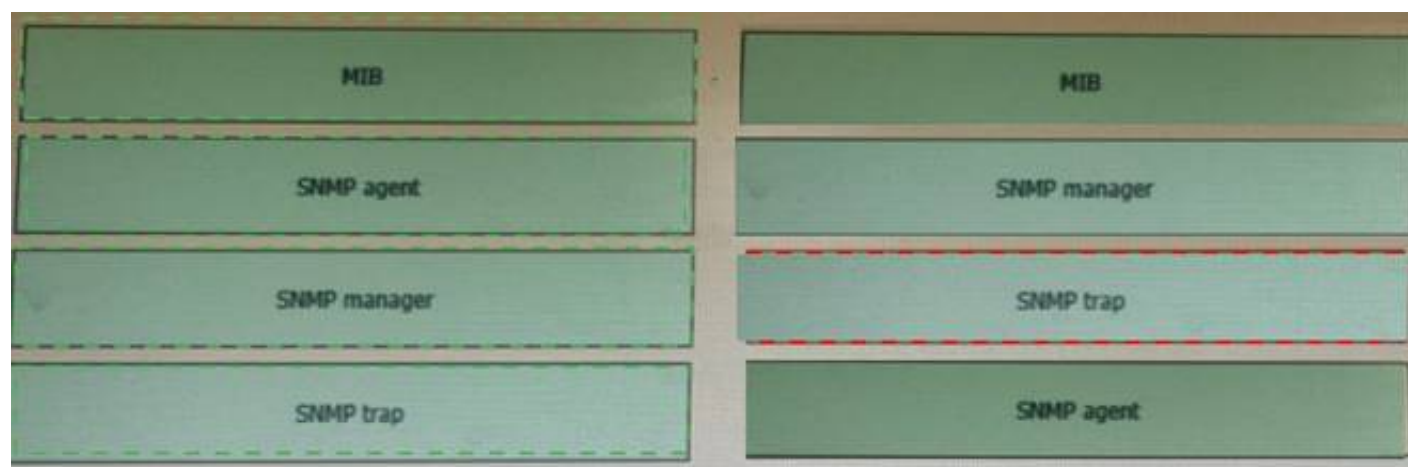Drag and drop the SNMP components from the left onto the descriptions on the right.
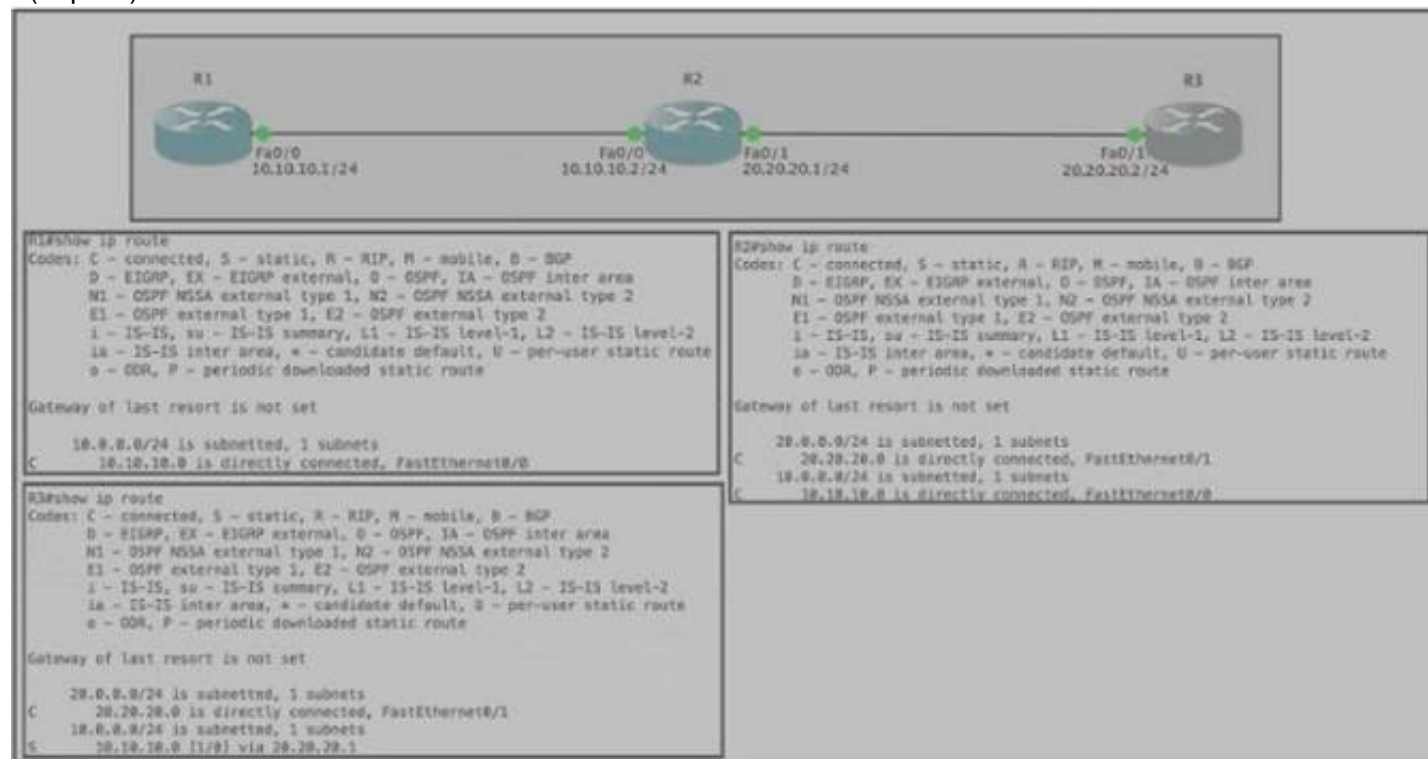

A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 191
- (Topic 1)

Refer to the exhibit Router R1 Fa0/0 is unable to ping router R3 Fa0'1. Which action must be taken in router R1 to help resolve the configuration issue?

A. set the default network as 20.20.20.0/24
B. set the default gateway as 20.20.20.2
C. configure a static route with Fa0/1 as the egress interface to reach the 20.20.20.0/24 network
D. configure a static route with 10.10.10.2 as the next hop to reach the 20.20.20.0/24 network

Answer: D

NEW QUESTION 193
- (Topic 1)
Refer to the exhibit.

Which command provides this output?

A. show ip route
B. show ip interface
C. show interface
D. show cdp neighbor

Answer: D

NEW QUESTION 198
- (Topic 1)
Which switch technology establishes a network connection immediately when it is plugged in?

A. PortFast
B. BPDU guard
C. UplinkFast
D. BackboneFast

Answer: A

Explanation:
PortFast is useful to connect hosts and switches to a switch. Access layer switches are more frequently "plugged in" and "plugged out" than distribution or core layer switches. Also, this feature's target is just to minimize STP convergence time.

NEW QUESTION 201
- (Topic 1)
Which two command sequences must you configure on switch to establish a Layer 3 EtherChannel with an open-standard protocol? (Choose two)

A. interface GigabitEthernet0/0/1 channel-group 10 mode on
B. interface GigabitEthernet0/0/1 channel-group 10 mode active
C. interface GigabitEthernet0/0/1 channel-group 10 mode auto
D. interface port-channel 10 switchportswitchport mode trunk
E. interface port-channel 10 no switchportip address 172.16.0.1.255.255.255.0

Answer: BE

NEW QUESTION 203
- (Topic 1)
Two switches are connected and using Cisco Dynamic Trunking Protocol SW1 is set to Dynamic Desirable
What is the result of this configuration?

A. The link is in a down state.
B. The link is in an error disables state
C. The link is becomes an access port.
D. The link becomes a trunk port.

Answer: D

NEW QUESTION 206
- (Topic 1)
Which WAN access technology is preferred for a small office / home office architecture?
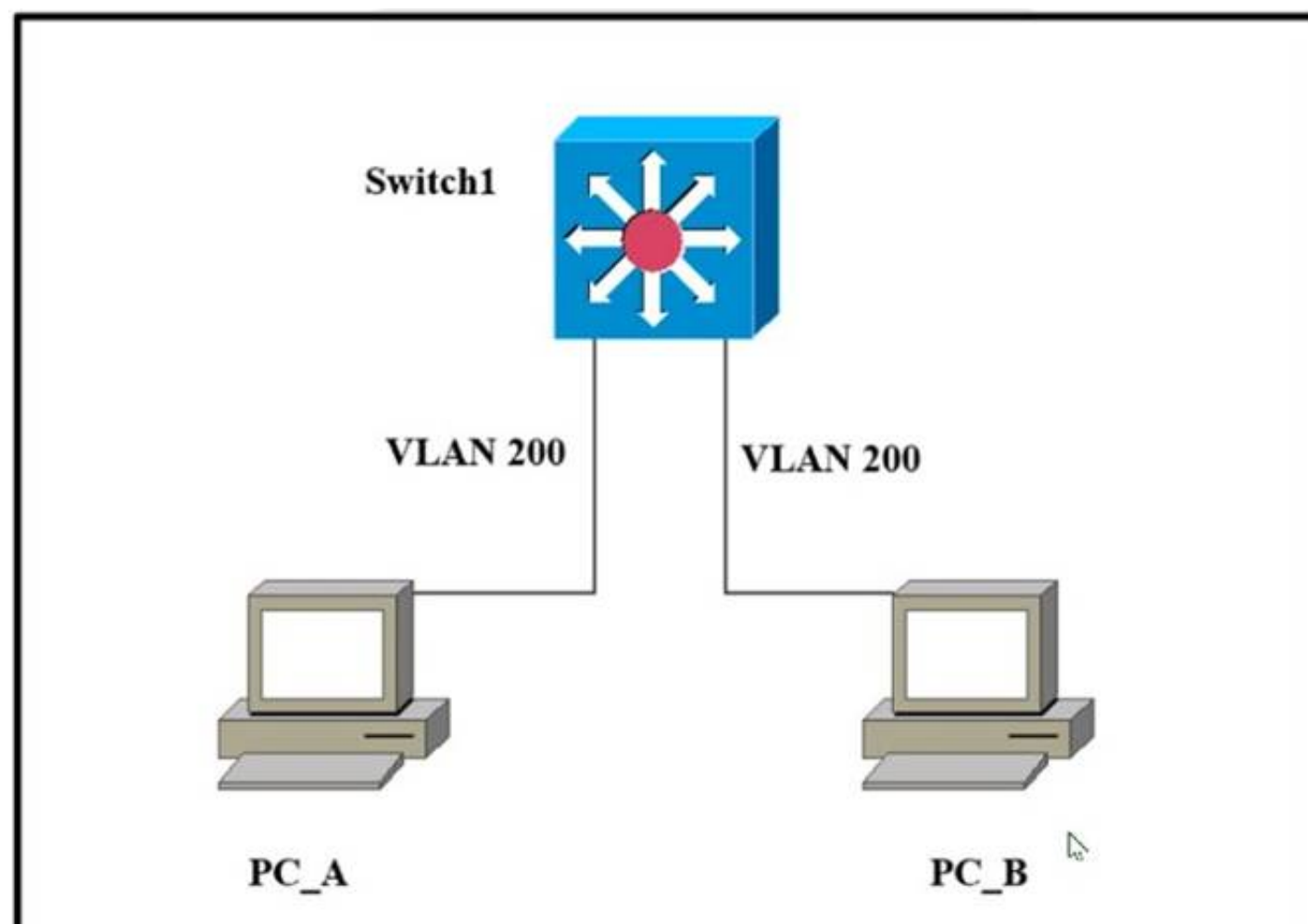
A. broadband cable access
B. frame-relay packet switching
C. dedicated point-to-point leased line
D. Integrated Services Digital Network switching.

Answer: A

NEW QUESTION 208
- (Topic 1)
Refer to the exhibit.

Which outcome is expected when PC_A sends data to PC_B?

A. The switch rewrites the source and destination MAC addresses with its own.
B. The source MAC address is changed.
C. The source and destination MAC addresses remain the same.
D. The destination MAC address is replaced with ffff.ffff.ffff.

Answer: C

NEW QUESTION 212
- (Topic 1)
Which command automatically generates an IPv6 address from a specified IPv6 prefix and MAC address of an interface?

A. ipv6 address dhcp
B. ipv6 address 2001:DB8:5:112::/64 eui-64
C. ipv6 address autoconfig
D. ipv6 address 2001:DB8:5:112::2/64 link-local

Answer: C

Explanation:
The "ipv6 address autoconfig" command causes the device to perform IPv6 stateless address autoconfiguration to discover prefixes on the link and then to add the EUI-64 based addresses to theinterface.Addresses are configured depending on the prefixes received in Router Advertisement (RA)messages.The device will listen for RA messages which are transmitted periodically from the router (DHCPServer).This RA message allows a host to create a global IPv6 address from:+ Its interface identifier (EUI- 64 address)+ Link Prefix (obtained via RA)Note: Global address is the combination of Link Prefix and EUI-64 address

NEW QUESTION 216
- (Topic 1)
What is a DNS lookup operation?

A. DNS server pings the destination to verify that it is available
B. serves requests over destination port 53
C. DNS server forwards the client to an alternate IP address when the primary IP is down
D. responds to a request for IP address to domain name resolution to the DNS server

Answer: D

NEW QUESTION 217
- (Topic 1)
How do TCP and UDP differ in the way they provide reliability for delivery of packets?

A. TCP is a connectionless protocol that does not provide reliable delivery of data, UDP is a connection-oriented protocol that uses sequencing to provide reliable delivery.
B. TCP does not guarantee delivery or error checking to ensure that there is no corruption of data UDP provides message acknowledgement and retransmits data if lost.
C. TCP provides flow control to avoid overwhelming a receiver by sending too many packets at once, UDP sends packets to the receiver in a continuous stream without checking for sequencing
D. TCP uses windowing to deliver packets reliably; UDP provides reliable message transfer between hosts by establishing a three-way handshake

Answer: C

NEW QUESTION 220
- (Topic 1)
What describes the operation of virtual machines?

A. Virtual machines are responsible for managing and allocating host hardware resources
B. In a virtual machine environment, physical servers must run one operating system at a time.
C. Virtual machines are the physical hardware that support a virtual environment.
D. Virtual machines are operating system instances that are decoupled from server hardware

Answer: B

NEW QUESTION 222
- (Topic 1)
Refer to the exhibit.

```
Atlanta#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Atlanta(config)#aaa new-model
Atlanta(config)#aaa authentication login default local
Atlanta(config)#line vty 0 4
Atlanta(config-line)#login authentication default
Atlanta(config-line)#exit
Atlanta(config)#username ciscoadmin password adminadmin123
Atlanta(config)#username ciscoadmin privilege 15
Atlanta(config)#enable password cisco123
Atlanta(config)#enable secret testing1234
Atlanta(config)#end
```

Which password must an engineer use to enter the enable mode?

A. adminadmin123
B. default
C. testing 1234
D. cisco123

Answer: C

Explanation:
 If neither the enable password command nor the enable secret command is configured, and if there is a line password configured for the console, the console line password serves as the enable password for all VTY sessions -> The "enable secret" will be used first if available, then "enable password" and line password.

NEW QUESTION 226
- (Topic 1)
Refer to the exhibit.
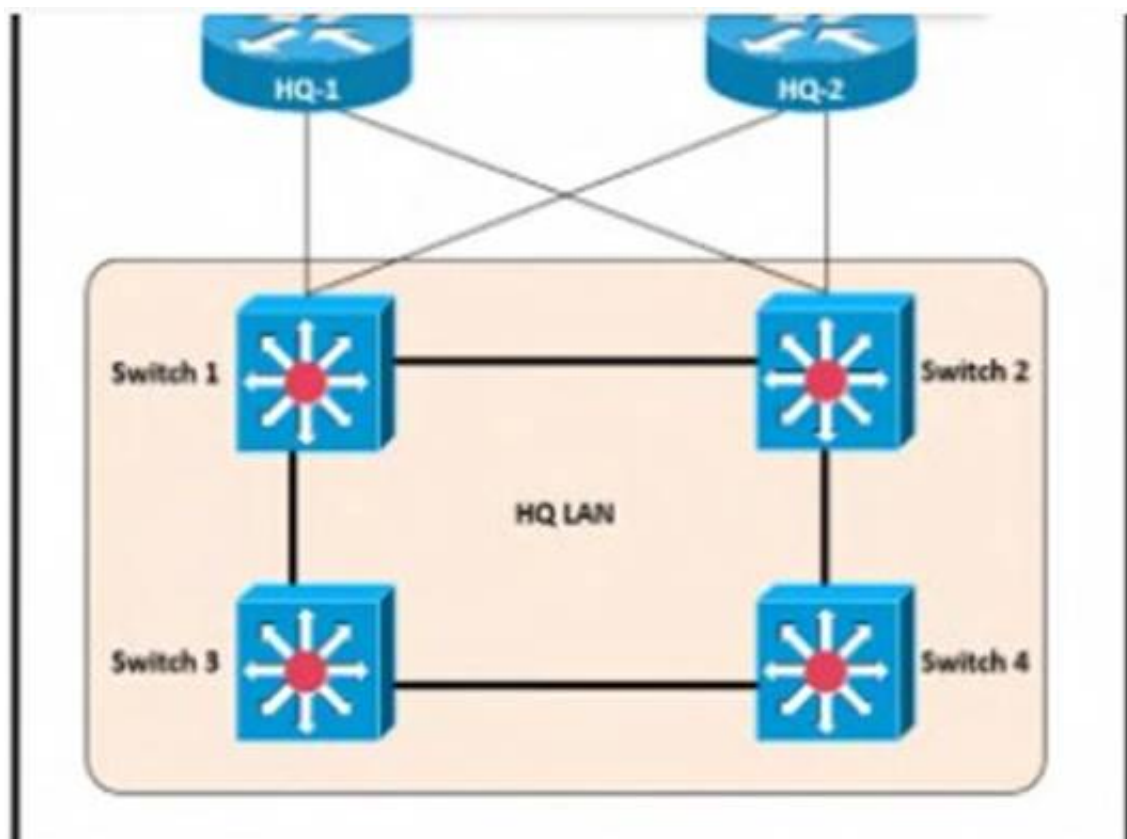
After the election process what is the root bridge in the HQ LAN?

Switch 1: 0C:E0:38:58:15:77
Switch 2: 0C:0E:15:22:1A:61
Switch 3: 0C:0E:15:1D:3C:9A
Switch 4: 0C:E0:19:A1:4D:16

A. Switch 1
B. Switch 2
C. Switch 3
D. Switch 4

Answer: C

Explanation:
 The root bridge is determined by the lowest bridge ID, which consists of the priority value and the MAC address. Because the priority values of all of the switches are not avalable, the MAC address is used to determine the root bridge. Because S3 has the lowest MAC address, S3 becomes the root bridge.

NEW QUESTION 227
DRAG DROP - (Topic 1)
Drag drop the descriptions from the left onto the correct configuration-management technologies on the right.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
The focus of Ansible is to be streamlined and fast, and to require no node agent installation.
Thus, Ansible performs all functions over SSH. Ansible is built on Python, in contrast to the Ruby foundation of Puppet and Chef.
TCP port 10002 is the command port. It may be configured in the Chef Push Jobs configuration file .
This port allows Chef Push Jobs clients to communicate with the Chef Push Jobs server. Puppet is an open-source configuration management solution, which is built with Ruby and offers custom Domain Specific Language (DSL) and Embedded Ruby (ERB) templates to create custom Puppet language files, offering a declarative-paradigm programming approach.
A Puppet piece of code is called a manifest, and is a file with .pp extension.

NEW QUESTION 229
- (Topic 1)
Refer to the exhibit.
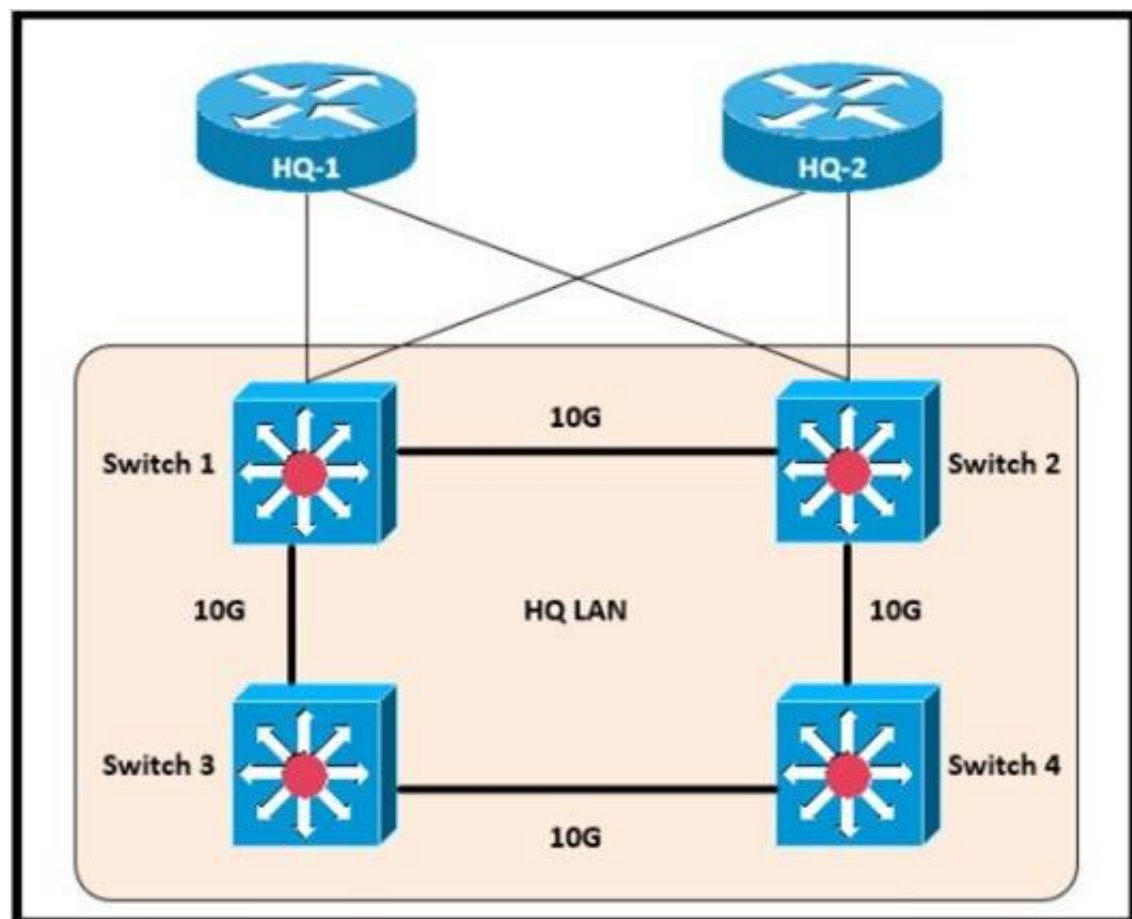
Which switch becomes the root of the spanning tree for VLAN 110?

