Cisco

Exam Questions 200-301
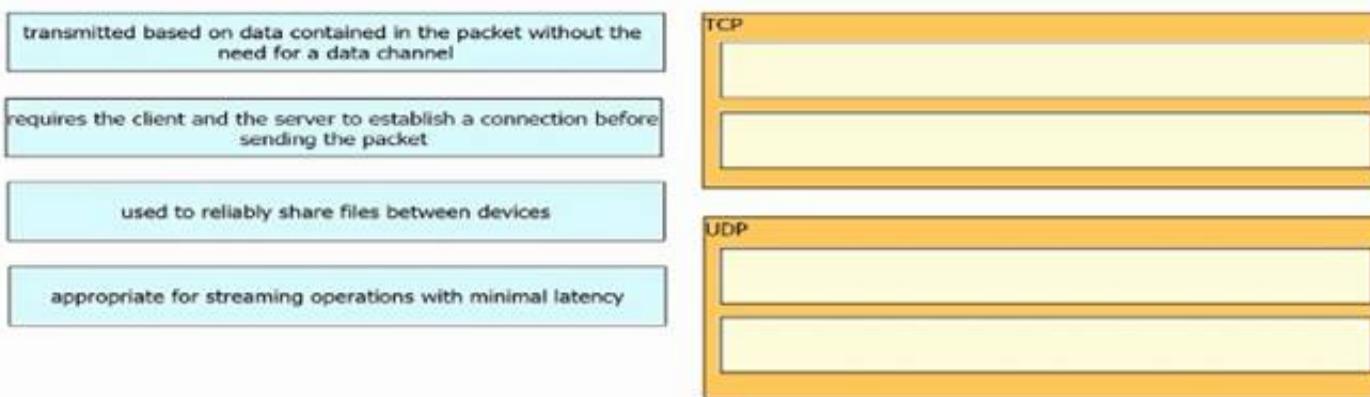
Cisco Certified Network Associate

NEW QUESTION 1
DRAG DROP - (Topic 3)
Drag and drop the TCP or UDP details from the left onto their corresponding protocols on the right.
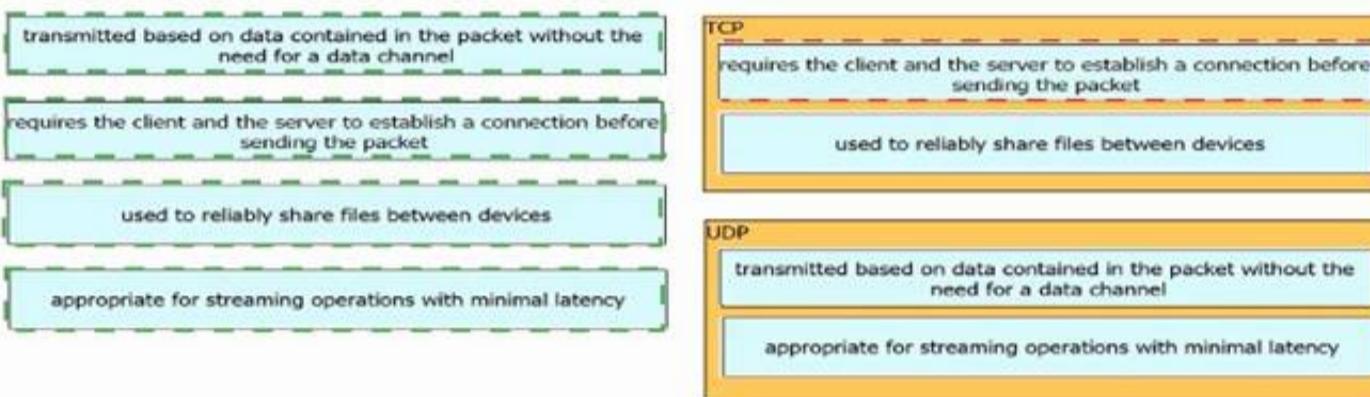
transmitted based on data contained in the packet without the need for a data channel	TCP
requires the client and the server to establish a connection before sending the packet	
used to reliably share files between devices	UDP
appropriate for streaming operations with minimal latency	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

| transmitted based on data contained in the packet without the need for a data channel | TCP |
requires the client and the server to establish a connection before sending the packet	requires the client and the server to establish a connection before sending the packet
used to reliably share files between devices	used to reliably share files between devices
appropriate for streaming operations with minimal latency	UDP
	transmitted based on data contained in the packet without the need for a data channel
	appropriate for streaming operations with minimal latency

NEW QUESTION 2
- (Topic 3)
Refer to the exhibit.

```
Switch 1          E1/1 ———————— E1/1          Switch 2
                  E1/2 ———————— E1/2

Interface Po1                    Interface Po1
switchport                       switchport
switchport mode access           switchport mode access
switchport access vlan 2         switchport access vlan 2

Interface E1/1 - 2               Interface E1/1 - 2
Switchport                       Switchport
switchport mode access           Switchport mode access
Switchport access vlan 2         Switchport access vlan 2
```

An engineer is configuring an EtherChannel using LACP between Switches 1 and 2 Which configuration must be applied so that only Switch 1 sends LACP initiation packets?