Switch 1
VLAN 110 - 32778 0018.184e.3c00
Switch 2
VLAN 110 - 24586 001a.e3ff.a680
Switch 3
VLAN 110 - 28682 0022.55cf.cc00
Switch 4
VLAN 110 - 64000 0e38.7363.657f

A. Switch 1
B. Switch 2
C. Switch 3
D. Switch 4

Answer: B

NEW QUESTION 231
- (Topic 1)
What occurs when overlapping Wi-Fi channels are implemented?

A. The wireless network becomes vulnerable to unauthorized access.
B. Wireless devices are unable to distinguish between different SSIDs
C. Users experience poor wireless network performance.
D. Network communications are open to eavesdropping.

Answer: C

NEW QUESTION 235
- (Topic 1)
What mechanism carries multicast traffic between remote sites and supports encryption?

A. ISATAP
B. GRE over iPsec
C. iPsec over ISATAP
D. GRE

Answer: B

NEW QUESTION 237
- (Topic 1)
Which virtual MAC address is used by VRRP group 1?

A. 0050.0c05.ad81
B. 0007.c061.bc01
C. 0000.5E00.0101

D. 0500.3976.6401

Answer: C

Explanation:
 The virtual router MAC address associated with a virtual router is an IEEE 802 MAC Address in the following format:
00-00-5E-00-01-{VRID} (in hex in internet standard bit-order)

NEW QUESTION 239
- (Topic 1)
What is a characteristic of cloud-based network topology?

A. wireless connections provide the sole access method to services
B. onsite network services are provided with physical Layer 2 and Layer 3 components
C. services are provided by a public, private, or hybrid deployment
D. physical workstations are configured to share resources

Answer: A

NEW QUESTION 240
- (Topic 1)
What is a benefit of using a Cisco Wireless LAN Controller?

A. Central AP management requires more complex configurations
B. Unique SSIDs cannot use the same authentication method
C. It supports autonomous and lightweight APs
D. It eliminates the need to configure each access point individually

Answer: D

NEW QUESTION 245
- (Topic 1)
What is a practice that protects a network from VLAN hopping attacks?

A. Enable dynamic ARP inspection
B. Configure an ACL to prevent traffic from changing VLANs
C. Change native VLAN to an unused VLAN ID
D. Implement port security on internet-facing VLANs

Answer: C

NEW QUESTION 250
- (Topic 1)
What occurs to frames during the process of frame flooding?

A. Frames are sent to every port on the switch in the same VLAN except from the originating port
B. Frames are sent to every port on the switch that has a matching entry in the MAC address table.
C. Frames are sent to all ports, including those that are assigned to other VLANs.
D. Frames are sent to every port on the switch in the same VLAN.

Answer: A

NEW QUESTION 253
- (Topic 1)
What criteria is used first during the root port selection process?

A. local port ID
B. lowest path cost to the root bridge
C. lowest neighbor's bridge ID
D. lowest neighbor's port ID

Answer: B

NEW QUESTION 258
- (Topic 1)
Refer to the exhibit.

```
SW1#show spanning-tree vlan 30

VLAN0030
Spanning tree enabled protocol rstp
Root ID    Priority          32798
           Address           0025.63e9.c800
           Cost              19
           Port              1 (FastEthernet 2/1)
           Hello Time        2 sec
           Max Age           30 sec
           Forward Delay     20 sec


[Output suppressed]
```

What two conclusions should be made about this configuration? (Choose two)

A. The designated port is FastEthernet 2/1
B. This is a root bridge
C. The spanning-tree mode is Rapid PVST+
D. The spanning-tree mode is PVST+
E. The root port is FastEthernet 2/1

Answer: CE

Explanation:
An engineer is configuring data and voice services to pass through the same port. The designated switch interface fastethernet0/1 must transmit packets using the same priority for data when they are received from the access port of the IP phone. Which configuration must be used?
A)

```
interface fastethernet0/1
 switchport priority extend cos 7
```

B)

```
interface fastethernet0/1
 switchport voice vlan untagged
```

C)

```
interface fastethernet0/1
 switchport voice vlan dot1p
```

D)

```
interface fastethernet0/1
 switchport priority extend trust
```

A. Option A
B. Option B
C. Option C
D. Option D
Answer: A

NEW QUESTION 260
- (Topic 1)
Refer to the exhibit.

```
ip arp inspection vlan 2-10
interface fastethernet 0/1
        ip arp inspection trust
```

If the network environment is operating normally, which type of device must be connected to interface FastEthernet 0/1?

A. DHCP client
B. access point
C. router
D. PC

Answer: C

NEW QUESTION 263
DRAG DROP - (Topic 1)
Drag the IPv6 DNS record types from the left onto the description on the right.

AAAA	aliases one name to another
CNAME	associates the domain serial number with its owner
NS	correlates a domain with its authoritative name servers
PTR	correlates a host name with an IP address
SOA	supports reverse name lookups

A. Mastered
B. Not Mastered

Answer: A

Explanation:
https://ns1.com/resources/dns-types-records-servers-and-queries#:~:text=Address%20Mapping%20record%20(A%20Record,a%20hostname%20to%20another%20hostname.

NEW QUESTION 266
- (Topic 1)
Which command prevents passwords from being stored in the configuration as plain text on a router or switch?

A. enable secret
B. service password-encryption
C. username Cisco password encrypt
D. enable password

Answer: B

NEW QUESTION 271
- (Topic 1)
What is recommended for the wireless infrastructure design of an organization?

A. group access points together to increase throughput on a given channel
B. configure the first three access points are configured to use Channels 1, 6, and 11
C. include a least two access points on nonoverlapping channels to support load balancing
D. assign physically adjacent access points to the same Wi-Fi channel

Answer: B

NEW QUESTION 276
- (Topic 1)
What are two southbound APIs? (Choose two)

A. OpenFlow
B. NETCONF
C. Thrift
D. CORBA
E. DSC

Answer: AB

Explanation:
 OpenFlow is a well-known southbound API. OpenFlow defines the way the SDN Controller should interact with the forwarding plane to make adjustments to the network, so it can better adapt to changing business requirements.
The Network Configuration Protocol (NetConf) uses Extensible Markup Language (XML) to install, manipulate and delete configuration to network devices.

NEW QUESTION 277
- (Topic 1)
What is the purpose of a southbound API in a control based networking architecture?

A. Facilities communication between the controller and the applications
B. Facilities communication between the controller and the networking hardware
C. allows application developers to interact with the network
D. integrates a controller with other automation and orchestration tools.

Answer: B

Explanation:
 https://www.ciscopress.com/articles/article.asp?p=2995354&seqNum=2#:~:text=The%20S
outhbound%20Interface,communicate%20to%20the%20networking%20devices.&text=The
%20overall%20goal%20is%20network,from%20being%20only%20a%20protocol.
The Southbound Interface
In a controller-based network architecture, the controller needs to communicate to the networking devices.

NEW QUESTION 280
- (Topic 1)
Which function is performed by the collapsed core layer in a two-tier architecture?

A. enforcing routing policies
B. marking interesting traffic for data polices
C. attaching users to the edge of the network
D. applying security policies

Answer: A

NEW QUESTION 283
- (Topic 1)
An engineer needs to add an old switch back into a network. To prevent the switch from corrupting the VLAN database which action must be taken?

A. Add the switch in the VTP domain with a lower revision number
B. Add the switch with DTP set to dynamic desirable
C. Add the switch in the VTP domain with a higher revision number
D. Add the switch with DTP set to desirable

Answer: A

NEW QUESTION 284
- (Topic 1)
What is the function of a controller in controller-based networking?

A. It serves as the centralized management point of an SDN architecture.
B. It centralizes the data plane for the network.
C. It is the card on a core router that maintains all routing decisions for a campus.
D. It is a pair of core routers that maintain all routing decisions for a campus

Answer: A

NEW QUESTION 288
- (Topic 1)
Which network allows devices to communicate without the need to access the Internet?

A. 1729.0.0/16
B. 172.28.0.0/16
C. 192.0.0.0/8
D. 209.165.201.0/24

Answer: B

Explanation:
 The private ranges of each class of IPv4 are listed below:
Class A private IP address ranges from 10.0.0.0 to 10.255.255.255 Class B private IP address ranges from 172.16.0.0 to 172.31.255.255 Class C private IP address ranges from 192.168.0.0 to 192.168.255.255 Only the network 172.28.0.0/16 belongs to the private IP address (of class B).

NEW QUESTION 293
- (Topic 1)
How is the native VLAN secured in a network?

A. separate from other VLANs within the administrative domain
B. give it a value in the private VLAN range
C. assign it as VLAN 1
D. configure it as a different VLAN ID on each end of the link

Answer: A

NEW QUESTION 296
- (Topic 1)
Which command enables a router to become a DHCP client?

A. ip address dhcp
B. ip helper-address
C. ip dhcp pool

D. ip dhcp client

Answer: A

Explanation:
 Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_dhcp/configuration/12-4/dhcp-12-4-book/config-dhcp-client.html
If we want to get an IP address from the DHCP server on a Cisco device, we can use the command "ip address dhcp".
Note: The command "ip helper-address" enables a router to become a DHCP Relay Agent.

NEW QUESTION 301
- (Topic 1)
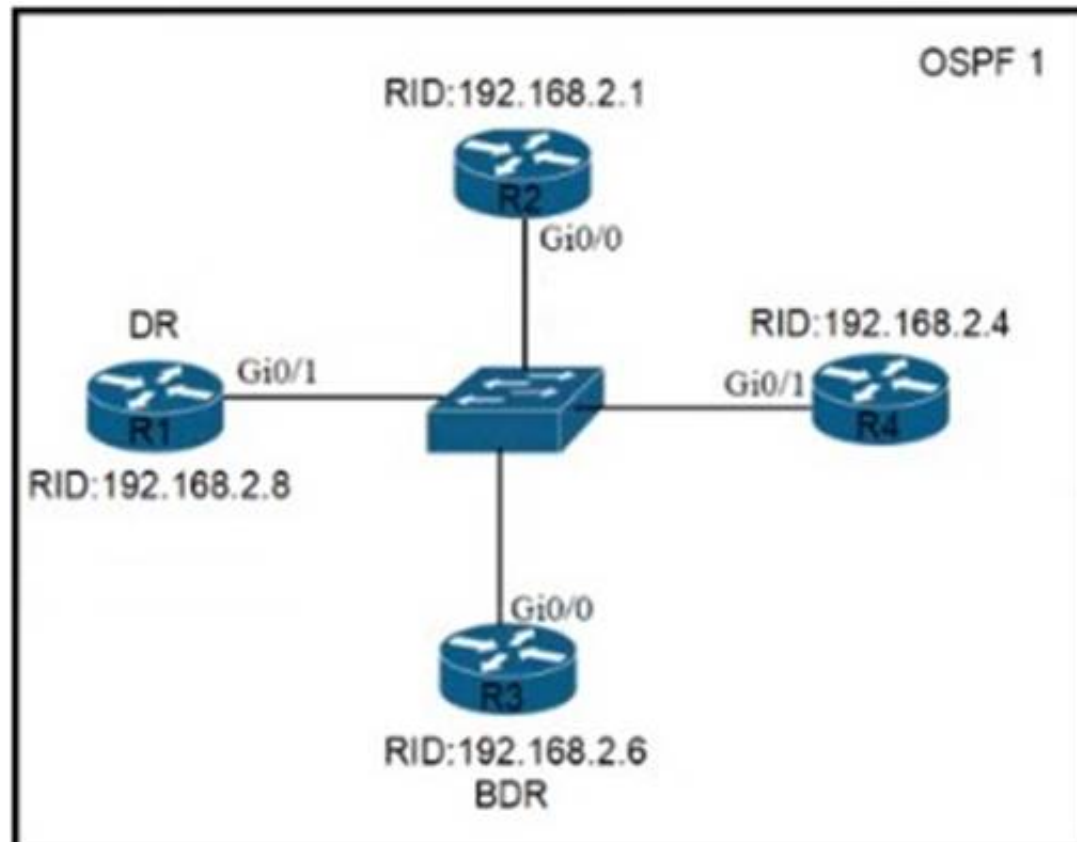
Refer to the exhibit. All routers in the network are configured R2 must be the DR. After the engineer connected the devices, R1 was elected as the DR. Which command sequence must be configure on R2 to Be elected as the DR in the network?

○ R2(config)#interface gi0/0
　R2(config-if)#ip ospf priority 1

○ R2(config)#interface gi0/0
　R2(config-if)#ip ospf priority 100

○ R2(config)#router ospf 1
　R2(config-router)#router-id 10.100.100.100

○ R2(config)#router ospf 1
　R2(config-router)#router-id 192.168.2.7

A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

NEW QUESTION 305
- (Topic 1)
What does a router do when configured with the default DNS lookup settings, and a URL is entered on the CLI?

A. initiates a ping request to the URL
B. prompts the user to specify the desired IP address
C. continuously attempts to resolve the URL until the command is cancelled
D. sends a broadcast message in an attempt to resolve the URL

Answer: D

NEW QUESTION 310
- (Topic 1)
In which two ways does a password manager reduce the chance of a hacker stealing a users password? (Choose two.)

A. It automatically provides a second authentication factor that is unknown to the original user.
B. It uses an internal firewall to protect the password repository from unauthorized access.
C. It protects against keystroke logging on a compromised device or web site.

D. It stores the password repository on the local workstation with built-in antivirus and anti- malware functionality
E. It encourages users to create stronger passwords.

Answer: CE

NEW QUESTION 315
- (Topic 1)
An email user has been lured into clicking a link in an email sent by their company's security organization. The webpage that opens reports that it was safe but the link could have contained malicious code. Which type of security program is in place?

A. Physical access control
B. Social engineering attack
C. brute force attack
D. user awareness

Answer: D

Explanation:
This is a training program which simulates an attack, not a real attack (as it says "The webpage that opens reports that it was safe") so we believed it should be called a "user awareness" program.Therefore the best answer here should be "user awareness". This is the definition of"User awareness" from CCNA 200- 301 Offical Cert Guide Book:"User awareness: All users should be made aware of the need for data confidentiality to protect corporate information, as well as their own credentials and personal information. They should also be made aware of potential threats, schemes to mislead, and proper procedures to report security incidents. " Note: Physical access control means infrastructure locations, such as network closets and data centers, should remain securely locked.

NEW QUESTION 318
- (Topic 1)
What is a function of the Cisco DNA Center Overall Health Dashboard?

A. It provides a summary of the top 10 global issues.
B. It provides detailed activity logging for the 10 devices and users on the network.
C. It summarizes the operational status of each wireless devise on the network.
D. It summarizes daily and weekly CPU usage for servers and workstations in the network.

Answer: A

NEW QUESTION 321
- (Topic 1)
Which output displays a JSON data representation?

A.
```
{
    "response": {
    "taskId": {};
    "url": "string"
    };
    "version": "string"
}
```

B.
```
{
    "response"- {
    "taskId"- {},
    "url"- "string"
    },
    "version"- "string"
}
```

C.
```
{
    "response": {
    "taskId": {},
    "url": "string"
    },
    "version": "string"
}
```

D.
```
{
    "response". {
    "taskId". {};
    "url". "string"
    };
    "version". "string"
}
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

Explanation:
JSON data is written as name/value pairs.A name/value pair consists of a field name (in double quotes), followed by a colon, followed by a value:"name":"Mark"JSON can use arrays. Array values must be of type string, number, object, array, boolean or null.For example:{"name":"John","age":30,"cars":["Ford", "BMW", "Fiat"]}JSON can have empty object like "taskId":{}

NEW QUESTION 323
DRAG DROP - (Topic 1)
Drag and drop the IPv6 address type characteristics from the left to the right.

	Link-Local Address
attached to a single subnet	
addresses with prefix FC00::/7	
configured only once per interface	Unique Local Address
addressing for exclusive use internally without Internet routing	

A. Mastered

B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 326
- (Topic 1)
When configuring IPv6 on an interface, which two IPv6 multicast groups are joined? (Choose two)

A. 2000::/3
B. 2002::5
C. FC00::/7
D. FF02::1
E. FF02::2

Answer: DE

Explanation:
 Reference:
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipv6/configuration/xe-3s/ipv6-xe-36s-book/ip6-multicast.html
When an interface is configured with IPv6 address, it automatically joins the all nodes (FF02::1) and solicited-node (FF02::1:FFxx:xxxx) multicast groups. The all-node group is used to communicate with all interfaces on the local link, and the solicited-nodes multicast group is required for link-layer address resolution. Routers also join a third multicast group, the all-routers group (FF02::2).

NEW QUESTION 328
- (Topic 1)
Which protocol does an IPv4 host use to obtain a dynamically assigned IP address?

A. ARP
B. DHCP
C. CDP
D. DNS

Answer: B

Explanation:
https://www.geeksforgeeks.org/how-dhcp-server-dynamically-assigns-ip-address-to-a-
host/#:~:text=DHCP%20is%20an%20abbreviation%20for,subnet%20mask%20and%20gat eway%20address.

NEW QUESTION 332
- (Topic 1)
Refer to the exhibit.

Which type of configuration is represented in the output?

A. Ansible
B. JSON
C. Chef
D. Puppet

Answer: D

NEW QUESTION 337

- (Topic 1)
Which function does the range of private IPv4 addresses perform?

A. allows multiple companies to each use the same addresses without conflicts
B. provides a direct connection for hosts from outside of the enterprise network
C. ensures that NAT is not required to reach the internet with private range addressing
D. enables secure communications to the internet for all external hosts

Answer: A

NEW QUESTION 340
- (Topic 1)
By default, how Does EIGRP determine the metric of a route for the routing table?

A. it uses the bandwidth and delay values of the path to calculate the route metric
B. it uses a default metric of 10 for all routes that are learned by the router
C. it uses a reference Bandwidth and the actual bandwidth of the connected link to calculate the route metric
D. it counts the number of hops between the receiving and destination routers and uses that value as the metric

Answer: A

NEW QUESTION 345
- (Topic 1)
When DHCP is configured on a router, which command must be entered so the default gateway is automatically distributed?

A. default-router
B. default-gateway
C. ip helper-address
D. dns-server

Answer: A

NEW QUESTION 346
- (Topic 1)
Refer to the exhibit.
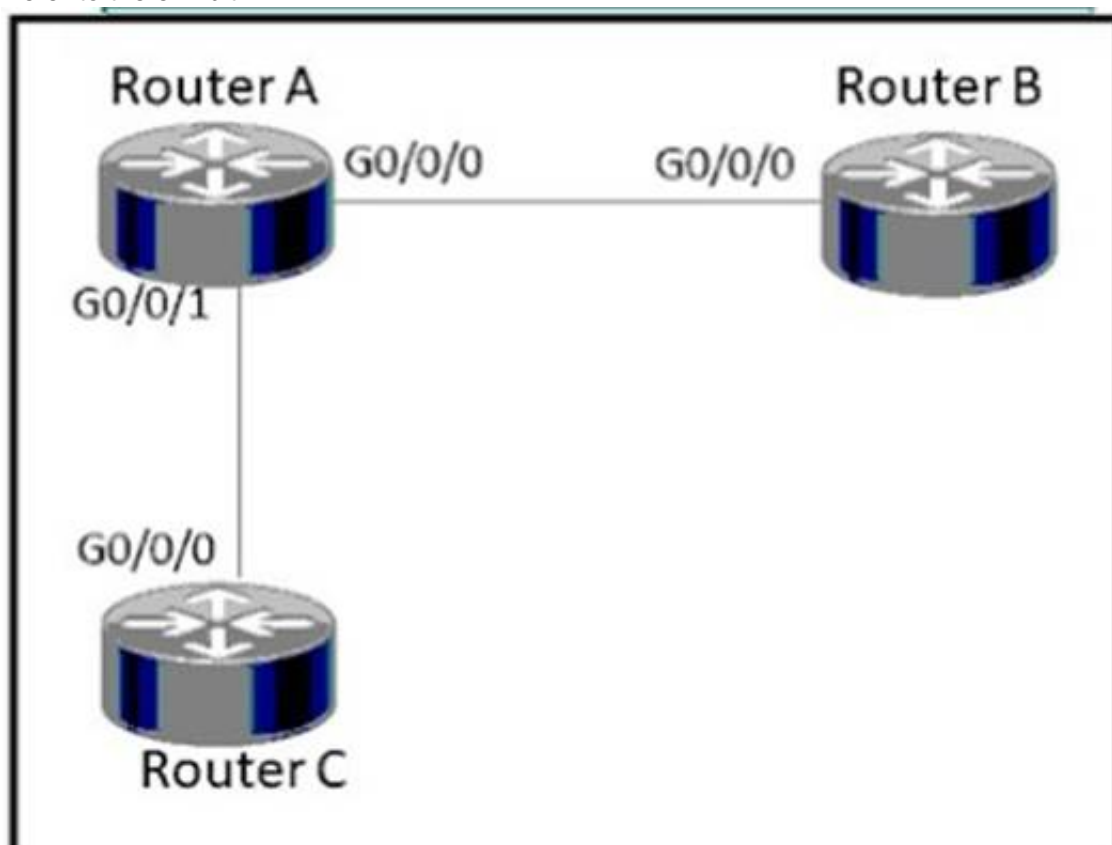
How must router A be configured so that it only sends Cisco Discovery Protocol Information to router C?

```
 #config t
    Router A (config)#cdp run
    Router A (config)#interface gi0/0/0
    Router A (config-if)#no cdp enable

 #config t
    Router A (config)#cdp run
    Router A (config)#interface gi0/0/0
    Router A (config-if)#cdp enable

 #config t
    Router A (config)#cdp run
    Router A (config)#interface gi0/0/1
    Router A (config-if)#cdp enable

 #config t
    Router A (config)#no cdp run
    Router A (config)#interface gi0/0/1
    Router A (config-if)#cdp enable
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: D

NEW QUESTION 348
- (Topic 1)
Refer to the exhibit.


```
OSPF Area 0

        Gi0/0        Gi0/0        Gi0/0
        R3           R4           R5
        3.3.3.3       4.4.4.4      5.5.5.5

R3# show ip ospf neighbor

Neighbor ID    Pri   State          Dead Time   Address        Interface
1.1.1.1        1     2WAY/DROTHER   00:00:32    172.16.10.1    GigabitEthernet0/0
2.2.2.2        1     2WAY/DROTHER   00:00:33    172.16.10.2    GigabitEthernet0/0
4.4.4.4        1     FULL/BDR       00:00:31    172.16.10.4    GigabitEthernet0/0
5.5.5.5        1     FULL/DR        00:00:30    172.16.10.5    GigabitEthernet0/0
```
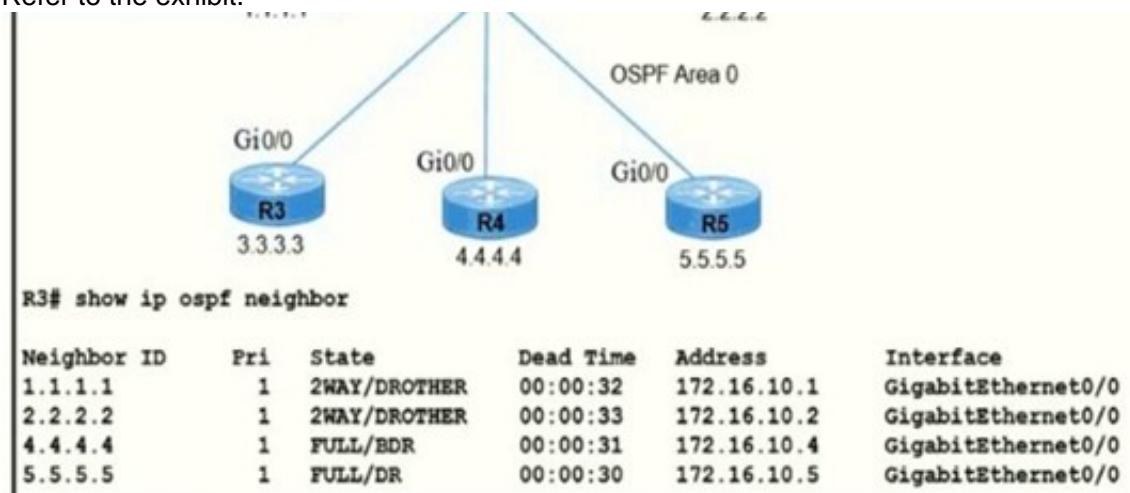
R5 is the current DR on the network, and R4 is the BDR. Their interfaces are flapping, so a network engineer wants the OSPF network to elect a different DR and BDR. Which set of configurations must the engineer implement?

A)
```
R4(config)#interface gi0/0
R4(config-if)#ip ospf priority 20

R5(config)#interface gi0/0
R5(config-if)#ip ospf priority 10
```

B)
```
R2(config)#interface gi0/0
R2(config-if)#ip ospf priority 259

R3(config)#interface gi0/0
R3(config-if)#ip ospf priority 256
```

C)
```
R5(config)#interface gi0/0
R5(config-if)#ip ospf priority 120

R4(config)#interface gi0/0
R4(config-if)#ip ospf priority 110
```

D)

```
R3(config)#interface gi0/0
R3(config-if)#ip ospf priority 255

R2(config)#interface gi0/0
R2(config-if)#ip ospf priority 240
```

A. Option
B. Option
C. Option
D. Option

Answer: D

NEW QUESTION 351
- (Topic 1)
Aside from discarding, which two states does the switch port transition through while using RSTP (802.1w)? (Choose two)

A. listening
B. blocking
C. forwarding
D. learning
E. speaking

Answer: CD

NEW QUESTION 354
- (Topic 1)
What are two functions of an SDN controller? (Choose two)

A. Layer 2 forwarding
B. coordinating VTNs
C. tracking hosts
D. managing the topology
E. protecting against DDoS attacks

Answer: BD

NEW QUESTION 359
- (Topic 1)
What is a function of a remote access VPN?

A. used cryptographic tunneling to protect the privacy of data for multiple users simultaneously
B. used exclusively when a user is connected to a company's internal network
C. establishes a secure tunnel between two branch sites
D. allows the users to access company internal network resources through a secure tunnel

Answer: D

NEW QUESTION 361
- (Topic 1)
Which type of address is the public IP address of a NAT device?

A. outside global
B. outsdwde local
C. inside global
D. insride local
E. outside public
F. inside public

Answer: C

Explanation:
 NAT use four types of addresses:* Inside local address – The IP address assigned to a host on the inside network. The address is usually not an IP address assigned by the Internet Network Information Center (InterNIC) or service provider.This address is likely to be an RFC 1918 private address.* Inside global address – A legitimate IP address assigned by the InterNIC or service provider that represents one or more inside local IP addresses to the outside world.* Outside local address – The IP address of an outside host as it is known to the hosts on the inside network.* Outside global address – The IP address assigned to a host on the outside network. The owner of the host assigns
this address.

NEW QUESTION 364
- (Topic 1)
What is a similarity between OM3 and OM4 fiber optic cable?

A. Both have a 50 micron core diameter
B. Both have a 9 micron core diameter
C. Both have a 62.5 micron core diameter

D. Both have a 100 micron core diameter

Answer: A

NEW QUESTION 369
DRAG DROP - (Topic 1)
Drag and drop the attack-mitigation techniques from the left onto the Types of attack that they mitigate on the right.

configure 802.1x authentication	802.1q double-tagging VLAN-hopping attack
configure DHCP snooping	MAC flooding attack
configure the native VLAN with a nondefault VLAN ID	man-in-the-middle spoofing attack
disable DTP	switch-spoofing VLAN-hopping attack

A. Mastered
B. Not Mastered

Answer: A

Explanation:

configure 802.1x authentication	configure the native VLAN with a nondefault VLAN ID
configure DHCP snooping	configure 802.1x authentication
configure the native VLAN with a nondefault VLAN ID	configure DHCP snooping
disable DTP	disable DTP

NEW QUESTION 373
- (Topic 1)
Which type of security program is violated when a group of employees enters a building using the ID badge of only one person?

A. intrusion detection
B. user awareness
C. physical access control
D. network authorization

Answer: C

NEW QUESTION 375
- (Topic 1)
If a notice-level messaging is sent to a syslog server, which event has occurred?

A. A network device has restarted
B. An ARP inspection has failed
C. A routing instance has flapped
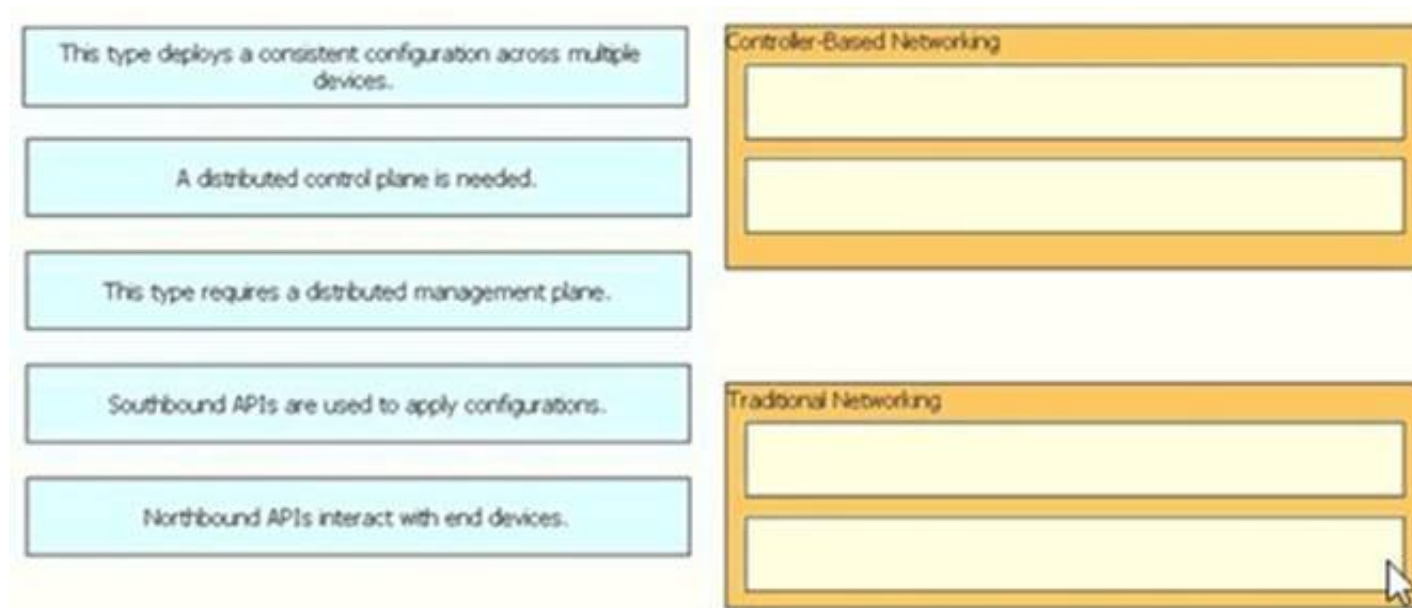D. A debug operation is running

Answer: C

Explanation:
 Usually no action is required when a route flaps so it generates the notification syslog level message (level 5).
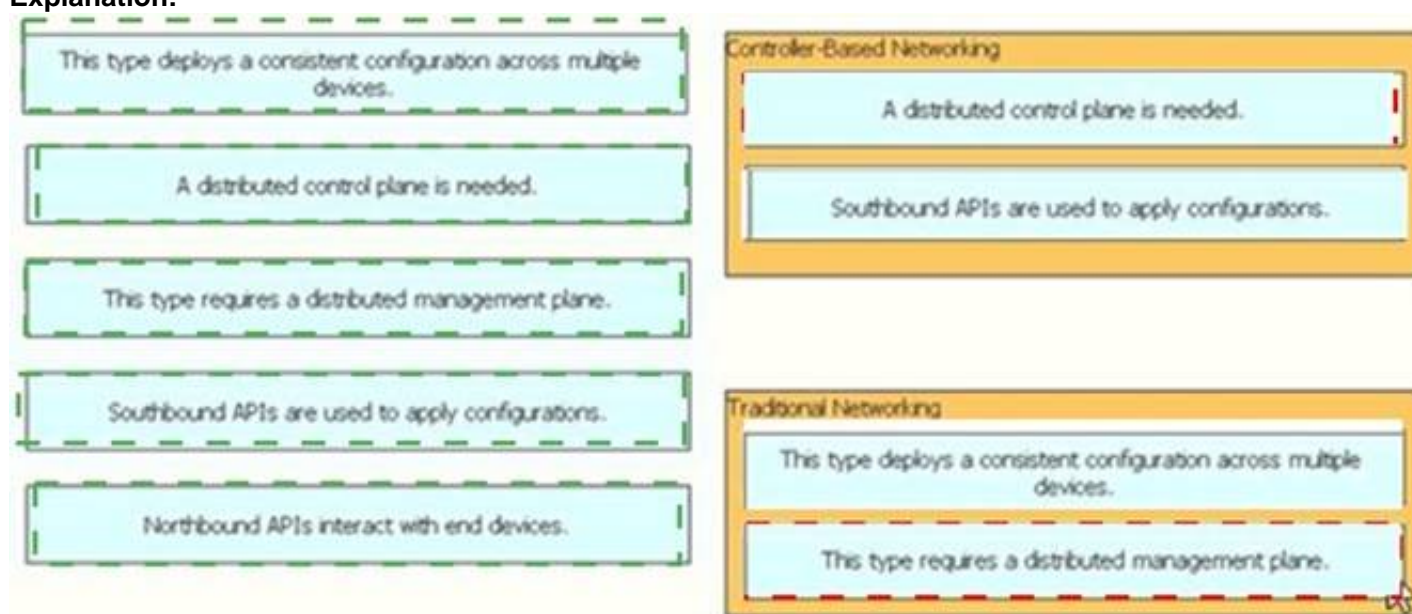
NEW QUESTION 379
DRAG DROP - (Topic 1)
Drag and drop the statement about networking from the left into the Corresponding networking types on the right. Not all statements are used.

This type deploys a consistent configuration across multiple devices.	Controller-Based Networking
A distributed control plane is needed.	
This type requires a distributed management plane.	
Southbound APIs are used to apply configurations.	Traditional Networking
Northbound APIs interact with end devices.	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

This type deploys a consistent configuration across multiple devices.	Controller-Based Networking
	A distributed control plane is needed.
A distributed control plane is needed.	Southbound APIs are used to apply configurations.
This type requires a distributed management plane.	
Southbound APIs are used to apply configurations.	Traditional Networking
Northbound APIs interact with end devices.	This type deploys a consistent configuration across multiple devices.
	This type requires a distributed management plane.

NEW QUESTION 380
- (Topic 1)
An organization has decided to start using cloud-provided services. Which cloud service allows the organization to install its own operating system on a virtual machine?

A. platform-as-a-service
B. software-as-a-service
C. network-as-a-service
D. infrastructure-as-a-service

Answer: B

Explanation:
Below are the 3 cloud supporting services cloud providers provide to customer:
+ SaaS (Software as a Service): SaaS uses the web to deliver applications that are managed by a thirdparty vendor and whose interface is accessed on the clients' side. Most SaaS applications can be run directly from a web browser without any downloads or installations required, although some require plugins.
+ PaaS (Platform as a Service): are used for applications, and other development, while providing cloud components to software. What developers gain with PaaS is a framework they can build upon to develop or customize applications. PaaS makes the development, testing, and deployment of applications quick, simple, and cost-effective. With this technology, enterprise operations, or a thirdparty provider, can manage OSes, virtualization, servers, storage, networking, and the PaaS software itself. Developers, however, manage the applications.
+ IaaS (Infrastructure as a Service): self-service models for accessing, monitoring, and managing remote datacenter infrastructures, such as compute (virtualized or bare metal), storage, networking, and networking services (e.g. firewalls). Instead of having to purchase hardware outright, users can purchase IaaS based on consumption, similar to electricity or other utility billing.
In general, IaaS provides hardware so that an organization can install their own operating system.

NEW QUESTION 381
- (Topic 1)
Which 802.11 management frame type is sent when a client roams between access points on the same SSID?

A. Reassociation Request
B. Probe Request
C. Authentication Request
D. Association Request

Answer: A

NEW QUESTION 384
DRAG DROP - (Topic 1)
A network engineer is configuring an OSPFv2 neighbor adjacency Drag and drop the parameters from the left onto their required categories on the right. Not all parameters are used

	must be unique
netmask	
OSPF process ID	
router ID	must match
IP address	
area ID	
timers	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

	must be unique
netmask	IP address
OSPF process ID	router ID
router ID	must match
	area ID
IP address	netmask
area ID	timers
timers	

NEW QUESTION 388
- (Topic 1)
Which IPv6 address block sends packets to a group address rather than a single address?

A. 2000::/3
B. FC00::/7
C. FE80::/10
D. FF00::/8

Answer: D

Explanation:
 FF00::/8 is used for IPv6 multicast and this is the IPv6 type of address the question wants to ask.FE80::/10 range is used for link-local addresses. Link-local addresses only used for communications within the local subnetwork (automatic address configuration, neighbor discovery, router discovery, and by many routing protocols). It is only valid on the current subnet.It is usually created dynamically using a link-local prefix of FE80::/10 and a 64-bit interface identifier (based on 48-bit MAC address).

NEW QUESTION 392
- (Topic 1)
What is the role of a firewall in an enterprise network?

A. Forwards packets based on stateless packet inspection
B. Processes unauthorized packets and allows passage to less secure segments of the network
C. determines which packets are allowed to cross from unsecured to secured networks
D. explicitly denies all packets from entering an administrative domain

Answer: C

NEW QUESTION 394
SIMULATION - (Topic 5)
Physical connectivity is implemented between the two Layer 2 switches, and the network connectivity between them must be configured.
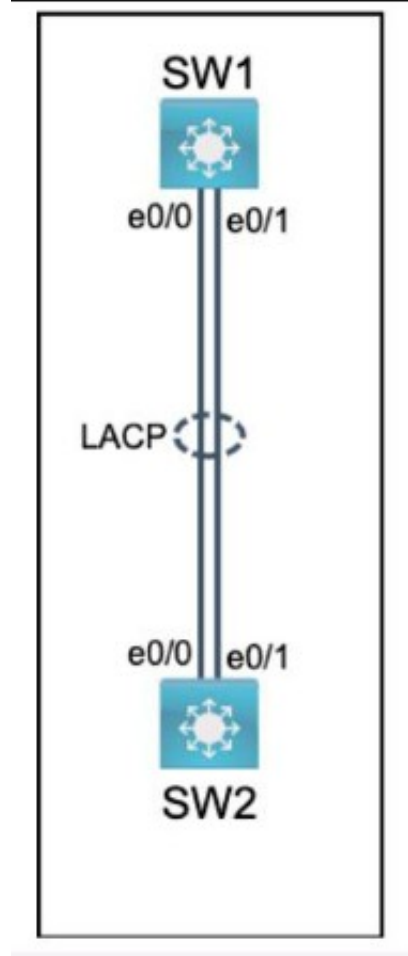* I . Configure an LACP EtherChannel and number it as 44; configure it between switches SWI and SW2 using interfaces EthernetO/O and Ethernet0/1 on both sides. The LACP mode must match on both ends.
* 2. Configure the EtherChannel as a trunk link.
* 3. Configure the trunk link with 802. Iq tags.
* 4. Configure VLAN 'MONITORING' as the untagged VLAN of the EtherChannel.
===================
Guidelines
This is a lab item in which tasks will be performed on virtual devices.
• Refer to the Tasks tab to view the tasks for this lab item.
• Refer to the Topology tab to access the device console(s) and perform the tasks.
• Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
• All necessary preconfigurations have been applied.
• Do not change the enable password or hostname for any device.
• Save your configurations to NVRAM before moving to the next item.
• Click Next at the bottom of the screen to submit this lab and move to the next question.
• When Next is clicked, the lab closes and cannot be reopened.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
To configure an LACP EtherChannel and number it as 44, configure it between switches SW1 and SW2 using interfaces Ethernet0/0 and Ethernet0/1 on both sides, configure the EtherChannel as a trunk link, configure the trunk link with 802.1q tags, and configure VLAN 'MONITORING' as the untagged VLAN of the EtherChannel, you need to follow these steps:
? On both SW1 and SW2, enter the global configuration mode by using the
configure terminal command.
? On both SW1 and SW2, select the two interfaces that will form the EtherChannel by using the interface range ethernet 0/0 - 1 command. This will enter the interface range configuration mode.
? On both SW1 and SW2, set the protocol to LACP by using the channel-protocol
lacp command.
? On both SW1 and SW2, assign the interfaces to an EtherChannel group number 44 by using the channel-group 44 mode active command. This will create a logical interface named Port-channel44 and set the LACP mode to active on both ends. The LACP mode must match on both ends for the EtherChannel to form.
? On both SW1 and SW2, exit the interface range configuration mode by using the exit command.
? On both SW1 and SW2, enter the Port-channel interface configuration mode by using the interface port-channel 44 command.
? On both SW1 and SW2, configure the Port-channel interface as a trunk link by using the switchport mode trunk command.
? On both SW1 and SW2, configure the Port-channel interface to use 802.1q tags for VLAN identification by using the switchport trunk encapsulation dot1q command.
? On both SW1 and SW2, configure VLAN 'MONITORING' as the untagged VLAN of the Port-channel interface by using the switchport trunk native vlan MONITORING command.
? On both SW1 and SW2, exit the Port-channel interface configuration mode by using the exit command.
? On both SW1 and SW2, save the configuration to NVRAM by using the copy running-config startup-config command.