A. Switch 1 (config-if)#channel-group 1 mode on Swrtch2(config-if)#channel-group 1 mode passive
B. Switch1(config-if)#channel-group 1 mode passive Switch2(config-if)#channel-group 1 mode active
C. Switch1{config-if)£channel-group 1 mode active Switch2(config-if)#channel-group 1 mode passive
D. Switch1(config-if)#channel-group 1 mode on Switch2(config-if)#channel-group 1 mode active

Answer: C

NEW QUESTION 3
- (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 4
- (Topic 3)
Which interface mode must be configured to connect the lightweight APs in a centralized architecture?
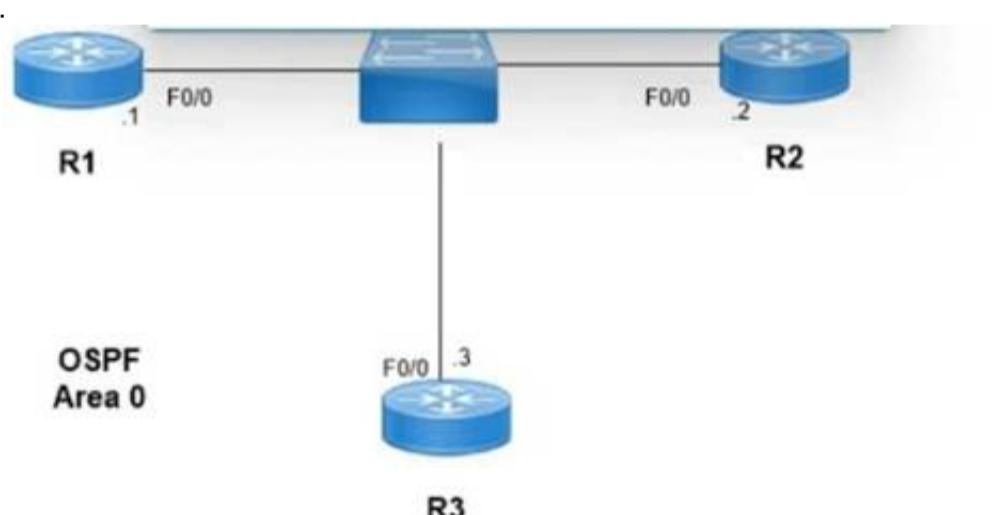
A. WLAN dynamic
B. management
C. trunk
D. access

Answer: D

NEW QUESTION 5
- (Topic 3)
Refer to the exhibit.


```
R1#show ip ospf neighbor
Neighbor ID    Pri    State       Dead Time    Address          Interface
192.168.100.2    1    FULL/BDR    00:00:32    192.168.100.2    FastEthernet0/0
192.168.100.3    1    FULL/DR     00:00:31    192.168.100.3    FastEthernet0/0
```

Which two configurations must the engineer apply on this network so that R1 becomes the DR? (Choose two.)
A)

```
R1(config)#router ospf 1
R1(config-router)#router-id 192.168.100.1
```

B)

```
R1(config)#interface fastethernet 0/0
R1(config-if)#ip ospf priority 200
```

C)

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

D)

```
R1(config)#interface fastethernet 0/0
R1(config-if)#ip ospf priority 0
```

E)

```
R3(config)#interface fastethernet 0/0
R3(config-if)#ip ospf priority 200
```
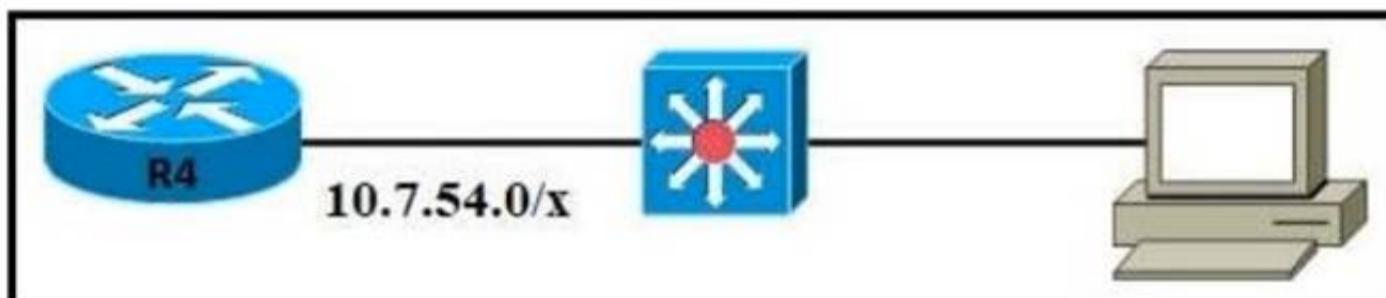
A. Option A
B. Option B
C. Option C
D. Option D
E. Option E