NEW QUESTION 396
SIMULATION - (Topic 5)
Connectivity between four routers has been established. IP connectivity must be configured in the order presented to complete the implementation. No dynamic

routing protocols are included.
* 1. Configure static routing using host routes to establish connectivity from router R3 to the router R1 Loopback address using the source IP of 209.165.200.230.
* 2. Configure an IPv4 default route on router R2 destined for router R4.
* 3. Configure an IPv6 default router on router R2 destined for router R4.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Answer as below configuration:
* 1.- on R3
config terminal
ip route 192.168.1.1 255.255.255.255 209.165.200.229
end
copy running start
* 2.- on R2
config terminal
ip route 0.0.0.0 0.0.0.0 209.165.202.130
end
copy running start
* 3.- on R2
config terminal
ipv6 route ::/0 2001:db8:abcd::2 end
copy running start

NEW QUESTION 397
SIMULATION - (Topic 5)

L1: 192.168.1.1/24
L0: 10.10.1.1/32

OSPF Process ID 1
Area 0

E0/0   R1   E0/1
.1   .1

10.10.12.0/24   10.10.13.0/24

E0/0   .2   .3   E0/1
.2   10.10.23.0/24   .3
R2   E0/2   E0/2   R3

L0: 10.10.2.2/32   L0: 10.10.3.3/32
L1: 192.168.2.2/24   L1: 192.168.3.3/24

Topology Diagram

Guidelines

This is a lab item in which tasks will be performed on virtual devices.
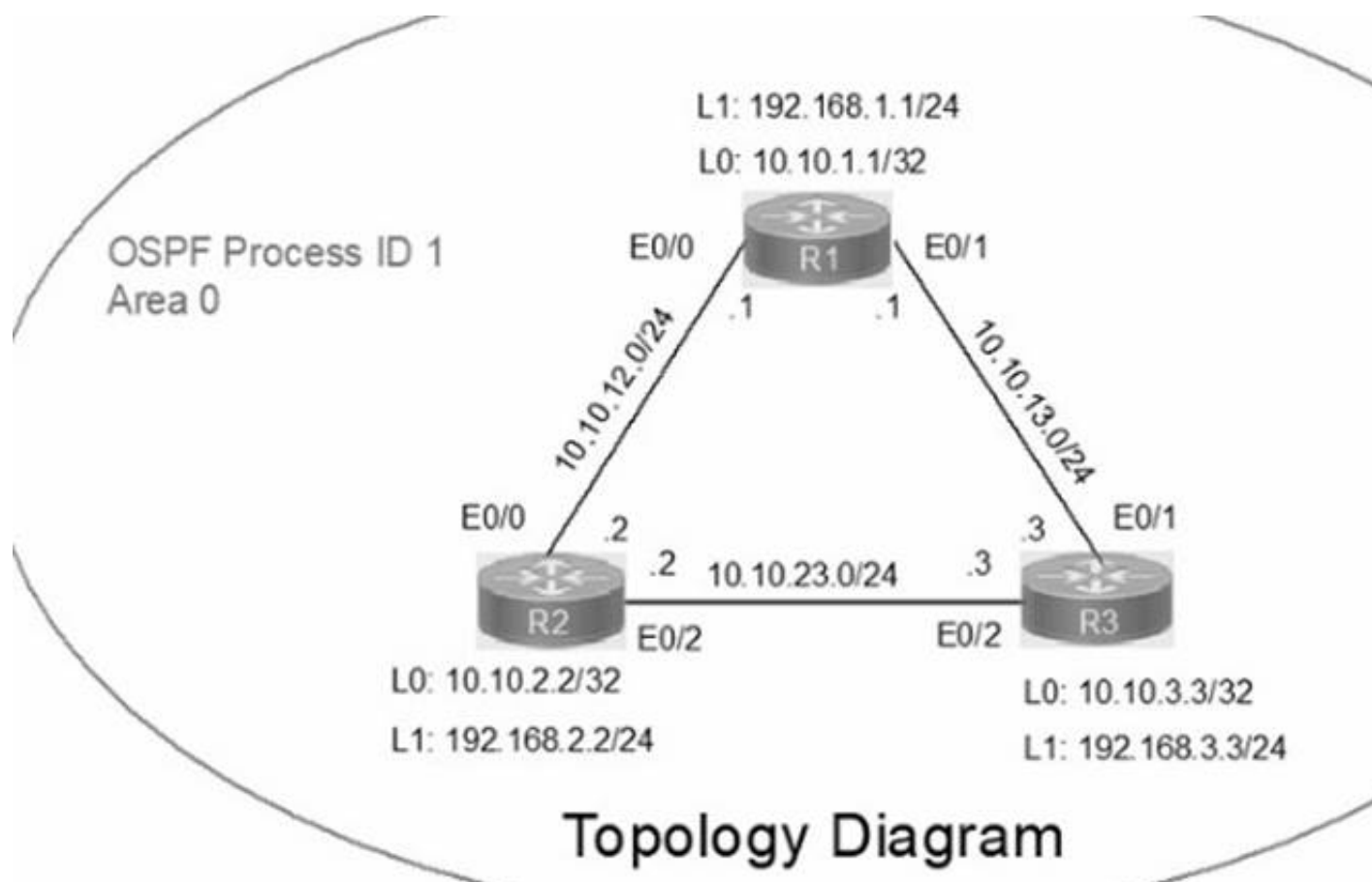
- Refer to the **Tasks** tab to view the tasks for this lab item.
- Refer to the **Topology** tab to access the device console(s) and perform the tasks.
- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary preconfigurations have been applied.
- Do not change the enable password or hostname for any device.
- **Save your configurations** to NVRAM before moving to the next item.
- Click **Next** at the bottom of the screen to submit this lab and move to the next question.
- When **Next** is clicked, the lab closes and cannot be reopened.

IP connectivity between the three routers is configured. OSPF adjacencies must be established.
* 1. Configure R1 and R2 Router IDs using the interface IP addresses from the link that is shared between them.
* 2. Configure the R2 links with a max value facing R1 and R3. R2 must become the DR. R1 and R3 links facing R2 must remain with the default OSPF configuration for DR election. Verify the configuration after clearing the OSPF process.
* 3. Using a host wildcard mask, configure all three routers to advertise their respective Loopback1 networks.
* 4. Configure the link between R1 and R3 to disable their ability to add other OSPF routers.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Answer as below configuration:
on R1
conf terminal interface Loopback0
ip address 10.10.1.1 255.255.255.255
!
interface Loopback1
ip address 192.168.1.1 255.255.255.0
!
interface Ethernet0/0 no shut
ip address 10.10.12.1 255.255.255.0
ip ospf 1 area 0 duplex auto
!
interface Ethernet0/1 no shut
ip address 10.10.13.1 255.255.255.0
ip ospf 1 area 0 duplex auto
!
router ospf 1
router-id 10.10.12.1
network 10.10.1.1 0.0.0.0 area 0
network 192.168.1.0 0.0.0.255 area 0
!
copy run star

On R2
conf terminal interface Loopback0
ip address 10.10.2.2 255.255.255.255
!

```
interface Loopback1
ip address 192.168.2.2 255.255.255.0
!
interface Ethernet0/0
no shut
ip address 10.10.12.2 255.255.255.0
ip ospf priority 255 ip ospf 1 area 0 duplex auto
!
interface Ethernet0/2 no shut
ip address 10.10.23.2 255.255.255.0
ip ospf priority 255 ip ospf 1 area 0 duplex auto
!
router ospf 1
network 10.10.2.2 0.0.0.0 area 0
network 192.168.2.0 0.0.0.255 area 0
!
copy runs start
----------------------
On R3
conf ter
interface Loopback0
ip address 10.10.3.3 255.255.255.255
!
interface Loopback1
ip address 192.168.3.3 255.255.255.0
!
interface Ethernet0/1 no shut
ip address 10.10.13.3 255.255.255.0
ip ospf 1 area 0 duplex auto
!
interface Ethernet0/2 no shut
ip address 10.10.23.3 255.255.255.0
ip ospf 1 area 0 duplex auto
!
router ospf 1
network 10.10.3.3 0.0.0.0 area 0
network 192.168.3.0 0.0.0.255 area 0
!
copy run start
!
```

NEW QUESTION 399
- (Topic 4)
Which IPsec encryption mode is appropriate when the destination of a packet differs from the security termination point?

A. tunnel
B. transport
C. aggressive
D. main

Answer: B

Explanation:
IPsec encryption mode is the way IPsec secures the data packets that are sent over an IP network. There are two main modes of IPsec encryption: tunnel mode and transport mode1. Tunnel mode encrypts the entire IP packet, including the original header, and adds a new IP header with the source and destination addresses of the security gateways (routers, firewalls, or VPN servers) that perform the encryption and decryption2. Transport mode encrypts only the payload (data) of the IP packet, leaving the original header intact, and uses the original source and destination addresses of the endpoints that generate and consume the data3. Therefore, transport mode is appropriate when the destination of a packet differs from the security termination point, as it does not change the original IP header information. Tunnel mode is more suitable when the security termination point is also the destination of the packet, as it provides more protection for the original IP header information.

NEW QUESTION 401
DRAG DROP - (Topic 4)
Drag and drop the statements about networking from me left onto the corresponding networking types on the right

	Traditional Networking
This type implements changes individually at each device.	
This type leverages controllers to handle network management.	
Maintenance costs are higher than with other networking options.	
This type provides a centralized view of the network.	Controller-Based Networking

A. Mastered
B. Not Mastered

Answer: A

Explanation:

	Traditional Networking
This type implements changes individually at each device.	This type implements changes individually at each device.
This type leverages controllers to handle network management.	Maintenance costs are higher than with other networking options.
Maintenance costs are higher than with other networking options.	Controller-Based Networking
This type provides a centralized view of the network.	This type leverages controllers to handle network management.
	This type provides a centralized view of the network.

NEW QUESTION 405
- (Topic 4)
Which WLC interface provides out-of-band management in the Cisco Unified Wireless Network Architecture?

A. service port
B. virtual
C. AP-Manager
D. dynamic

Answer: A

NEW QUESTION 406
- (Topic 4)
How do TCP and UDP fit into a query-response model?

A. TCP establishes a connection prior to sending data, and UDP sends immediately.
B. TCP uses error detection for packets, and UDP uses error recovery.
C. TCP avoids using sequencing, and UDP avoids using acknowledgments.
D. TCP encourages out-of-order packet delivery, and UDP prevents re-ordering.

Answer: A

NEW QUESTION 407
- (Topic 4)
Refer to the exhibit.

```
R1#show ip route
Gateway of last resort is 10.10.10.2 to network 0.0.0.0
S*    0.0.0.0/0 [1/0] via 10.10.10.2

R2#show ip route
Gateway of last resort is 10.10.10.1 to network 0.0.0.0
S*    0.0.0.0/0 [1/0] via 10.10.10.1
```

The image server and client A are running an application that transfers an extremely high volume of data between the two. An engineer is configuring a dedicated circuit between R1 and R2. Which set of commands must the engineer apply to the routers so that only traffic between the image server and client A is forces to use the new circuit?
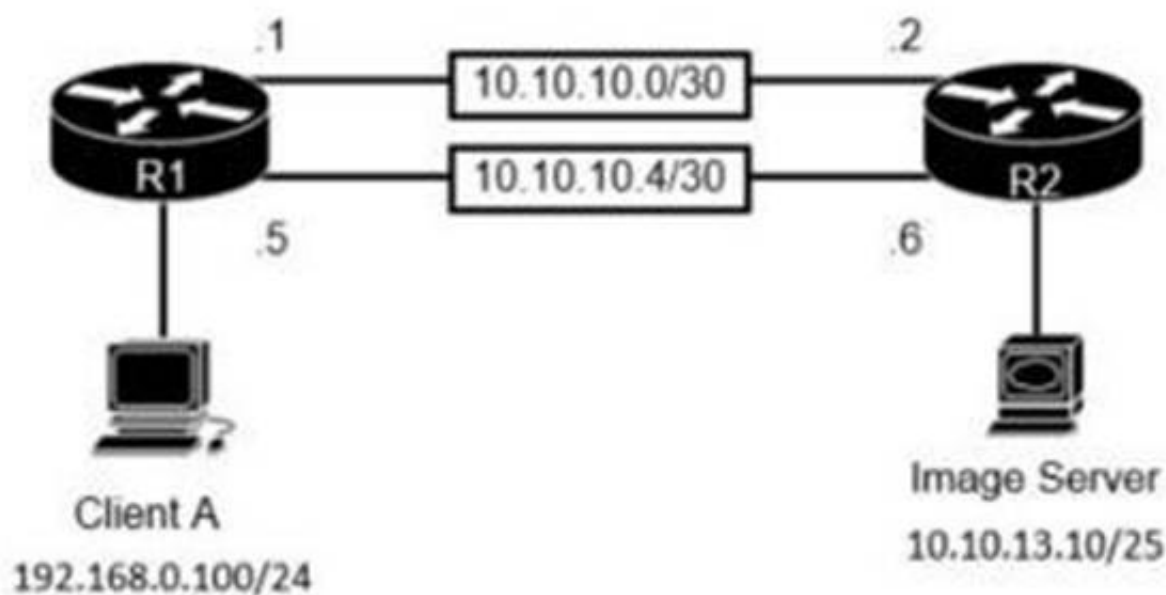
A. R1(config)#ip route 10.10.13.10 255.255.255.255 10.10.10.6R2(config)#ip route 192.168.0.100 255.255.255.255 10.10.10.5
B. R1(config)#ip route 10.10.13.10 255.255.255.128 10.10.10.6R2(config)#lp route 192.168.0.100 255.255.255.0 10.10.10.5
C. R1(config)#ip route 10.10.13.10 255.255.255.252 10.10.10.6R2(config)#tp route 192.168.0.100 255.255.255.252 10.10.10.5
D. R1(config)#ip route 10.10.13.10 255.255.255.255 10.10.10.2R2(config)#ip route 192.168.0.100 255.255.255.255 10.10.10.1

Answer: D

NEW QUESTION 409
- (Topic 4)
What is a reason to implement IPv4 private addressing?

A. Reduce the risk of a network security breach
B. Comply with PCI regulations
C. Comply with local law
D. Reduce the size of the forwarding table on network routers

Answer: D

NEW QUESTION 411
- (Topic 4)
Refer to the exhibit.
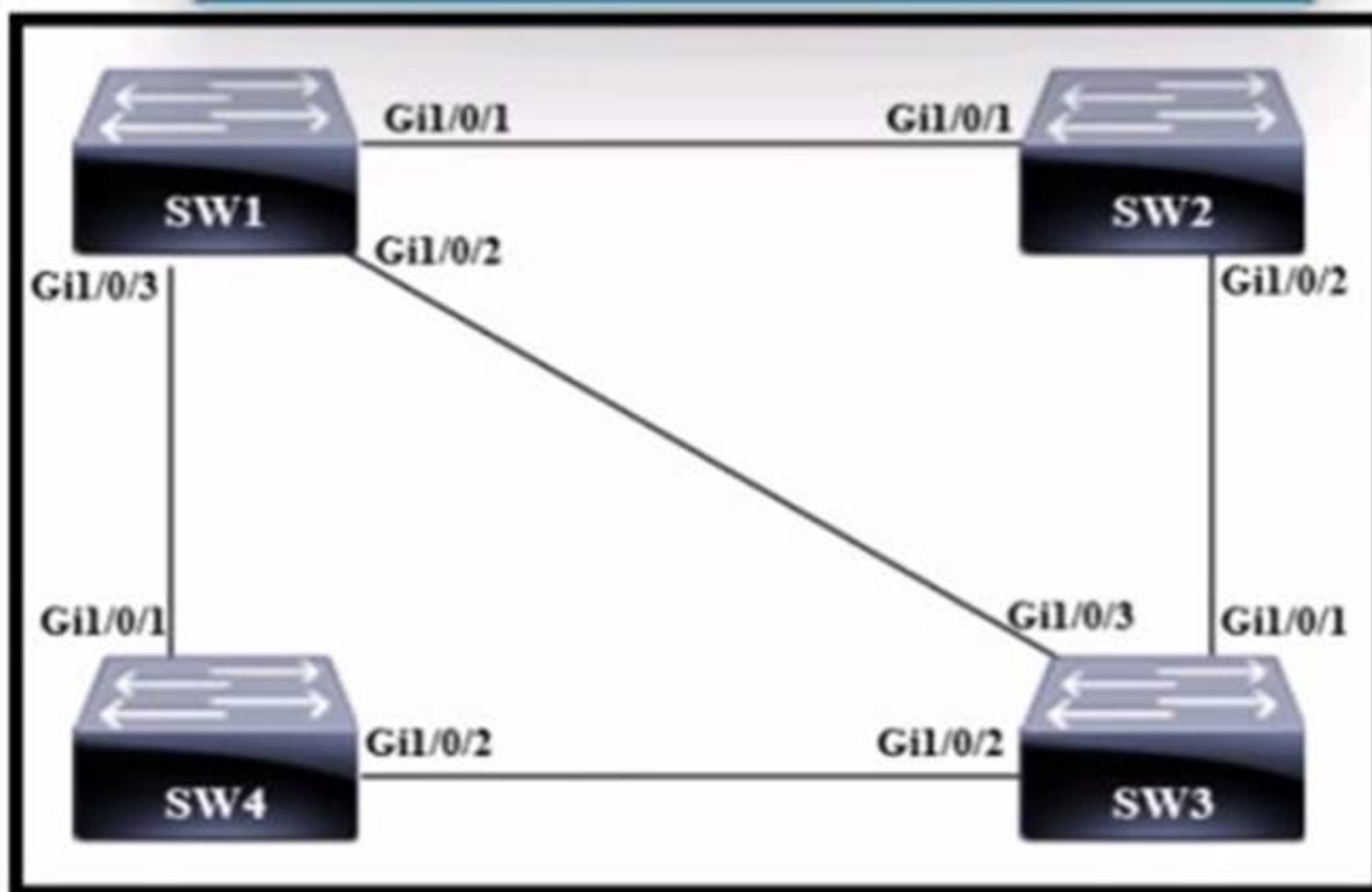
Which switch becomes the root bridge?
A)

SW 1
Bridge Priority - 32768
mac-address 0d:ca:8e:7f:a0:24

B)

SW 2
Bridge Priority - 53248
mac-address 02:3e:ee:61:5b:21

C)

SW 4
Bridge Priority - 32768
mac-address 07:c1:b7:27:dd:73

D)

SW 3
Bridge Priority - 53248
mac-address 02:aa:03:d3:05:87

A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

NEW QUESTION 412
- (Topic 4)
What is a link-local all-nodes IPv6 multicast address?

A. ff02:0:0:0:0:0:0:1
B. 2004:31c:73d9:683e:255::
C. fffe:034:0dd:45d6:789e::
D. fe80:4433:034:0dd::2

Answer: D

NEW QUESTION 417
- (Topic 4)
Which advantage does the network assurance capability of Cisco DNA Center provide over traditional campus management?

A. Cisco DNA Center correlates information from different management protocols to obtain insights, and traditional campus management requires manual analysis.

B. Cisco DNA Center handles management tasks at the controller to reduce the load on infrastructure devices, and traditional campus management uses the data backbone.
C. Cisco DNA Center leverages YANG and NETCONF to assess the status of fabric and nonfabric devices, and traditional campus management uses CLI exclusively.
D. Cisco DNA Center automatically compares security postures among network devices, and traditional campus management needs manual comparisons.

Answer: C

NEW QUESTION 421
- (Topic 4)
To improve corporate security, an organization is planning to implement badge authentication to limit access to the data center. Which element of a security program is being deployed?

A. user training
B. user awareness
C. vulnerability verification
D. physical access control

Answer: D

NEW QUESTION 423
- (Topic 4)
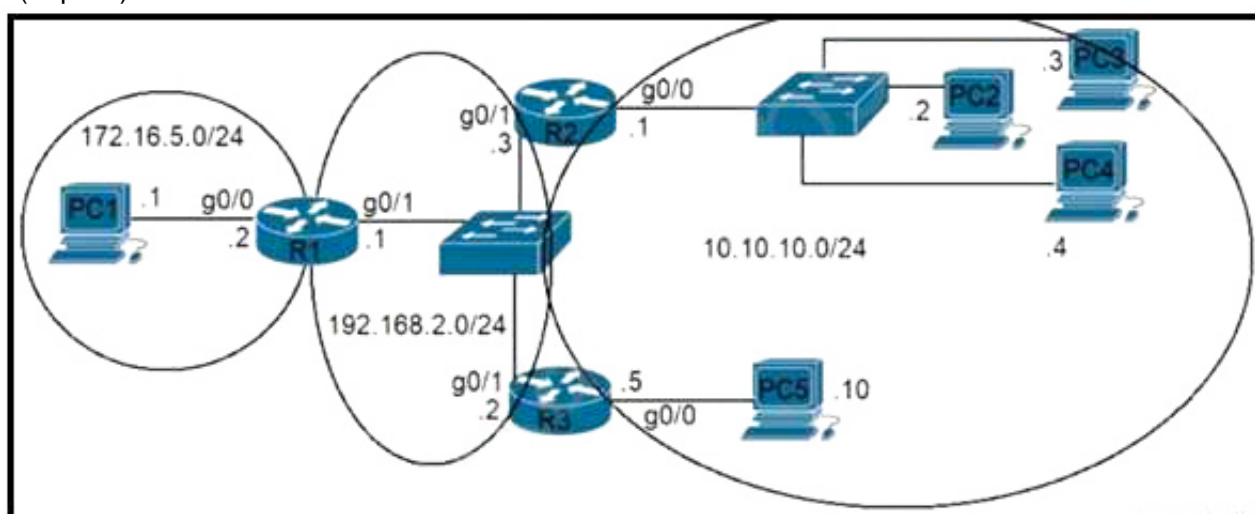
Refer to the exhibit. The router R1 is in the process of being configured. Routers R2 and R3 are configured correctly for the new environment. Which two commands must be configured on R1 for PC1 to communicate to all PCs on the 10.10.10.0/24 network? (Choose two.)