Answer: BC

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

The router has been configured with a supernet to accommodate the requirement for 380 users on a subnet The requirement already considers 30% future growth. Which configuration verifies the IP subnet on router R4?

A)

```
Subnet: 10.7.54.0
Subnet mask: 255.255.254.0
Broadcast address: 10.7.54.255
Usable IP address range: 10.7.54.1 - 10.7.55.254
```

B)

```
Subnet: 10.7.54.0
Subnet mask: 255.255.254.0
Broadcast address: 10.7.55.255
Usable IP address range: 10.7.54.1 - 10.7.55.254
```

C)

```
Subnet: 10.7.54.0
Subnet mask: 255.255.128.0
Broadcast address: 10.7.55.255
Usable IP address range: 10.7.54.1 - 10.7.55.254
```

D)

```
Subnet: 10.7.54.0
Subnet mask: 255.255.255.0
Broadcast address: 10.7.54.255
Usable IP address range: 10.7.54.1 - 10.7.55.254
```
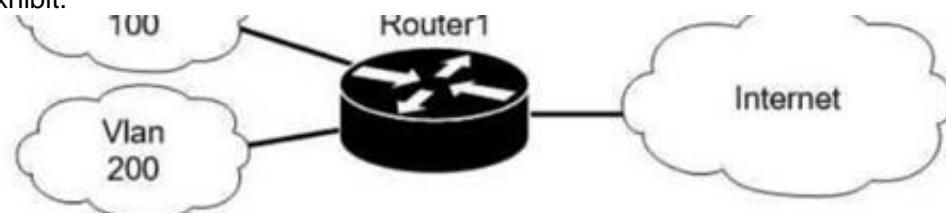
A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

NEW QUESTION 7

- (Topic 3)
Refer to the exhibit.


```
Router1(config)#interface GigabitEthernet0/0
Router1(config-if)#ip address 209.165.200.225 255.255.255.224
Router1(config-if)#ip nat outside
Router1(config)#interface GigabitEthernet0/1
Router1(config-if)#ip nat inside
Router1(config)#interface GigabitEthernet0/1.100
Router1(config-if)#encapsulation dot1Q 100
Router1(config-if)#ip address 10.10.10.1 255.255.255.0
Router1(config)#interface GigabitEthernet0/1.200
Router1(config-if)#encapsulation dot1Q 200
Router1(config-if)#ip address 10.10.20.1 255.255.255.0
Router1(config)#ip access-list standard NAT_INSIDE_RANGES
Router1(config-std-nacl)#permit 10.10.10.0 0.0.0.255
Router1(config)#ip nat inside source list NAT_INSIDE_RANGES interface GigabitEthernet0/0 overload
```

Users on existing VLAN 100 can reach sites on the Internet. Which action must the administrator take to establish connectivity to the Internet for users in VLAN 200?

A. Define a NAT pool on the router.
B. Configure static NAT translations for VLAN 200.
C. Configure the ip nat outside command on another interface for VLAN 200.
D. Update the NAT INSIDF RANGFS ACL

Answer: B

NEW QUESTION 8
- (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 9
- (Topic 3)
How does Rapid PVST+ create a fast loop-free network topology?

A. It requires multiple links between core switches
B. It generates one spanning-tree instance for each VLAN
C. It maps multiple VLANs into the same spanning-tree instance
D. It uses multiple active paths between end stations.