A. ip route 10.10.10.0 255.255.255.0 192.168.2.3
B. ip route 10.10.10.10 255.255.255.255 192.168.2.2
C. ip route 10.10.10.10 255.255.255.255 g0/1
D. ip route 10.10.10.8 255.255.255.248 g0/1
E. ip route 10.10.10.0 255.255.255.248 192.168.2.2

Answer: AE

NEW QUESTION 426
- (Topic 4)
Refer to the exhibit.
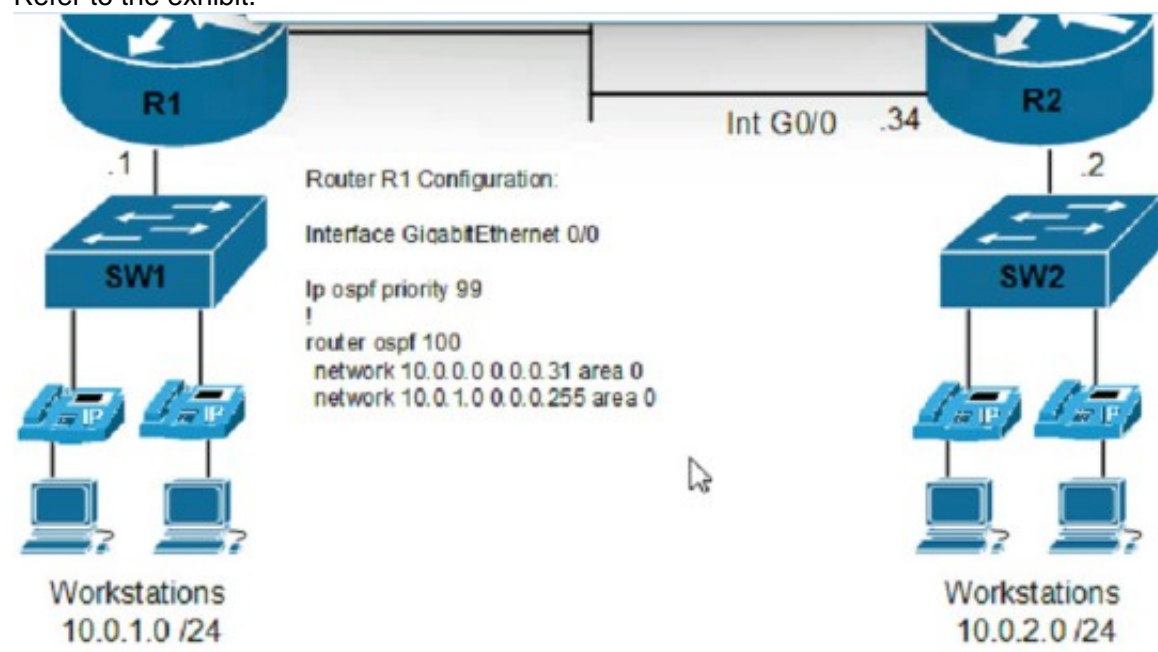
An engineer must configure router R2 so it is elected as the DR on the WAN subnet. Which command sequence must be configured?
A)

```
interface gigabitethernet0/0
    ip address 10.0.0.34 255.255.255.224
    ip ospf priority 100
```

B)

```
interface gigabitethernet0/0
   ip address 10.0.1.1 255.255.255.224
   ip ospf priority 98
```

C)

```
interface gigabitethernet0/0
   ip address 10.0.0.34 255.255.255.248
   ip ospf priority 0
```

D)

```
interface gigabitethernet0/0
   ip address 10.0.1.1 255.255.255.0
   ip ospf priority 255
```

A. Option
B. Option
C. Option
D. Option

Answer: A

NEW QUESTION 428
- (Topic 4)
How do UTP and STP cables compare?

A. STP cables are cheaper to procure and easier to install and UTP cables are more expensive and harder to install.
B. UTP cables are less prone to crosstalk and interference and STP cables are more prone to crosstalk and interference.
C. UTP cables provide taster and more reliable data transfer rates and STP cables are slower and less reliable.
D. STP cables are shielded and protect against electromagnetic interference and UTP lacks the same protection against electromagnetic interference.

Answer: D

NEW QUESTION 433
DRAG DROP - (Topic 4)
Drag and drop the DNS commands from the left onto their effects on the right.

Drag and drop the DNS commands from the left onto their effects on the right.

ip domain-lookup		adds an entry to the host table
ip domain-name		completes the FQDN of the DNS server
ip host switch_1 192.168.0.1		displays address-mapping information
ip name-server		enables host-to-IP-address translation
show hosts		specifies the IP address of the DNS server

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Drag and drop the DNS commands from the left onto their effects on the right.

ip domain-lookup	ip domain-name
ip domain-name	ip domain-lookup
ip host switch_1 192.168.0.1	show hosts
ip name-server	ip host switch_1 192.168.0.1
show hosts	ip name-server

NEW QUESTION 437
- (Topic 4)
What is the purpose of using First Hop Redundancy Protocol on a specific subnet?

A. ensures a loop-free physical topology
B. filters traffic based on destination IP addressing
C. sends the default route to the hosts on a network
D. forwards multicast hello messages between routers

Answer: D

NEW QUESTION 442
- (Topic 4)
An engineer is configuring router R1 with an IPv6 static route for prefix 2019:C15C:0CAF:E001::/64. The next hop must be 2019:C15C:0CAF:E002::1 The route must be reachable via the R1 Gigabit 0/0 interface. Which command configures the designated route?

A. R1(config)#ipv6 route 2019:C15C:0CAF:E001::/64 2019:C15C:0CAF:E002::1
B. R1(config-if)#ipv6 route 2019:C15C:0CAF:E001::/64 2019:C15C:0CAF:E002::1
C. R1(config-if)#ip route 2019:C15C:0CAF:E001::/64 GigabitEthernet0/0
D. R1(config)#ip route 2019:C15C:0CAF:E001::/64 GigabitEthernet0/0

Answer: C

NEW QUESTION 443
- (Topic 4)
Refer to the exhibit.

```
{
    "Routers":["R1","R2","R3"],
    "Switches":["SW1","SW2","SW3"]
}
```
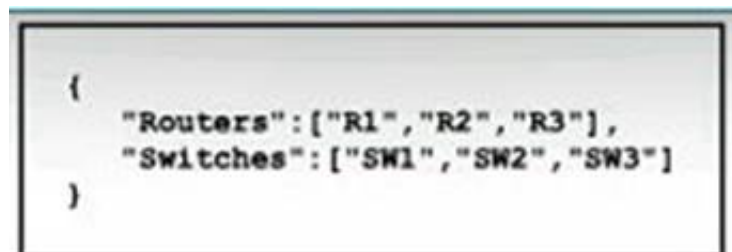
What is represented by "R1" and "SW1" within the JSON output?

A. key
B. array
C. value
D. object

Answer: C

NEW QUESTION 445
- (Topic 4)
What is the function of northbound API?

A. It upgrades software and restores files.
B. It relies on global provisioning and configuration.
C. It supports distributed processing for configuration.
D. It provides a path between an SDN controller and network applications.

Answer: D

NEW QUESTION 449
- (Topic 4)
Refer to the exhibit.
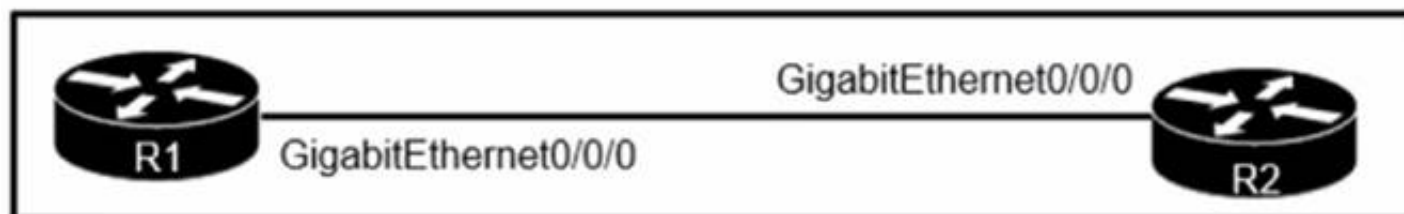
A network engineer must configure the link with these requirements:
• Consume as few IP addresses as possible.
• Leave at least two additional useable IP addresses for future growth. Which set of configurations must be applied?

A)

```
R1(config-if)#ip address 10.10.10.1 255.255.255.252
R2(config-if)#ip address 10.10.10.2 255.255.255.252
```

B)

```
R1(config-if)#ip address 10.10.10.1 255.255.255.248
R2(config-if)#ip address 10.10.10.4 255.255.255.248
```

C)

```
R1(config-if)#ip address 10.10.10.1 255.255.255.0
R2(config-if)#ip address 10.10.10.5 255.255.255.0
```

D)

```
R1(config-if)#ip address 10.10.10.1 255.255.255.240
R2(config-if)#ip address 10.10.10.12 255.255.255.240
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

Explanation:
 We have to configure the link which will need 2 IP addresses, 1 for each port on each Router. We also need 2 spare IPs for future growth, so overall we need 4 usable IP addresses. If we consider using the /30 (255.255.255.252) mask, it will give us 2^2 (=4) i.e., total 4 IPs and 2 usable IPs, which doesn't fulfil the given requirements. So, we can consider using the next /29 (255.255.255.248) mask, which gives us 2^3 (=8) i.e., total 8 IP address and 6 usable IP addresses, which perfectly fulfil the given requirements.

NEW QUESTION 450
- (Topic 4)
Refer to the exhibit.

How must OSPF be configured on the GigabitEthernet0/0 interface of the neighbor device to achieve.
A)

```
Router(config)#interface GigabitEthernet 0/0
Router(config-if)#ip ospf priority 1
```

B)

Router(config)#**interface GigabitEthernet 0/0**
Router(config-if)#**ip ospf 1 area 2**

C)

Router(config)#**interface GigabitEthernet 0/0**
Router(config-if)#**ip ospf cost 5**

D)

Router(config)#**interface GigabitEthernet 0/0**
Router(config-if)#**ip ospf network point-to-point**

A. Option A
B. Option B
C. Option C
D. Option D

Answer: A

NEW QUESTION 455
DRAG DROP - (Topic 4)
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

	Global Unicast Address
enables aggregation of routing prefixes	
provides for one-to-one communication	
	Multicast
provides one-to-many communications	
sends packets to a group address rather than a single address	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

enables aggregation of routing prefixes	Global Unicast Address
provides for one-to-one communication	enables aggregation of routing prefixes
provides one-to-many communications	provides for one-to-one communication
sends packets to a group address rather than a single address	**Multicast**
	provides one-to-many communications
	sends packets to a group address rather than a single address

NEW QUESTION 459
- (Topic 4)
An engineer is configuring SSH version 2 exclusively on the R1 router. What is the minimum configuration required to permit remote management using the cryptographic protocol?

○ hostname R1

    ip domain name cisco

    crypto key generate rsa general-keys modulus 1024

    username cisco privilege 15 password 0 cisco123

    ip ssh version 2

    line vty 0 15
     transport input ssh
     login local

○ hostname R1

    crypto key generate rsa general-keys modulus 1024

    username cisco privilege 15 password 0 cisco123

    ip ssh version 2

    line vty 0 15
     transport input all
     login local

○ hostname R1

    service password-encryption

    crypto key generate rsa general-keys modulus 1024

    username cisco privilege 15 password 0 cisco123

    ip ssh version 2

    line vty 0 15
     transport input ssh
     login local

○ hostname R1

    ip domain name cisco

    crypto key generate rsa general-keys modulus 1024

    username cisco privilege 15 password 0 cisco123

    ip ssh version 2

    line vty 0 15
     transport input all
     login local

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 462
- (Topic 4)
What is the primary purpose of a console port on a Cisco WLC?

A. In-band management via an asynchronous transport
B. out-of-band management via an IP transport
C. in-band management via an IP transport
D. out-of-band management via an asynchronous transport

Answer: D

NEW QUESTION 466
- (Topic 4)
The clients and OHCP server reside on different subnets. Which command must be used to forward requests and replies between clients on the 10.10.0.1/24 subnet and the DHCP server at 192.168.10.1?

A. ip route 192.168.10.1
B. ip default-gateway 192.168.10.1
C. ip helper-address 192.168.10.1
D. ip dhcp address 192.168.10.1

Answer: C

NEW QUESTION 471
- (Topic 4)
What differentiates device management enabled by Cisco DNA Center from traditional campus device management?

A. per-device
B. centralized
C. device-by-device hands-on
D. CLI-oriented device

Answer: B

NEW QUESTION 473
- (Topic 4)
When an access point is seeking to join wireless LAN controller, which message is sent to the AP- Manager interface?

A. Discovery response
B. DHCP request
C. DHCP discover
D. Discovery request

Answer: D

NEW QUESTION 478
- (Topic 4)
What is a benefit of using private IPv4 addressing?

A. Multiple companies can use the same addresses without conflicts.
B. Direct connectivity is provided to internal hosts from outside an enterprise network.
C. Communication to the internet Is reachable without the use of NAT.
D. All external hosts are provided with secure communication to the Internet.

Answer: A

NEW QUESTION 483
- (Topic 4)
What is the operating mode and role of a backup port on a shared LAN segment in Rapid PVST+?

A. forwarding mode and provides the lowest-cost path to the root bridge for each VLAN
B. learning mode and provides the shortest path toward the root bridge handling traffic away from the LAN
C. blocking mode and provides an alternate path toward the designated bridge
D. listening mode and provides an alternate path toward the root bridge

Answer: C

NEW QUESTION 488
- (Topic 4)
Refer to the exhibit.

```
Gateway of last resort is 172.16.2.2 to network 0.0.0.0

      10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C     10.10.8.0/28 is directly connected, GigabitEthernet0/0/2
C     10.10.10.0/24 is directly connected, GigabitEthernet0/0/0
L     10.10.10.3.32 is directly connected, GigabitEthernet0/0/0

      172.16.0.0/16 is variably subnetted, 3 subnets, 2 masks
S     172.16.1.33/32 is directly connected, GigabitEthernet0/0/1
C     172.16.2.0/23 is directly connected, GigabitEthernet0/0/1
L     172.16.2.1/32 is directly connected, GigabitEthernet0/0/1
S*    0.0.0.0/0 [1/0] via 172.16.2.2
```

A packet sourced from 10.10.10.1 is destined for 10.10.8.14. What is the subnet mask of the destination route?

A. 255.255.254.0
B. 255.255.255.240
C. 255.255.255.248
D. 255.255.255.252

Answer: B

NEW QUESTION 490
- (Topic 4)
An engineer is configuring a switch port that is connected to a VoIP handset. Which command must the engineer configure to enable port security with a manually assigned MAC address of abod-bod on voice VLAN 4?

A. switchport port-security mac-address abcd.abcd.abcd
B. switchport port-security mac-address abed.abed.abed vlan 4
C. switchport port-security mac-address sticky abcd.abcd.abcd vlan 4
D. switchport port-security mac-address abcd.abcd.abcd vlan voice

Answer: A

NEW QUESTION 495
DRAG DROP - (Topic 4)
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 496
- (Topic 4)
Refer to the exhibit.

Layer 2	Layer 3	AAA Servers

Layer 2 Security <u>6</u>   WPA+WPA2

MAC Filtering<u>9</u> ☐

Fast Transition

Fast Transition   Adaptive
Over the DS   ☑
Reassociation Timeout 20   Seconds

Protected Management Frame

PMF   Disabled

WPA+WPA2 Parameters

WPA Policy   ☐
WPA2 Policy   ☑
WPA2 Encryption   ☑AES   ☐TKIP   ☐CCMP256   ☐GCMP128   ☐GCMP256
OSEN Policy   ☐

Authentication Key Management <u>19</u>

802.1X   ☑ Enable
CCKM   ☐ Enable
PSK   ☐ Enable
FT 802.1X   ☐ Enable
FT PSK   ☐ Enable
SUITEB-1X   ☐ Enable
SUITEB192-1X   ☐ Enable
WPA gtk-randomize State   Disable
<u>14</u>

Clients on the WLAN are required to use 802.11r. What action must be taken to meet the requirement?

A. Under Protected Management Frames, set the PMF option to Required.
B. Enable CCKM under Authentication Key Management.
C. Set the Fast Transition option and the WPA gtk-randomize State to disable.
D. Set the Fast Transition option to Enable and enable FT 802.1X under Authentication Key Management.

Answer: D

NEW QUESTION 500
- (Topic 4)
What must be considered before deploying virtual machines?

A. location of the virtual machines within the data center environment
B. whether to leverage VSM to map multiple virtual processors to two or more virtual machines
C. resource limitations, such as the number of CPU cores and the amount of memory
D. support for physical peripherals, such as monitors, keyboards, and mice

Answer: C

NEW QUESTION 501
- (Topic 4)
A wireless access point is needed and must meet these requirements:
• "zero-touch" deployed and managed by a WLC
• process only real-time MAC functionality
• used in a split-MAC architecture. Which access point type must be used?

A. autonomous
B. lightweight
C. mesh
D. cloud-based

Answer: B

Explanation:
https://www.cisco.com/c/en/us/support/docs/wireless/aironet-1200- series/70278-lap-faq.html

NEW QUESTION 506
- (Topic 4)

What is a feature of WPA?

A. 802.1x authentication
B. preshared key
C. TKIP/MIC encryption
D. small Wi-Fi application

Answer: A

NEW QUESTION 507
- (Topic 4)
Refer to the exihibit.

```
SW1#show run
Building configuration...
!
hostname SW1
!
ip domain-name CCNA-test
!
username CCNA privilege 1 password 0 cisco123
!
interface FastEthernet0/1
 switchport access vlan 10
!
interface Vlan10
 ip address 192.168.1.2 255.255.255.0
!
line vty 0 4
 login local
 transport input telnet
line vty 5 15
 login local
 transport input telnet

SW1#show crypto key mypubkey rsa
% Key pair was generated at: 0:1:23 UTC Mar 1 2020
Key name: SW1.CCNA-test
```

An engineer is updating the management access configuration of switch SW1 to allow secured, encrypted remote configuration. Which two commands or command sequences must the engineer apply to the switch? (Choose two.)

A. SW1(config)#enable secret ccnaTest123
B. SW1(config)#username NEW secret R3mote123
C. SW1(config)#line vty 0 15 SW1(config-line)#transport input ssh
D. SW1(config)# crypto key generate rsa
E. SW1(config)# interface f0/1 SW1(confif-if)# switchport mode trunk

Answer: CD

NEW QUESTION 512
DRAG DROP - (Topic 4)
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

provides for one-to-one communication	**Global Unicast Address**
allows sites to be combined without address conflicts	provides for one-to-one communication
	allows sites to be combined without address conflicts
is a counterpart of private IPv4 addresses	**Unique Local**
is publicly routable in the same way as IPv4 addresses	is a counterpart of private IPv4 addresses
	is publicly routable in the same way as IPv4 addresses

NEW QUESTION 514
- (Topic 4)
Refer to the exhibit.

```
interface g2/0/0
    channel-group 1 mode active
interface g4/0/0
    channel-group 1 mode active
interface Port-channel1
    ip address 203.0.113.65 255.255.255.252