Answer: A

NEW QUESTION 10
- (Topic 3)
Which QoS per-hop behavior changes the value of the ToS field in the IPv4 packet header?
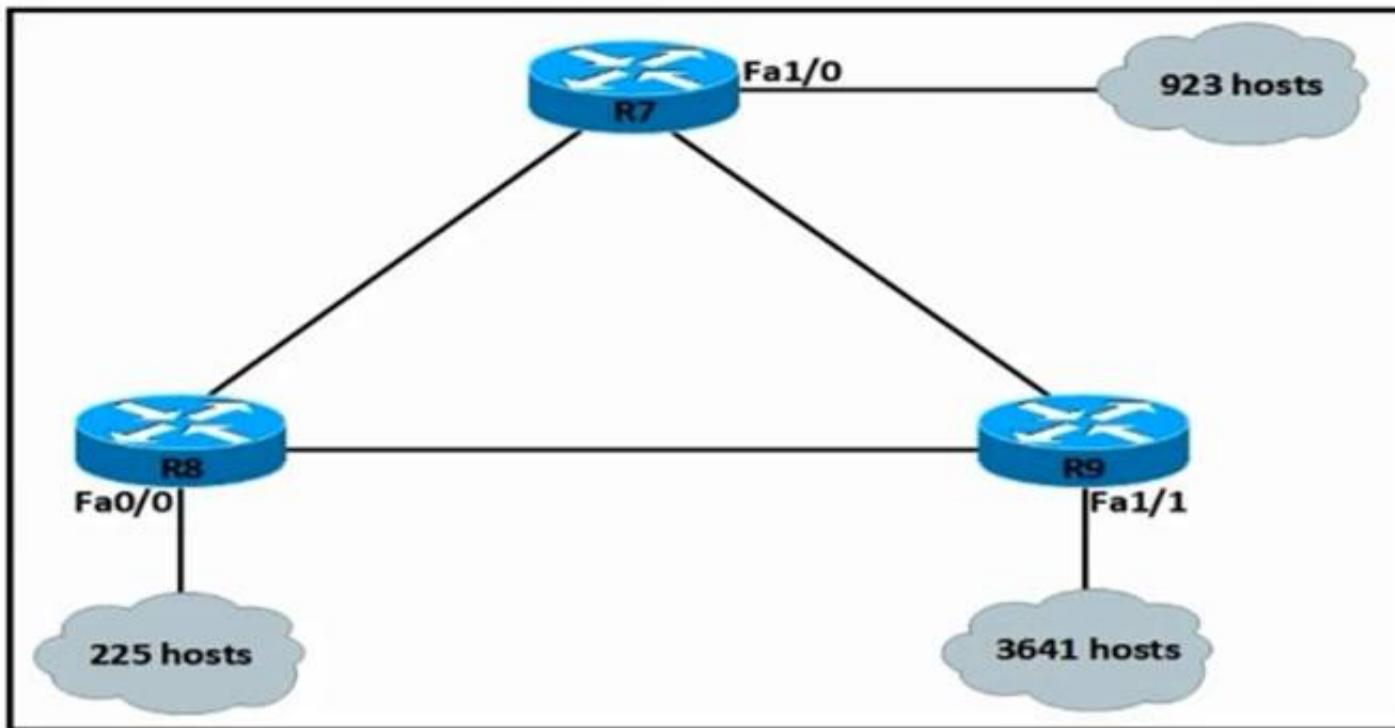
A. shaping
B. classification
C. policing
D. marking

Answer: D

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

An IP subnet must be configured on each router that provides enough addresses for the number of assigned hosts and anticipates no more than 10% growth for now hosts. Which configuration script must be used?
A)

```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.252.0
no shutdown

R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.255.0
no shutdown

R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.240.0
no shutdown
```

B)
```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.248.0
no shutdown

R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.254.0
no shutdown

R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.248.0
no shutdown
```

C)

```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.240.0
no shutdown

R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown

R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.192.0
no shutdown
```

D)
```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.192.0
no shutdown

R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown

R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.128.0
no shutdown
```
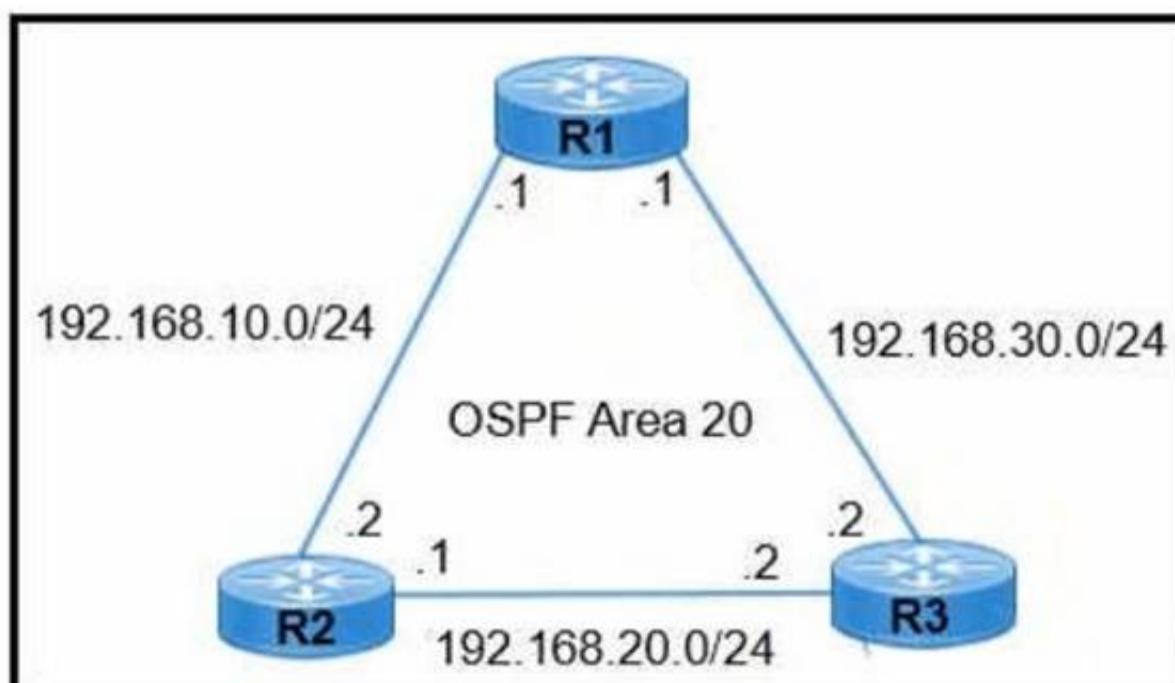
A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 13
- (Topic 3)
Refer to the exhibit.

R1 learns all routes via OSPF Which command configures a backup static route on R1 to reach the 192 168.20.0/24 network via R3?

A. R1(config)#ip route 192.168.20.0 255.255.0.0 192.168.30.2
B. R1(config)#ip route 192.168.20.0 255.255.255.0 192.168.30.2 90
C. R1(config)#ip route 192.168.20.0 255.255.255.0 192.168.30.2 111
D. R1(config)#ip route 192.168.20.0 255.255.255.0 192.168.30.2

Answer: C

NEW QUESTION 15
- (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 two network actions occur within the data plane? (Choose two.)
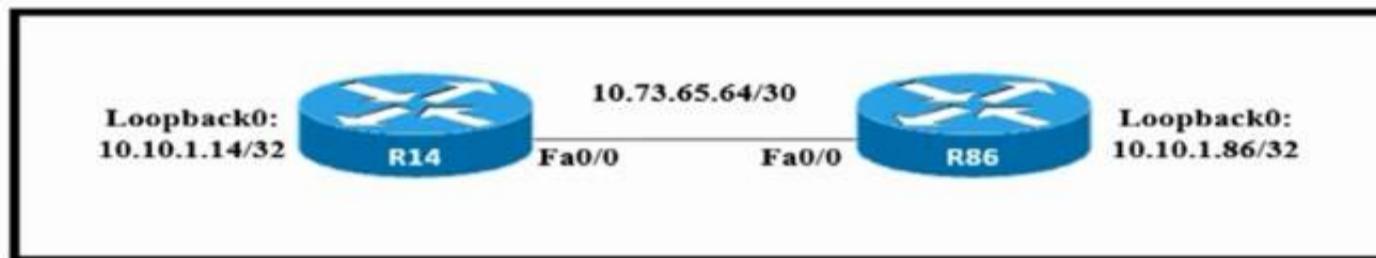
A. Add or remove an 802.1Q trunking header.
B. Make a configuration change from an incoming NETCONF RPC.
C. Run routing protocols.
D. Match the destination MAC address to the MAC address table.
E. Reply to an incoming ICMP echo request.

Answer: BD

NEW QUESTION 21
- (Topic 3)
Refer to the exhibit.

Which configuration allows routers R14 and R86 to form an OSPFv2 adjacency while acting as a central point for exchanging OSPF information between routers?
A)

```
R14#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf network broadcast
ip ospf 10 area 0
ip mtu 1500

router ospf 10
ip ospf priority 255
router-id 10.10.1.14

R86#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf network broadcast
ip ospf 10 area 0
ip mtu 1500
```

B)

```
R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf network broadcast
ip ospf priority 255
ip mtu 1500

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf network broadcast
ip mtu 1500

router ospf 10
router-id 10.10.1.86
network 10.10.1.86 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
```

C)

```
R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf network broadcast
ip ospf priority 0
ip mtu 1400

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface Loopback0
ip address 10.10.1.86 255.255.255.255
```

D)

```
R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf network broadcast
ip ospf priority 255
ip mtu 1500

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf network broadcast
ip mtu 1400

router ospf 10
router-id 10.10.1.86
network 10.10.1.86 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
```

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

Answer: D

NEW QUESTION 25
- (Topic 3)
An engineer must configure R1 for a new user account. The account must meet these requirements:
* It must be configured in the local database.
* The username is engineer.
* It must use the strongest password configurable. Which command must the engineer configure on the router?