%LINEPROTO-5-UPDOWN: Line protocol on Interface Port-channel, changed state to down
```

An engineer is configuring a Layer 3 port-channel interface with LACP. The configuration on the first device is complete, and it is verified that both interfaces have registered the neighbor device in the CDP table. Which task on the neighbor device enables the new port channel to come up without negotiating the channel?

A. Change the EtherChannel mode on the neighboring interfaces to auto.
B. Configure the IP address of the neighboring device.
C. Bring up the neighboring interfaces using the no shutdown command.
D. Modify the static EtherChannel configuration of the device to passive mode.

Answer: D

NEW QUESTION 518
- (Topic 4)
What is a reason why an administrator would choose to implement an automated network management approach?

A. Reduce inconsistencies in the network configuration.
B. Enable "box by box" configuration and deployment.
C. Decipher simple password policies.
D. Increase recurrent management costs.

Answer: A

NEW QUESTION 520
DRAG DROP - (Topic 4)
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

provides for one-to-one communication	**Global Unicast Address**
is a counterpart of private IPv4 addresses	
is publicly routable in the same way as IPv4 addresses	**Unique Local**
allows sites to be combined without address conflicts	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Global Unicast Address
is publicly routable in the same way as IPv4 addresses
allows sites to be combined without address conflicts

provides for one-to-one communication
is a counterpart of private IPv4 addresses

Unique Local
provides for one-to-one communication
is a counterpart of private IPv4 addresses

is publicly routable in the same way as IPv4 addresses
allows sites to be combined without address conflicts

NEW QUESTION 525
- (Topic 4)
In a cloud-computing environment what is rapid elasticity?

A. control and monitoring of resource consumption by the tenant
B. automatic adjustment of capacity based on need
C. pooling resources in a multitenant model based on need
D. self-service of computing resources by the tenant

Answer: B

NEW QUESTION 527
- (Topic 4)
What are two examples of multifactor authentication? (Choose two.)

A. single sign-on
B. unique user knowledge
C. passwords that expire
D. soft tokens
E. shared password responsibility

Answer: BD

NEW QUESTION 530
- (Topic 4)
Which type of address is shared by routers in a HSRP implementation and used by hosts on the subnet as their default gateway address?

A. multicast address
B. loopback IP address
C. virtual IP address
D. broadcast address

Answer: C

NEW QUESTION 535
- (Topic 4)
Which Cisco proprietary protocol ensures traffic recovers immediately, transparently, and automatically when edge devices or access circuits fail?

A. SLB
B. FHRP
C. VRRP
D. HSRP

Answer: D

NEW QUESTION 539
DRAG DROP - (Topic 4)
Drag and drop the statement about AAA services from the left to the corresponding AAA services on the right.

It grants access to network assets, such as FTP servers.	Accounting
It restricts the CLI commands that a user is able to perform.	
It performs user validation via TACACS+.	Authorization
It records the duration of each connection.	
It supports User Access Reporting.	
It verifies "who you are".	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

It grants access to network assets, such as FTP servers.	Accounting
It restricts the CLI commands that a user is able to perform.	It supports User Access Reporting.
It performs user validation via TACACS+.	It restricts the CLI commands that a user is able to perform.
It records the duration of each connection.	Authorization
It supports User Access Reporting.	It performs user validation via TACACS+.
It verifies "who you are".	It grants access to network assets, such as FTP servers.

NEW QUESTION 541
- (Topic 4)
What is the default port-security behavior on a trunk link?

A. It causes a network loop when a violation occurs.
B. It disables the native VLAN configuration as soon as port security is enabled.
C. It places the port in the err-disabled state if it learns more than one MAC address.
D. It places the port in the err-disabled slate after 10 MAC addresses are statically configured.

Answer: A

NEW QUESTION 543
- (Topic 4)
What are two capabilities provided by VRRP within a LAN network? (Choose two.)

A. dynamic routing updates
B. bandwidth optimization
C. granular QoS
D. load sharing
E. redundancy

Answer: AC

Explanation:
 Redundancy— VRRP enables you to configure multiple routers as the default gateway router, which reduces the possibility of a single point of failure in a network.
Load Sharing—You can configure VRRP in such a way that traffic to and from LAN clients can be shared by multiple routers, thereby sharing the traffic load more equitably among available router

NEW QUESTION 545
DRAG DROP - (Topic 4)
Drag and drop the SNMP components from the left onto the description on the right.

agent		collection of uniquely identifiable objects whose state can be interrogated over SNMP
managed device		network node controlled by SNMP
MIB		system that runs monitoring applications and controls network nodes
NMS		SNMP component that captures and translates device and network data

A. Mastered
B. Not Mastered

Answer: A

Explanation:

agent		MIB
managed device		agent
MIB		managed device
NMS		NMS
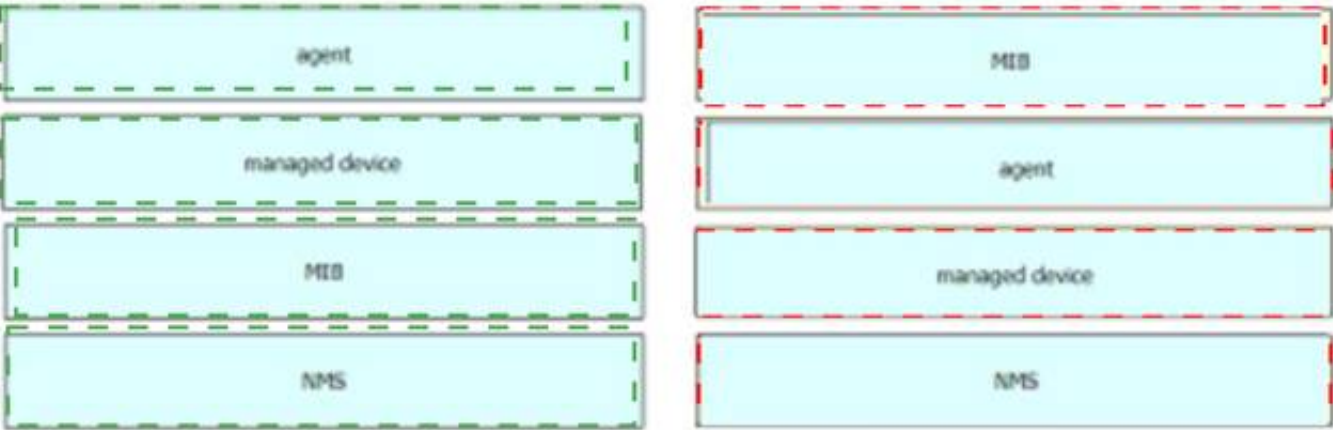
NEW QUESTION 548
- (Topic 4)
Which type of port is used to connect lo the wired network when an autonomous AP maps two VLANs to its WLANs?

A. LAG
B. EtherChannel
C. trunk
D. access

Answer: C

NEW QUESTION 549
DRAG DROP - (Topic 4)
Drag and drop the management connection types from the left onto the definitions on the right.

console		supports clear-text connections to the controller CLI
HTTPS		supports encrypted access to CLI and a secure channel for data transfer
SSH		supports physical connections over a serial cable
Telnet		supports secure web access for management of the device

A. Mastered
B. Not Mastered

Answer: A

Explanation:

console		Telnet
HTTPS		SSH
SSH		console
Telnet		HTTPS
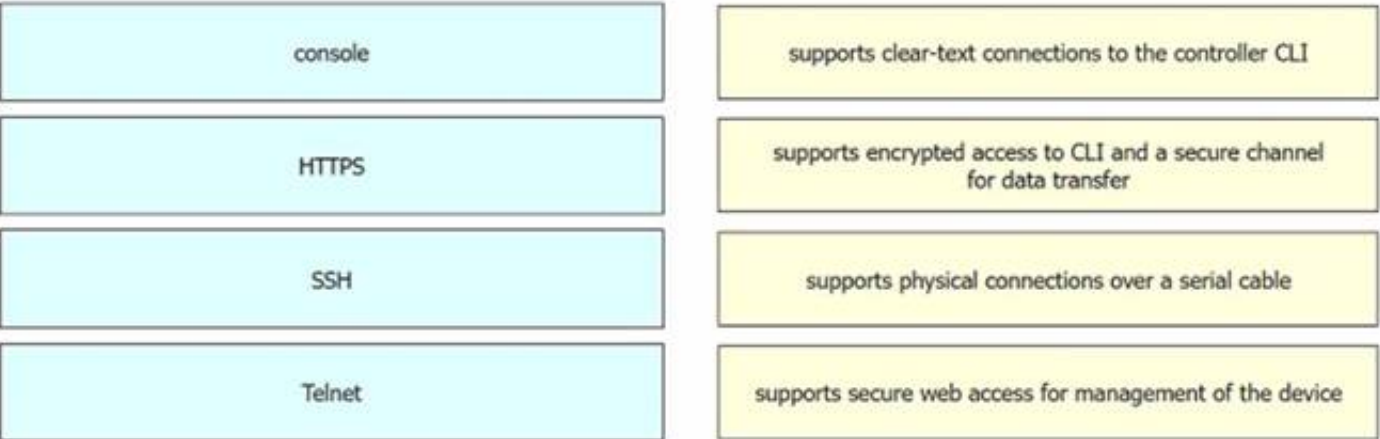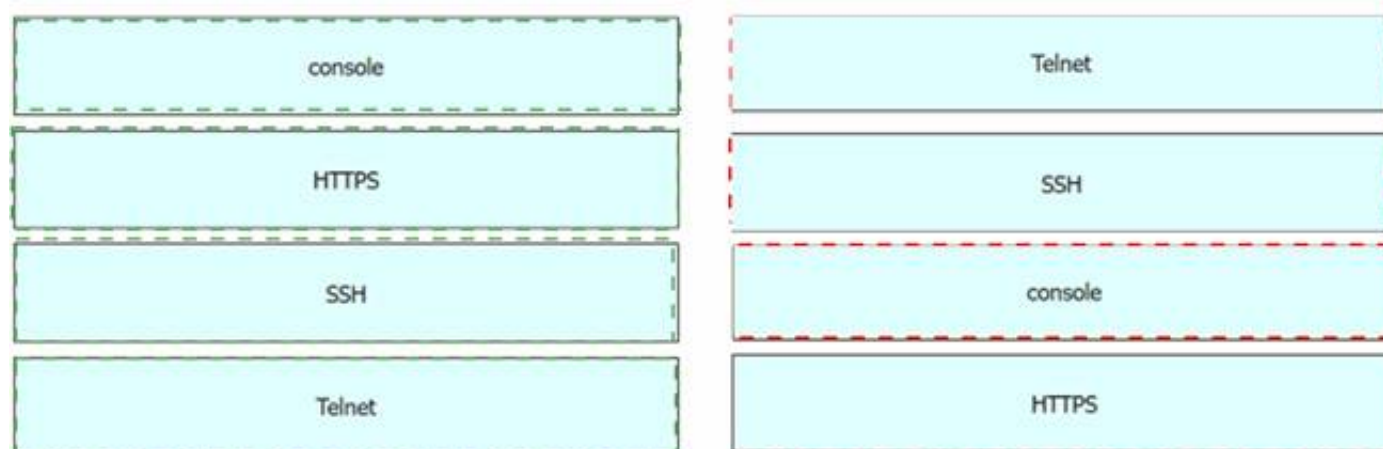
NEW QUESTION 552
- (Topic 4)
What is an advantage of using auto mode versus static mode for power allocation when an access point is connected to a PoE switch port?

A. All four pairs of the cable are used
B. It detects the device is a powered device
C. The default level is used for the access point
D. Power policing is enabled at the same time

Answer: D

NEW QUESTION 556
- (Topic 4)
In which circumstance would a network architect decide to implement a global unicast subnet instead of a unique local unicast subnet?

A. when the subnet must be available only within an organization
B. when the subnet does not need to be routable
C. when the addresses on the subnet must be equivalent to private IPv4 addresses
D. when the subnet must be routable over the internet

Answer: D

NEW QUESTION 561
- (Topic 4)
Refer to the exhibit.

```
RTR-1
interface Loopback1
ip address 192.168.1.1 255.255.255.0
!
interface Loopback2
ip address 192.168.2.1 255.255.255.0
!
interface Loopback3
ip address 192.168.3.1 255.255.255.0
!
interface GigabitEthernet0/0
ip address 172.16.1.62 255.255.255.224
```

RTR-1 G0/0 172.16.1.62
SW-1
PC-1 172.16.1.33/27
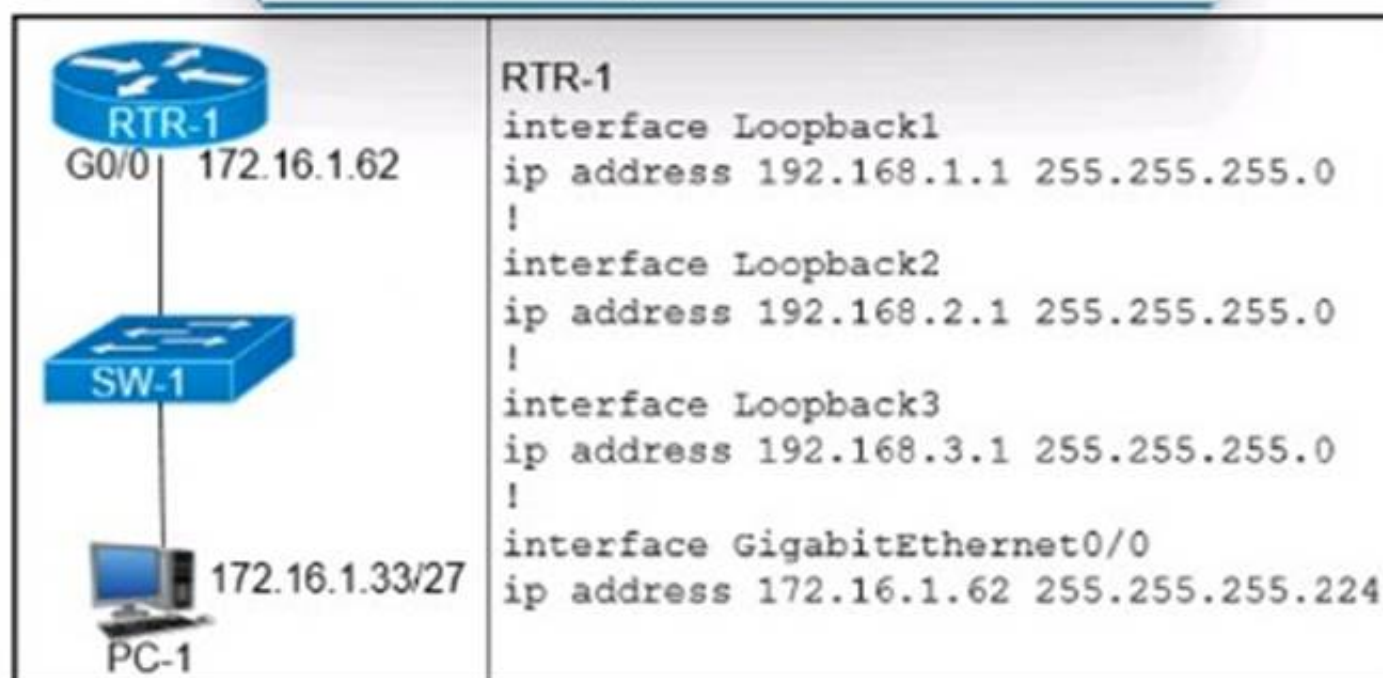
Which configuration for RTR-1 deniess SSH access from PC-1 to any RTR-1 interface and allows all other traffic?
A)
```
access-list 100 deny tcp host 172.16.1.33 any eq 22
access-list 100 permit ip any any

interface GigabitEthernet0/0
 ip access-group 100 in
```

B)
```
access-list 100 deny tcp host 172.16.1.33 any eq 22
access-list 100 permit ip any any

line vty 0 15
 access-class 100 in
```

C)

```
access-list 100 deny tcp host 172.16.1.33 any eq 23
access-list 100 permit ip any any

interface GigabitEthernet0/0
 ip access-group 100 in
```

D)
```
access-list 100 deny tcp host 172.16.1.33 any eq 23
access-list 100 permit ip any any

line vty 0 15
 access-class 100 in
```

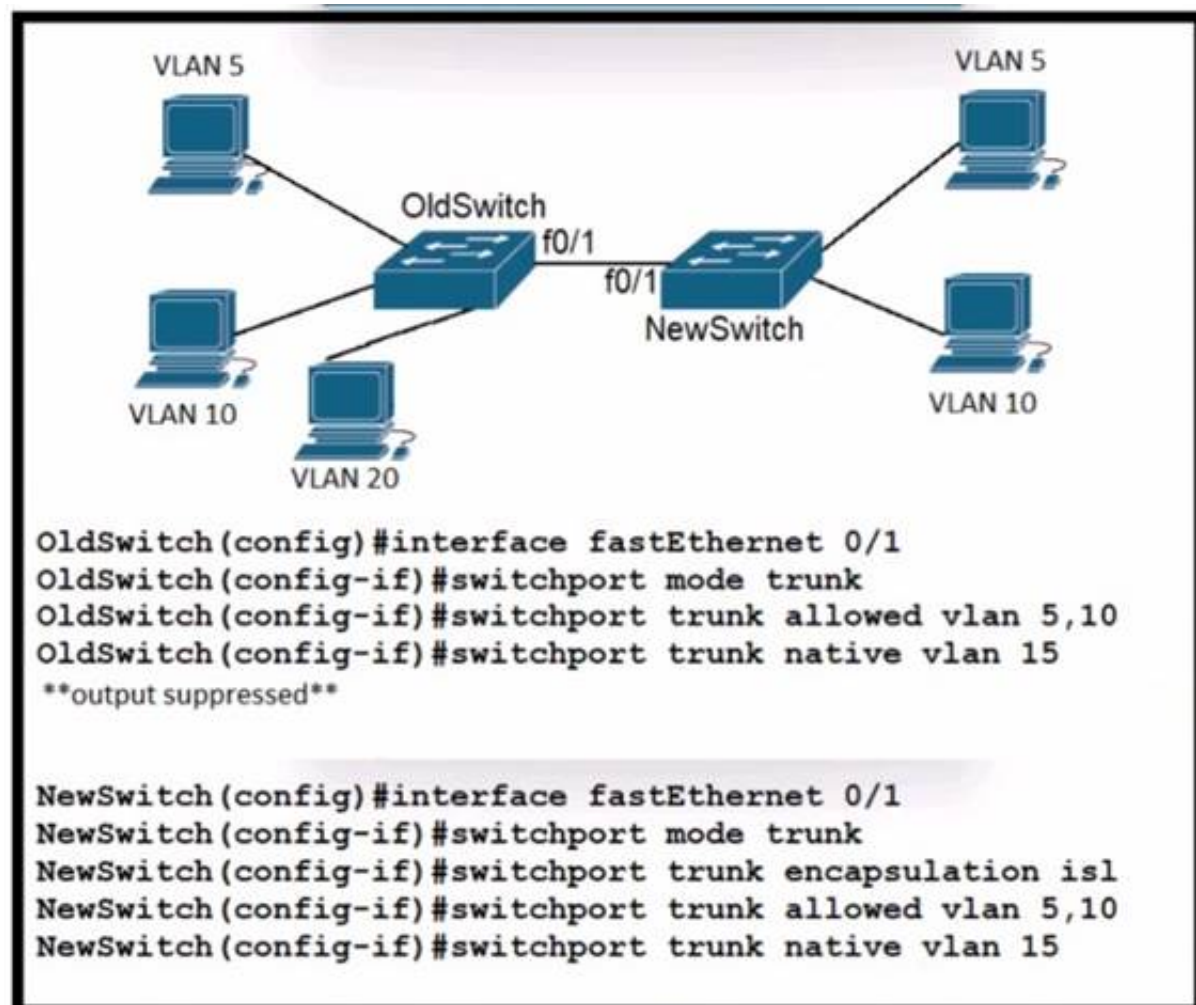A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

NEW QUESTION 562
- (Topic 4)
Refer to the exhibit.


```
OldSwitch(config)#interface fastEthernet 0/1
OldSwitch(config-if)#switchport mode trunk
OldSwitch(config-if)#switchport trunk allowed vlan 5,10
OldSwitch(config-if)#switchport trunk native vlan 15
**output suppressed**


NewSwitch(config)#interface fastEthernet 0/1
NewSwitch(config-if)#switchport mode trunk
NewSwitch(config-if)#switchport trunk encapsulation isl
NewSwitch(config-if)#switchport trunk allowed vlan 5,10
NewSwitch(config-if)#switchport trunk native vlan 15
```

A new VLAN and switch are added to the network. A remote engineer configures OldSwitch and must ensure that the configuration meets these requirements:
• accommodates current configured VLANs
• expands the range to include VLAN 20
• allows for IEEE standard support for virtual LANs
Which configuration on the NewSwitch side of the link meets these requirements?
A)

```
no switchport trunk encapsulation isl
switchport trunk encapsulation dot1q
switchport trunk allowed vlan add 20
```

B)
```
switchport nonegotiate
 no switchport trunk allowed vlan 5,10
 switchport trunk allowed vlan 5,10,15,20
```

C)
```
no switchport mode trunk
 switchport trunk encapsulation isl
 switchport mode access vlan 20
```

D)

switchport mode dynamic
channel-group 1 mode active
switchport trunk allowed vlan 5,10,15, 20

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 563
- (Topic 4)
Which action implements physical access control as part of the security program of an organization1?

A. backing up syslogs at a remote location
B. configuring a password for the console port
C. configuring enable passwords on network devices
D. setting up IP cameras to monitor key infrastructure

Answer: B

NEW QUESTION 566
- (Topic 4)
Which access point mode relies on a centralized controller for management, roaming, and SSID configuration?

A. repeater mode
B. autonomous mode
C. bridge mode
D. lightweight mode

Answer: D

NEW QUESTION 569
- (Topic 4)
Refer to the exhibit.

```
Router1#show ip route
Gateway of last resort is 10.10.11.2 to network 0.0.0.0

     209.165.200.0/27 is subnetted, 1 subnets
B       209.165.200.224 [20/0] via 10.10.12.2, 03:22:14
     209.165.201.0/27 is subnetted, 1 subnets
B       209.165.201.0 [20/0] via 10.10.12.2, 02:26:33
     209.165.202.0/27 is subnetted, 1 subnets
B       209.165.202.128 [20/0] via 10.10.12.2, 02:26:03
     10.0.0.0/8 is variably subnetted, 8 subnets, 4 masks
C       10.10.10.0/28 is directly connected, GigabitEthernet0/0
C       10.10.11.0/30 is directly connected, FastEthernet2/0
C       10.10.12.0/30 is directly connected, GigabitEthernet0/1
O       10.10.13.0/25 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O       10.10.13.128/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O       10.10.13.144/28 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O       10.10.13.160/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O       10.10.13.208/29 [110/2] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
S*   0.0.0.0/0 [1/0] via 10.10.11.2
```

What is the subnet mask of the route to the 10.10.13.160 prefix?

A. 255.255.255.240
B. 255.255.255.128
C. 255.255.248.
D. 255.255.255.248

Answer: D

NEW QUESTION 573
- (Topic 4)
An engineer is configuring switch SW1 to act an NTP server when all upstream NTP server connectivity fails. Which configuration must be used?
A)

SW1# config t
SW1(config)#ntp peer 192.168.1.1
SW1(config)#ntp access-group peer accesslist1

B)

```
SW1# config t
SW1(config)#ntp master
SW1(config)#ntp server 192.168.1.1
```

C)

```
SW1# config t
SW1(config)#ntp server 192.168.1.1
SW1(config)#ntp access-group server accesslist1
```

D)

```
SW1# config t
SW1(config)#ntp backup
SW1(config)#ntp server 192.168.1.1
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

NEW QUESTION 575
FILL IN THE BLANK - (Topic 4)
Refer to the exhibit.

```
R2#show ip ospf interface
GigabitEthernet0/0/0 is up, line protocol is up
   Internet address is 192.168.1.1/24, Area 0
   Process ID 1, Router ID 192.168.1.1, Network Type BROADCAST, Cost: 1
   Transmit Delay is 1 sec, State DROTHER, Priority 1
   Designated Router (ID) 192.168.1.1, Interface address 192.168.1.2
   Backup Designated Router (ID) 192.168.1.1, Interface address 192.168.1.2
   Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
     Hello due in 00:00:02
   Index 2/2, flood queue length 0
    Neighbor Count is 1, Adjacent neighbor count is 2
```

Router OldR is replacing another router on the network with the intention of having OldR and R2 exchange routes_ After the engineer applied the initial OSPF configuration: the routes were still missing on both devices. Which command sequence must be issued before the clear IP ospf process command is entered to enable the neighbor relationship?

○ OldR(config)#interface g0/0/0
OldR(config-if)#ip ospf dead-interval 15

○ OldR(config)#router ospf 1
OldR(config-router)#no router-id 192.168.1.1

◉ OldR(config)#router ospf 1
OldR(config-router)#network 192.168.1.0 255.255.255.0 area 2

○ OldR(config)#interface g0/0/0
OldR(config-if)#ip ospf hello-interval 15

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 579
- (Topic 4)
What are two purposes of HSRP? (Choose two.)

A. It groups two or more routers to operate as one virtual router.
B. It improves network availability by providing redundant gateways.
C. It passes configuration information to hosts in a TCP/IP network.

D. It helps hosts on the network to reach remote subnets without a default gateway.
E. It provides a mechanism for diskless clients to autoconfigure their IP parameters during boot.

Answer: AB

NEW QUESTION 583
- (Topic 4)
What are two functions of DHCP servers? (Choose two.)