A. R1 (config)# username engineer2 algorithm-type scrypt secret test2021
B. R1(config)# username engineer2 secret 5 .password S1$b1Ju$kZbBS1Pyh4QzwXyZ
C. R1(config)# username engineer2 privilege 1 password 7 test2021
D. R1(config)# username englneer2 secret 4 S1Sb1Ju$kZbBS1Pyh4QzwXyZ

Answer: B

NEW QUESTION 29
- (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 31
- (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 35
- (Topic 3)
Which two spanning-tree states are bypassed on an interface running PortFast? (Choose two.)

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

Answer: BD

NEW QUESTION 37
- (Topic 3)
What is a function of an endpoint on a network?

A. forwards traffic between VLANs on a network
B. connects server and client devices to a network
C. allows users to record data and transmit to a tile server
D. provides wireless services to users in a building

Answer: C

Explanation:
 An endpoint is a host that acts as the source or destination of data traffic flowing through a network.
When you are at your PC, editing your CV and uploading it to a file server, you are sitting at an endpoint.

NEW QUESTION 41
- (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 43
- (Topic 2)
While examining excessive traffic on the network, it is noted that all incoming packets on an interface appear to be allowed even though an IPv4 ACL is applied to the interface.
Which two misconfigurations cause this behavior? (Choose two)
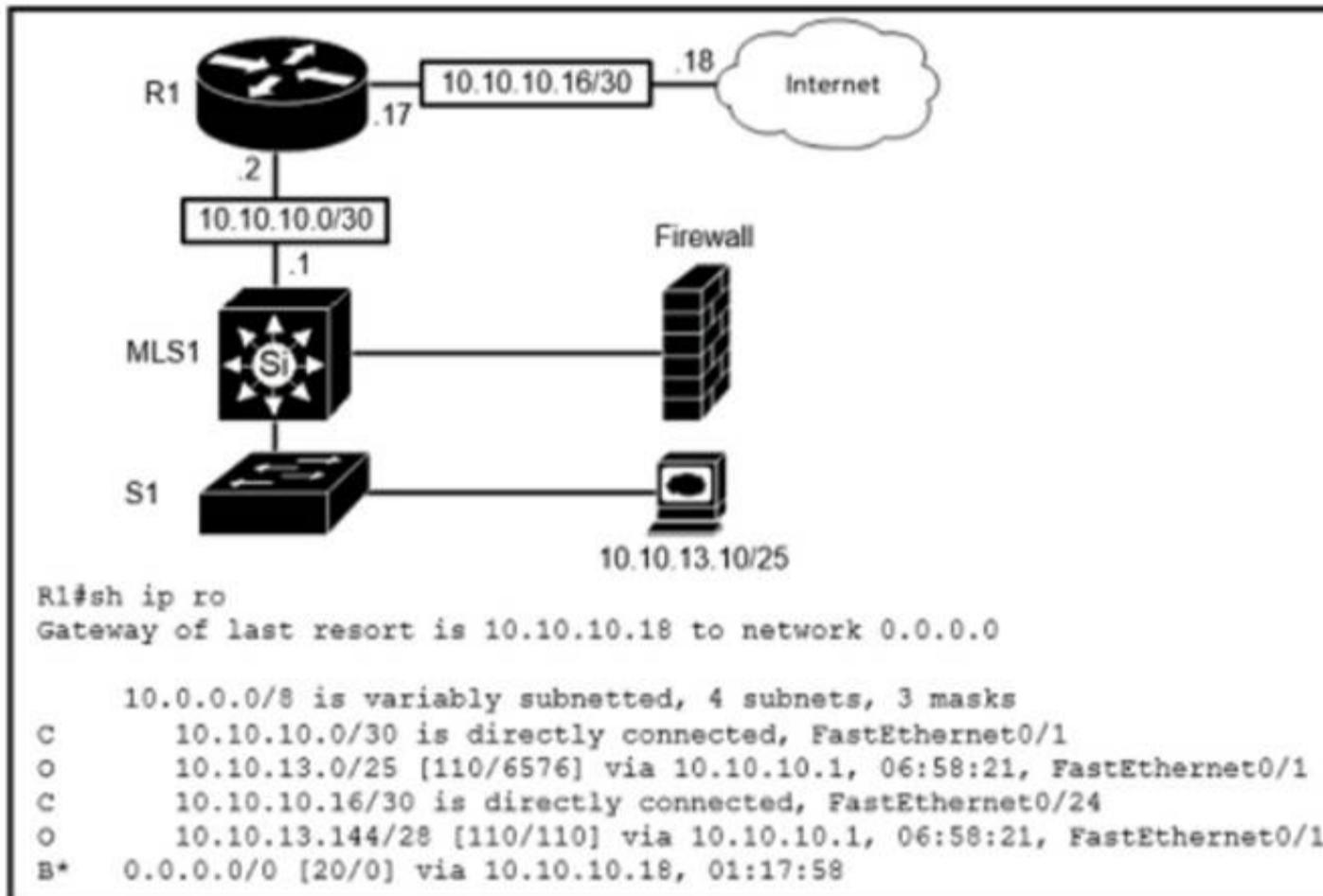
A. The packets fail to match any permit statement
B. A matching permit statement is too high in the access test
C. A matching permit statement is too broadly defined
D. The ACL is empty
E. A matching deny statement is too high in the access list

Answer: BC

NEW QUESTION 48
- (Topic 2)
Refer to the exhibit.


```
R1#sh ip ro
Gateway of last resort is 10.10.10.18 to network 0.0.0.0

     10.0.0.0/8 is variably subnetted, 4 subnets, 3 masks
C       10.10.10.0/30 is directly connected, FastEthernet0/1
O       10.10.13.0/25 [110/6576] via 10.10.10.1, 06:58:21, FastEthernet0/1
C       10.10.10.16/30 is directly connected, FastEthernet0/24
O       10.10.13.144/28 [110/110] via 10.10.10.1, 06:58:21, FastEthernet0/1
B*    0.0.0.0/0 [20/0] via 10.10.10.18, 01:17:58
```

Which route type is configured to reach the internet?
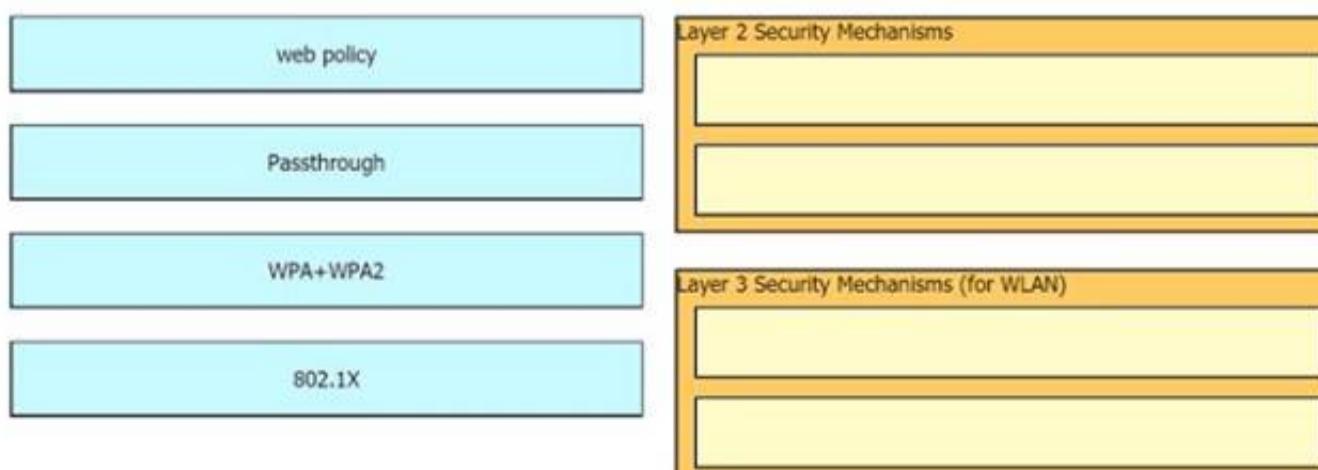
A. host route
B. default route
C. floating static route
D. network route