A. prevent users from assigning their own IP addresses to hosts
B. assign dynamic IP configurations to hosts in a network
C. support centralized IP management
D. issue DHCPDISCOVER messages when added to the network
E. respond to client DHCPOFFER requests by issuing an IP address

Answer: BC

NEW QUESTION 584
- (Topic 4)
Refer to the exhibit.

```
R1# show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate default
       U - per-user static route, o - ODR
Gateway of last resort is not set
C    172.16.0.0/16 is directly connected, Loopback0
     172.16.0/16 is variably subnetted, 4 subnets, 2 masks
O       172.16.1.3/32 [110/100] via 192.168.7.40, 00:39:08, Serial0
C       172.16.1.0/24 is directly connected, Serial0
O       172.16.1.184/29 [110/5] via 192.168.7.35, 00:39:08, Serial0
O       172.16.3.0/24 [110/10] via 192.168.7.4, 00:39:08, Gigabit Ethernet 0/0
D       172.16.1.0/28 [90/10]  via 192.168.7.7, 00:39:08, Gigabit Ethernet 0/0
```

Load-balanced traffic is coming in from the WAN destined to a host at 172.16.1.190. Which next-hop is used by the router to forward the request?

A. 192.168.7.4
B. 192.168.7.7
C. 192.168.7.35
D. 192.168.7.40

Answer: D

NEW QUESTION 589
- (Topic 4)
Refer to the exhibit.

```
R1# show ip route
. . . .
D       172.16.32.0/27 [90/2888597172]  via 20.1.1.1
O       172.16.32.0/19  [110/292094]    via 20.1.1.10
R       172.16.32.0/24  [120/2]  via 20.1.1.3
```

An engineer executed the script and added commands that were not necessary for SSH and now must remove the commands.

A. metric
B. cost
C. longest prefix
D. administrative distance

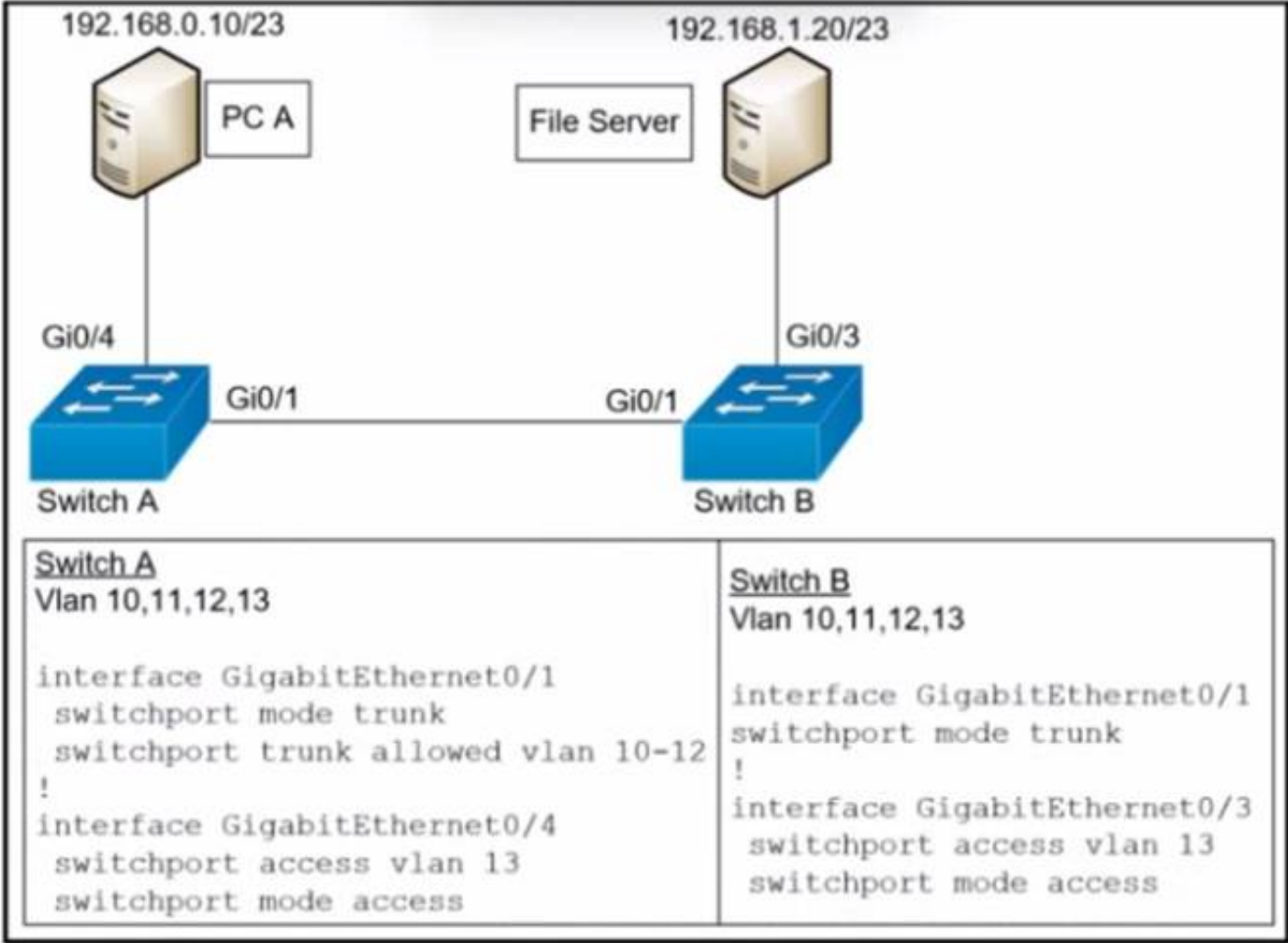**Answer:** D

NEW QUESTION 594
- (Topic 4)
Refer to the exhibit.
A network engineer must configure communication between PC A and the file server. Which commend must be configured on switch A to prevent interruption of other communications?

192.168.0.10/23   192.168.1.20/23

PC A

File Server

Gi0/4   Gi0/3

Gi0/1   Gi0/1

Switch A   Switch B

```
Switch A
Vlan 10,11,12,13

interface GigabitEthernet0/1
 switchport mode trunk
 switchport trunk allowed vlan 10-12
!
interface GigabitEthernet0/4
 switchport access vlan 13
 switchport mode access
```

```
Switch B
Vlan 10,11,12,13

interface GigabitEthernet0/1
switchport mode trunk
!
interface GigabitEthernet0/3
 switchport access vlan 13
 switchport mode access
```

A. switch port trunk allowed vlan 12
B. switchport trunk allowed vlan none
C. switchport trunk allowed vlan add 13
D. switch port trunk allowed vlan remove 10-11

Answer: C

NEW QUESTION 599
DRAG DROP - (Topic 4)

Host A   R1   R2   R3   Host B
10.10.14.10/24   10.10.13.10/25

10.10.10.0/30   10.10.10.4/30
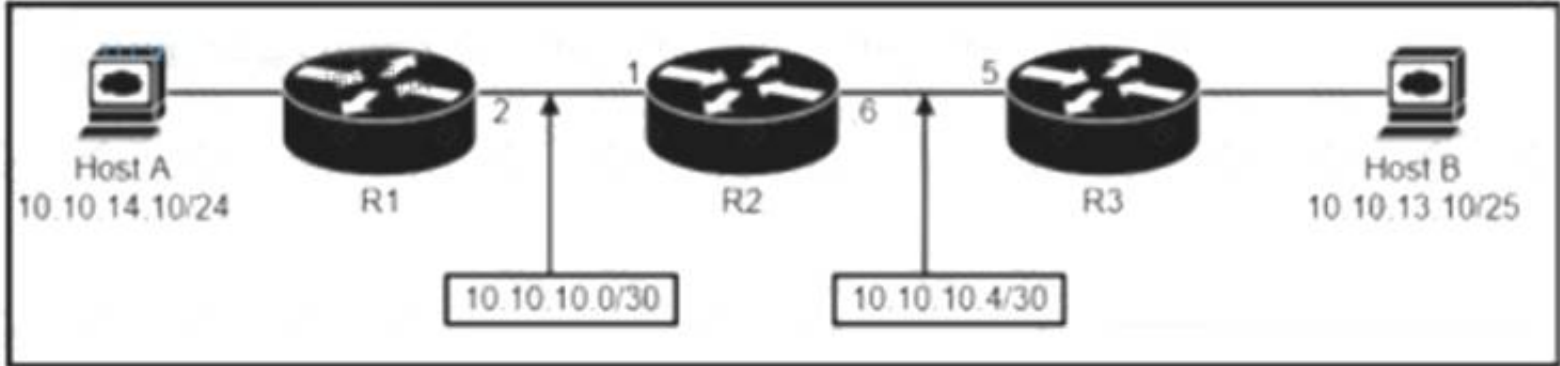
Refer to the exhibit. An engineer must configure a static network route between two networks so that host A communicates with host B. Drag and drop the commands from the left onto the routers where they must be configured on the right. Not all commands are used.

ip route 10.10.13.0 255.255.255.128 10.10.10.1

ip route 10.10.13.0 255.255.255.128 10.10.10.5

ip route 10.10.13.10 255.255.255.255 10.10.10.1

ip route 10.10.14.0 255.255.255.0 10.10.10.2

ip route 10.10.14.0 255.255.255.0 10.10.10.6

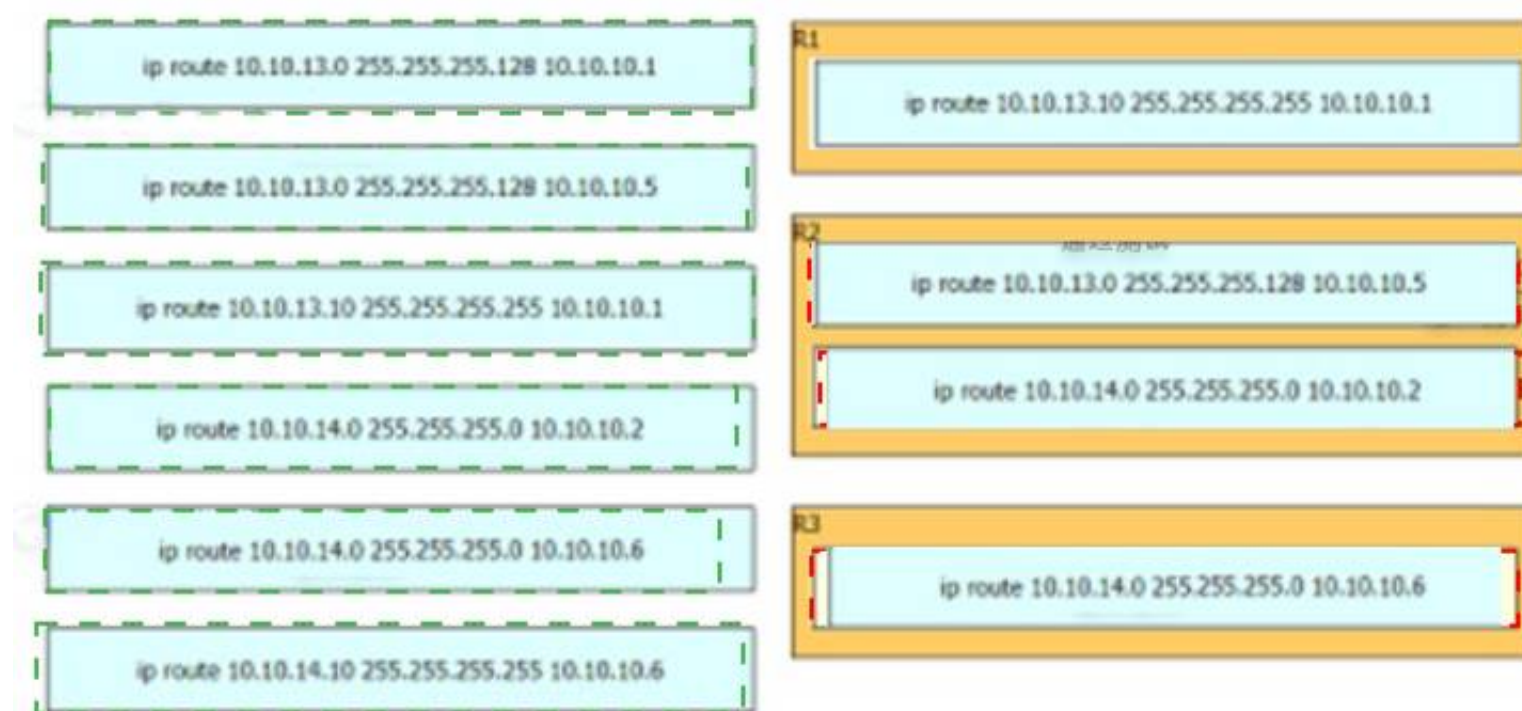ip route 10.10.14.10 255.255.255.255 10.10.10.6

R1

R2

R3

A. Mastered
B. Not Mastered

Answer: A

Explanation:

ip route 10.10.13.0 255.255.255.128 10.10.10.1	**R1** ip route 10.10.13.10 255.255.255.255 10.10.10.1
ip route 10.10.13.0 255.255.255.128 10.10.10.5	**R2** ip route 10.10.13.0 255.255.255.128 10.10.10.5
ip route 10.10.13.10 255.255.255.255 10.10.10.1	ip route 10.10.14.0 255.255.255.0 10.10.10.2
ip route 10.10.14.0 255.255.255.0 10.10.10.2	
ip route 10.10.14.0 255.255.255.0 10.10.10.6	**R3** ip route 10.10.14.0 255.255.255.0 10.10.10.6
ip route 10.10.14.10 255.255.255.255 10.10.10.6	

NEW QUESTION 604
- (Topic 4)
Refer to the exhibit.

```
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       a - application route
       + - replicated route, % - next hop override, p - overrides from PfR
Gateway of last resort is 0.0.0.0 to network 0.0.0.0
S*     0.0.0.0/0 is directly connected, Null0
       10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C         10.0.12.0/24 is directly connected, GigabitEthernet0/1
L         10.0.12.1/32 is directly connected, GigabitEthernet0/1
C         10.0.13.0/24 is directly connected, GigabitEthernet0/2
L         10.0.13.1/32 is directly connected, GigabitEthernet0/2
C         10.0.14.0/24 is directly connected, GigabitEthernet0/3
L         10.0.14.1/32 is directly connected, GigabitEthernet0/3
D      192.168.0.0/16 [90/130816] via 10.0.13.3, 00:10:09, GigabitEthernet0/2
O      192.168.0.0/23 [110/2] via 10.0.14.4, 00:00:46, GigabitEthernet0/3
S      192.168.0.0/24 [100/0] via 10.0.12.2
```

Which interface is chosen to forward traffic to the host at 192.168.0.55?

A. GigabitEthernet0
B. GigabitEthernet0/1
C. Null0
D. GigabitEthernet0/3

Answer: B

NEW QUESTION 608
- (Topic 4)
Which channel-group mode must be configured when multiple distribution interfaces connected to a WLC are bundled?

A. Channel-group mode passive.
B. Channel-group mode on.
C. Channel-group mode desirable.
D. Channel-group mode active.

Answer: B

NEW QUESTION 611
- (Topic 4)
Refer to the exhibit.

```
Entry #
1          192.168.10.0 255.255.254.0
2          192.168.10.0 255.255.255.192
3          192.168.10.0 255.255.0.0
4          192.168.10.0 255.255.224.0
```

Which entry is the longest prefix match for host IP address 192.168.10.5?

A. 1
B. 2
C. 3
D. 4

Answer: B

NEW QUESTION 615
- (Topic 4)
What is the role of community strings in SNMP operations?

A. It serves as a sequence tag on SNMP traffic messages.
B. It serves as a password lo protect access to MIB objects.
C. It passes the Active Directory username and password that are required for device access
D. It translates alphanumeric MIB output values to numeric values.

Answer: B

NEW QUESTION 618
- (Topic 4)
Refer to the exhibit.

```json
{
    "myCar": {
            "name": "thunder",
            "wheels": ["good", "good", "pressureLow", "warning"],
            "gasLight": false
            },
    "oldCar": {
            "name": "sleepy",
            "wheels": ["pressureLow", "pressureLow", "pressureLow", "pressureLow"],
            "color": "rust"
            "gasLight": true
            },
    "newCar": {
            "name": "lightning",
            "wheels": ["pressureLow", "good", "pressureLow", "good"],
            "color": "blue"
            "gasLight": true
            }
}
```

In which structure does the word "warning" directly reside?

A. array
B. object
C. Boolean
D. string
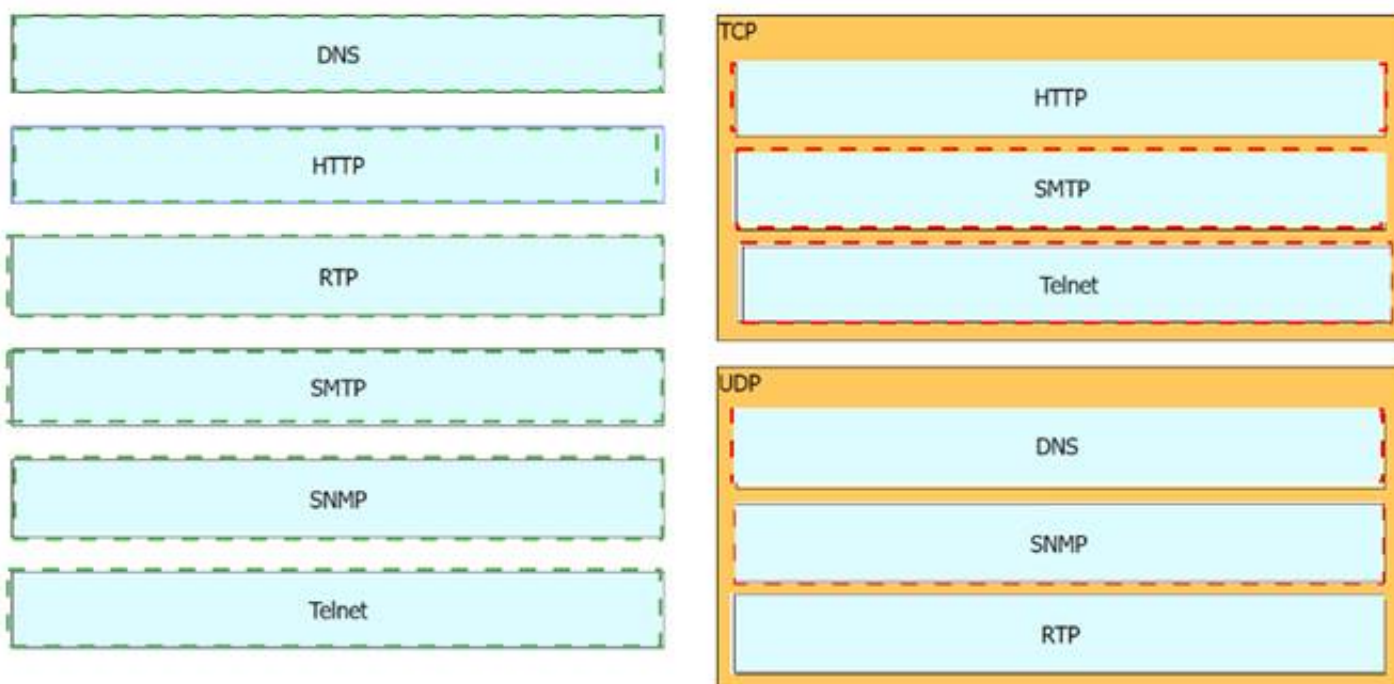
Answer: A

NEW QUESTION 623
DRAG DROP - (Topic 4)
An engineer must configure a core router with a floating static default route to the backup router at 10.200.0.2.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 626
- (Topic 4)
Which cable type must be used to interconnect one switch using 1000 BASE-SX GBiC modules and another switch using 1000 BASE-SX SFP modules?

A. LC to SC
B. SC t ST
C. SC to SC
D. LC to LC

Answer: D

NEW QUESTION 628
- (Topic 4)
Refer to the exhibit.

```
Gateway of last resort is not set

     10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.1.1.0/30 is directly connected, GigabitEthernet0/0
L       10.1.1.2/32 is directly connected, GigabitEthernet0/0
S     192.168.0.0/20 [1/0] via 10.1.1.1
     192.168.1.0/30 is subnetted, 1 subnets
S       192.168.1.0/30 [1/0] via 10.1.1.1
     192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
S       192.168.2.0/28 [1/0] via 10.1.1.1
S       192.168.2.0/29 [1/0] via 10.1.1.1
```

An engineer is checking the routing table in the main router to identify the path to a server on the network. Which route does the router use to reach the server at 192.168.2.2?
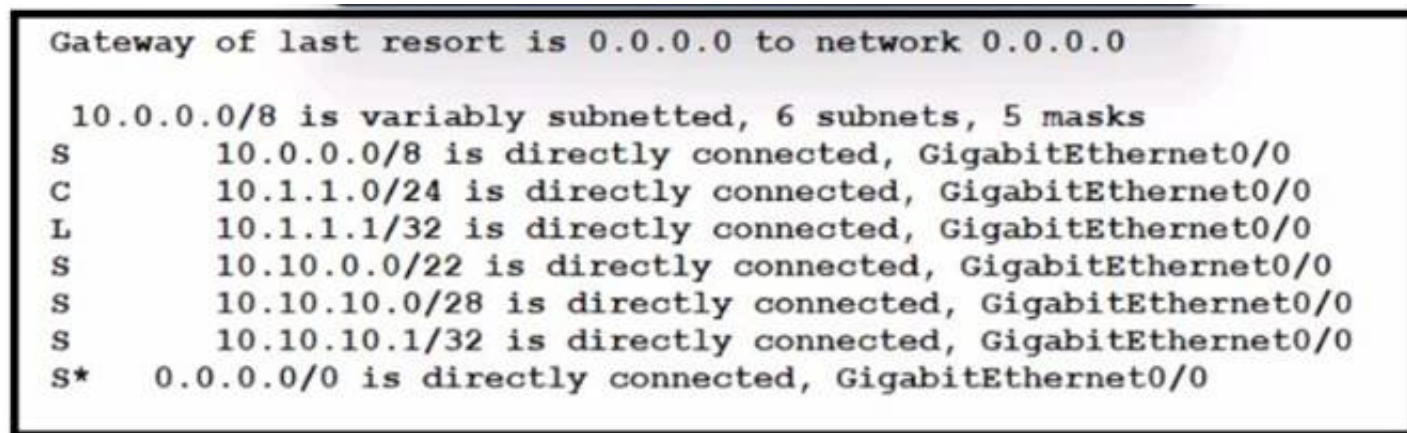
A. S 192.168.0.0/20 [1/0] via 10.1.1.1
B. S 192.168.2.0/29 [1/0] via 10.1.1.1
C. S 192.168.2.0/28 [1/0] via 10.1.1.1
D. S 192.168.1.0/30 [1/0] via 10.1.1.1

Answer: B

NEW QUESTION 633
- (Topic 4)
Refer to the exhibit.

```
Gateway of last resort is 0.0.0.0 to network 0.0.0.0

  10.0.0.0/8 is variably subnetted, 6 subnets, 5 masks
S        10.0.0.0/8 is directly connected, GigabitEthernet0/0
C        10.1.1.0/24 is directly connected, GigabitEthernet0/0
L        10.1.1.1/32 is directly connected, GigabitEthernet0/0
S        10.10.0.0/22 is directly connected, GigabitEthernet0/0
S        10.10.10.0/28 is directly connected, GigabitEthernet0/0
S        10.10.10.1/32 is directly connected, GigabitEthernet0/0
S*    0.0.0.0/0 is directly connected, GigabitEthernet0/0
```

Which IP route command created the best path for a packet destined for 10.10.10.3?

A. ip route 10.10.0.0 255.255.252.0 g0/0
B. ip route 10.0.0.0 255.0.0.0 g0/0
C. ip route 10.10.10.1 255.255.255.255 g0/0
D. ip route 10.10.10.0 255.255.255.240 g0/0

Answer: D

NEW QUESTION 634
- (Topic 4)
Refer to the exhibit.

A network engineer configures the Cisco WLC to authenticate local wireless clients against a RADIUS server Which task must be performed to complete the process?

A. Change the Server Status to Disabled
B. Select Enable next to Management
C. Select Enable next to Network User
D. Change the Support for CoA to Enabled.

Answer: C

NEW QUESTION 638
- (Topic 4)
How does IPsec provide secure networking for applications within an organization?

A. It takes advantage of FTP to secure file transfers between nodes on the network.
B. It provides GRE tunnels to transmit traffic securely between network nodes.
C. It enables sets of security associations between peers.
D. It leverages TFTP providing secure file transfers among peers on the network.

Answer: C

Explanation:
IPsec (Internet Protocol Security) is a protocol suite that provides secure communication over Internet Protocol (IP) networks. It achieves this by authenticating and encrypting each IP packet within a communication session. One of the key concepts in IPsec is the establishment of security associations (SAs) between

peers. Security associations are the combination of algorithms and keys used to secure communication between two devices. They define the security parameters for the communication, including the encryption algorithm, integrity algorithm, and keying information. By establishing these security associations, IPsec ensures confidentiality, integrity, and authenticity of the data being transmitted between network nodes.

NEW QUESTION 643
- (Topic 4)
Which signal frequency appears 60 times per minute?

A. 1 Hz signal
B. 1 GHz signal
C. 60 Hz signal
D. 60 GHz signal

Answer: B

NEW QUESTION 648
- (Topic 4)
What are two characteristics of a small office / home office connection environment? (Choose two.)

A. It requires 10Gb ports on all uplinks.
B. It supports between 50 and 100 users.
C. It supports between 1 and 50 users.
D. It requires a core, distribution, and access layer architecture.
E. A router port connects to a broadband connection.

Answer: CE

NEW QUESTION 652
- (Topic 4)
Refer to the exhibit.
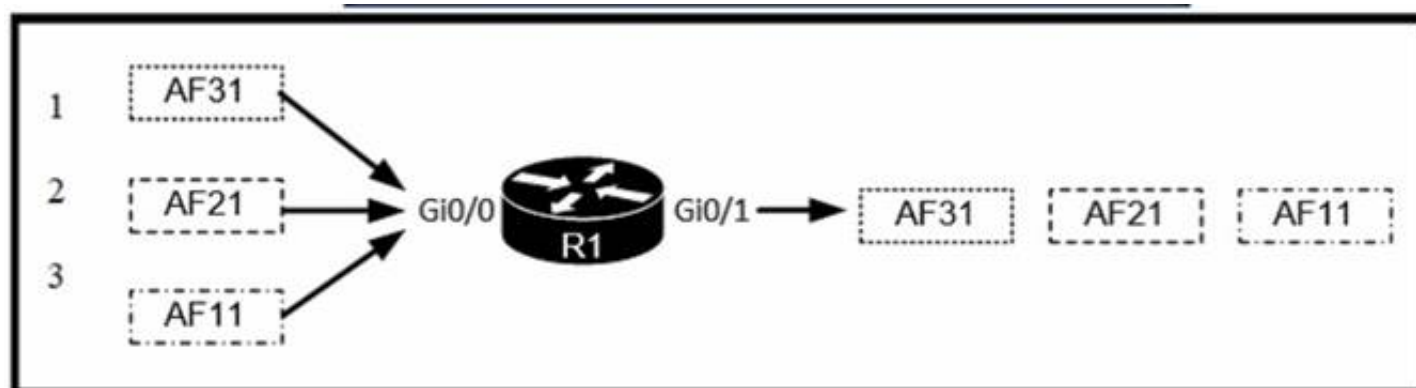
Which per-hop QoS behavior is R1 applying to incoming packets?

A. queuing
B. marking
C. shaping
D. policing

Answer: D

Explanation:
 R1 is applying policing to incoming packets. Policing is a QoS mechanism that limits the rate of traffic flow by dropping or remarking packets that exceed the configured rate limit. In this case, R1 is applying policing to incoming packets on interface G0/0 and G0/1. The exhibit shows that R1 is configured to police traffic at a rate of AF31, AF21, and AF11. This means that R1 is limiting the rate of traffic flow for these three traffic classes .
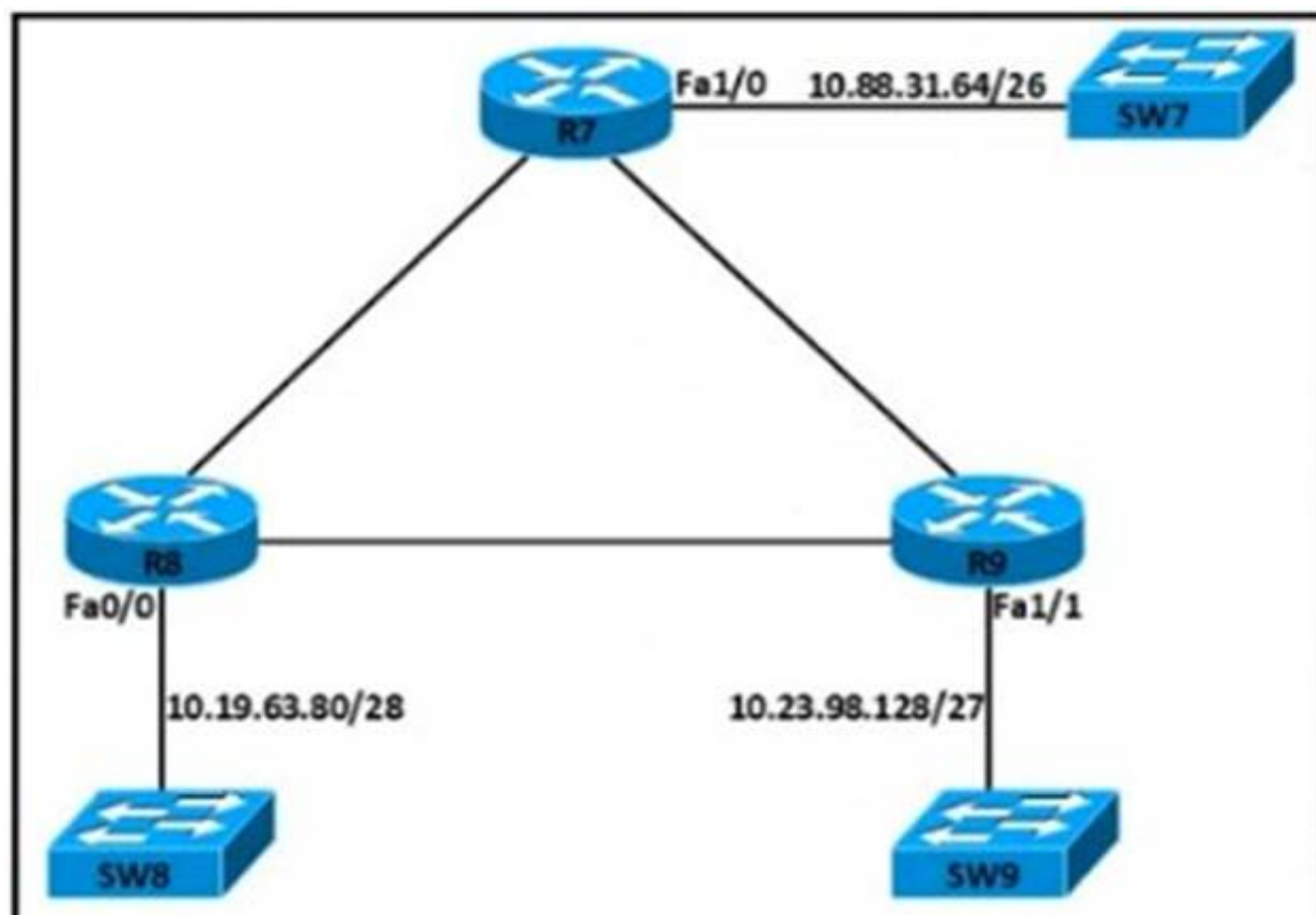References:
? : Cisco CCNA Certification Guide - Chapter 16: Quality of Service (QoS)
? : Cisco IOS Quality of Service Solutions Configuration Guide - Configuring Class- Based Policing

NEW QUESTION 654
- (Topic 4)

Fa1/0 10.88.31.64/26

R7 SW7

R8 R9 Fa1/1

Fa0/0

10.19.63.80/28 10.23.98.128/27

SW8 SW9

Refer to the exhibit. Each router must be configured with the last usable IP address in the subnet. Which configuration fulfills this requirement?

```
R7#
interface FastEthernet1/0
ip address 10.88.31.126 255.255.255.240

R8#
interface FastEthernet0/0
ip address 10.19.63.94 255.255.255.192

R9#
interface FastEthernet1/1
ip address 10.23.98.158 255.255.255.248
```

```
R7#
interface FastEthernet1/0
ip address 10.88.31.127 255.255.255.240

R8#
interface FastEthernet0/0
ip address 10.19.63.95 255.255.255.192

R9#
interface FastEthernet1/1
ip address 10.23.98.159 255.255.255.248
```

```
R7#
interface FastEthernet1/0
ip address 10.88.31.126 255.255.255.192

R8#
interface FastEthernet0/0
ip address 10.19.63.94 255.255.255.240

R9#
interface FastEthernet1/1
ip address 10.23.98.158 255.255.255.224
```

```
R7#
interface FastEthernet1/0
ip address 10.88.31.127 255.255.255.192

R8#
interface FastEthernet0/0
ip address 10.19.63.95 255.255.255.240

R9#
interface FastEthernet1/1
ip address 10.23.98.159 255.255.255.224
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 657
- (Topic 4)
What is a purpose of traffic shaping?

A. It enables dynamic flow identification.
B. It enables policy-based routing.
C. It provides best-effort service.
D. It limits bandwidth usage.

Answer: A

NEW QUESTION 658
- (Topic 4)
Which interface IP address serves as the tunnel source for CAPWAP packets from the WLC to an AP?

A. service
B. trunk
C. AP-manager
D. virtual AP connection

Answer: C

Explanation:
The AP-manager interface is used by the WLC to communicate with access points using CAPWAP packets2. The AP-manager interface has an IP address that serves as the tunnel source for CAPWAP packets from the WLC to an AP3. The service interface is used for out-of-band management of the WLC, such as Telnet and SSH4. The trunk interface is used to connect the WLC to a switch and carry multiple VLANs5. The virtual AP connection is not an interface, but a logical connection between an AP and a WLC that allows multiple SSIDs to be supported by a single AP6.

NEW QUESTION 663
- (Topic 4)
Which command do you enter so that a switch configured with Rapid PVST + listens and learns for a specific time period?

A. switch(config)#spanning-tree vlan 1 max-age 6
B. switch(config)#spanning-tree vlan 1 hello-time 10
C. switch(config)#spanning-tree vlan 1 priority 4096
D. switch(config)#spanning-tree vlan 1 forward-time 20

Answer: D

Explanation:
Forward time : Determines how long each of the listening and learning states last before the port begins forwarding.
Switch(config)# [no] spanning-tree vlan vlan_ID forward-time forward_timeConfigures the forward time of a VLAN. The forward_time value can be from 4 to 30 seconds. https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst4500/12-2/15- 02SG/configuration/guide/config/spantree.html#56177

NEW QUESTION 667
- (Topic 4)
What is a characteristics of a collapsed-core network topology?

A. It allows the core and distribution layers to run as a single combined layer.
B. It enables the core and access layers to connect to one logical distribution device over an EtherChannel.
C. It enables all workstations in a SOHO environment to connect on a single switch with internet access.
D. It allows wireless devices to connect directly to the core layer, which enables faster data transmission.
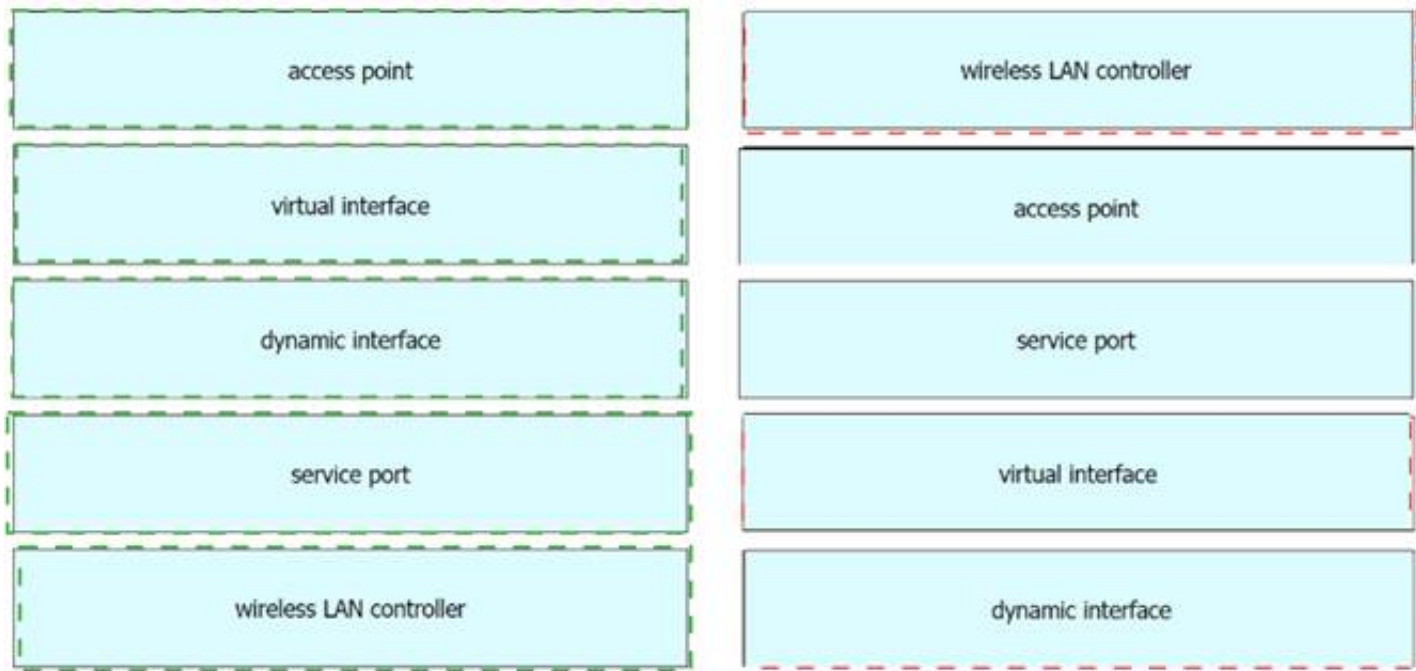
Answer: B

NEW QUESTION 671
DRAG DROP - (Topic 4)
Drag and drop the WLAN components from the left onto the component details on the right.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

access point	wireless LAN controller
virtual interface	access point
dynamic interface	service port
service port	virtual interface
wireless LAN controller	dynamic interface

NEW QUESTION 673
- (Topic 4)
Which properly is shared by 10GBase-SR and 10GBase-LR interfaces?

A. Both require fiber cable media for transmission.
B. Both require UTP cable media for transmission.
C. Both use the single-mode fiber type.
D. Both use the multimode fiber type.

Answer: A

NEW QUESTION 676
- (Topic 4)
How does frame switching function on a switch?

A. forwards frames to a neighbor port using CDP
B. modifies frames that contain a known source VLAN
C. inspects and drops frames from unknown destinations
D. forwards known destinations to the destination port

Answer: D

NEW QUESTION 678
DRAG DROP - (Topic 4)
Drag and drop the statements about access-point modes from the left onto the corresponding modes on the right.

Monitor

Sensor

Sniffer

It provides air-quality data and interference detection across all enabled channels.

It enables enhanced RFID-tag location tracking.

It supports analytics for wireless performance testing.

It supports real-time Wi-Fi client troubleshooting when network engineers are offsite.

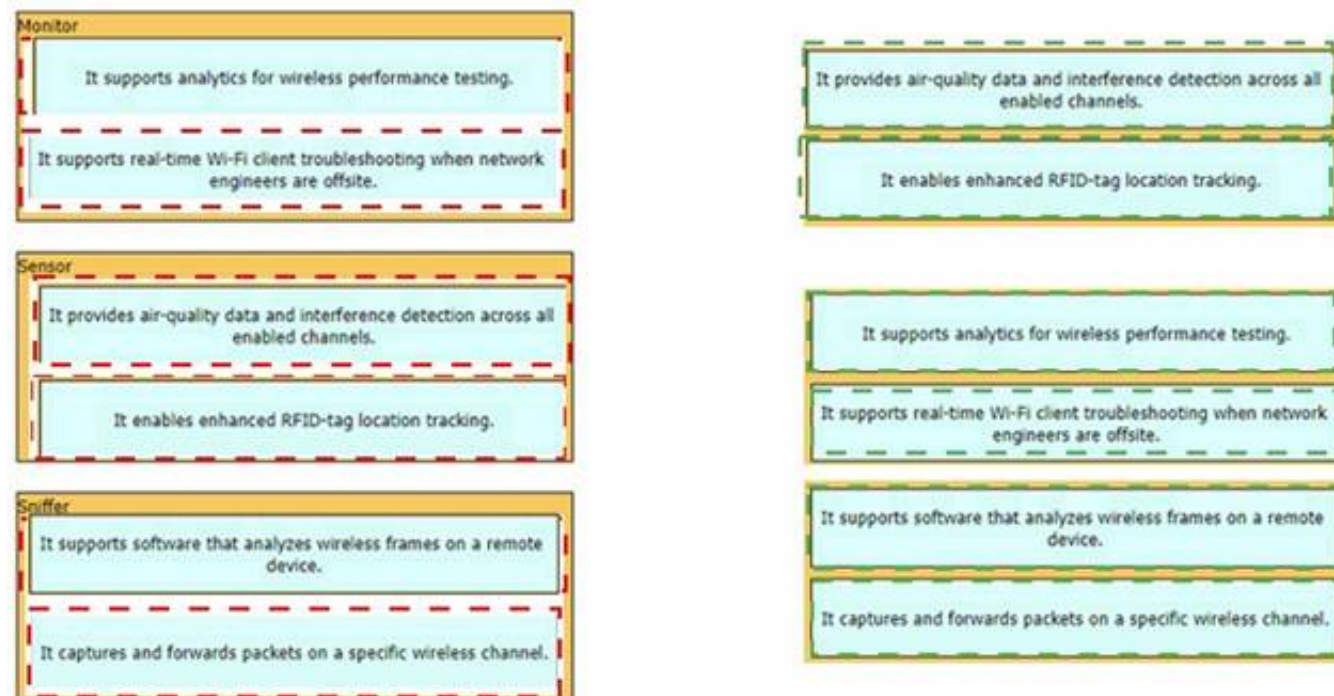It supports software that analyzes wireless frames on a remote device.

It captures and forwards packets on a specific wireless channel.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 679
- (Topic 4)
Under which condition is TCP preferred over UDP?

A. UDP is used when low latency is optimal, and TCP is used when latency is tolerable.
B. TCP is used when dropped data is more acceptable, and UDP is used when data is accepted out- of-order.
C. TCP is used when data reliability is critical, and UDP is used when missing packets are acceptable.
D. UDP is used when data is highly interactive, and TCP is used when data is time- sensitive.

Answer: C

NEW QUESTION 680
- (Topic 4)
Company has decided to require multifactor authentication for all systems. Which set of parameters meets the requirement?

A. personal 10-digit PIN and RSA certificate
B. complex password and personal 10-digit PIN
C. password of 8 to 15 characters and personal 12-digit PIN
D. fingerprint scanning and facial recognition

Answer: A

Explanation:
the set of parameters that meets the requirement for MFA is option A, personal 10-digit PIN and RSA certificate. A personal 10-digit PIN is something the user knows, and an RSA certificate is something the user has. An RSA certificate is a digital certificate that uses the RSA algorithm for encryption and digital signatures3.

NEW QUESTION 685
......

THANKS FOR TRYING THE DEMO OF OUR PRODUCT

Visit Our Site to Purchase the Full Set of Actual 200-301 Exam Questions With Answers.

We Also Provide Practice Exam Software That Simulates Real Exam Environment And Has Many Self-Assessment Features. Order the 200-301 Product From:

https://www.2passeasy.com/dumps/200-301/

Money Back Guarantee

200-301 Practice Exam Features:

* 200-301 Questions and Answers Updated Frequently

* 200-301 Practice Questions Verified by Expert Senior Certified Staff

* 200-301 Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* 200-301 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year