Answer: B

NEW QUESTION 50
DRAG DROP - (Topic 2)
Drag and drop the Cisco Wireless LAN Controller security settings from the left onto the correct security mechanism categories on the right.
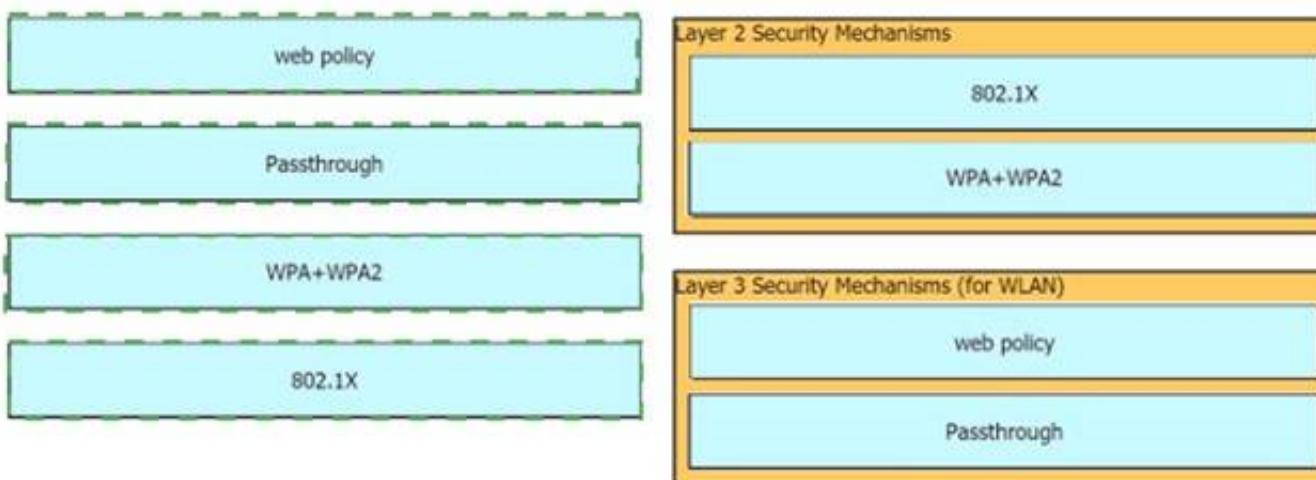
A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 55
- (Topic 2)
A network administrator needs to aggregate 4 ports into a single logical link which must negotiate layer 2 connectivity to ports on another switch. What must be configured when using active mode on both sides of the connection?

A. 802.1q trunks
B. Cisco vPC
C. LLDP
D. LACP

Answer: D

NEW QUESTION 58
- (Topic 2)
A packet is destined for 10.10.1.22. Which static route does the router choose to forward the packet?

A. ip route 10.10.1.0 255.255.255.240 10.10.255.1
B. ip route 10.10.1.16 255.255.255.252 10.10.255.1
C. ip route 10.10.1.20 255.255.255.252 10.10.255.1
D. ip route 10.10.1.20 255.255.255.254 10.10.255.1

Answer: C

NEW QUESTION 63
- (Topic 2)
An engineer requires a scratch interface to actively attempt to establish a trunk link with a neighbor switch. What command must be configured?

A. switchport mode trunk
B. switchport mode dynamic desirable
C. switchport mode dynamic auto
D. switchport nonegotiate

Answer: C

NEW QUESTION 65
- (Topic 2)
Which action does the router take as rt forwards a packet through the network?

A. The router replaces the source and desinaoon labels wth the sending router uterface label as a source and the next hop router label as a desbnabon
B. The router encapsulates the source and destination IP addresses with the sending router P address as the source and the neighbor IP address as the destination
C. The router replaces the original source and destination MAC addresses with the sending router MAC address as the source and neighbor MAC address as the destination
D. The router encapsulates the original packet and then includes a tag that identifies the source router MAC address and transmit transparently to the destination

Answer: C

NEW QUESTION 70
- (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 71
- (Topic 2)
If a switch port receives a new frame while it is actively transmitting a previous frame, how does it process the frames?

A. The new frame is delivered first, the previous frame is dropped, and a retransmission request is sent.
B. The previous frame is delivered, the new frame is dropped, and a retransmission request is sent.
C. The new frame is placed in a queue for transmission after the previous frame.
D. The two frames are processed and delivered at the same time.

Answer: B

NEW QUESTION 73
- (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 77
- (Topic 2)
Which design element is a best practice when deploying an 802.11b wireless infrastructure?

A. disabling TPC so that access points can negotiate signal levels with their attached wireless devices.
B. setting the maximum data rate to 54 Mbps on the Cisco Wireless LAN Controller
C. allocating nonoverlapping channels to access points that are in close physical proximity to one another
D. configuring access points to provide clients with a maximum of 5 Mbps

Answer: C

NEW QUESTION 82
- (Topic 2)
What are two reasons for an engineer to configure a floating state route? (Choose two)

A. to automatically route traffic on a secondary path when the primary path goes down
B. to route traffic differently based on the source IP of the packet
C. to enable fallback static routing when the dynamic routing protocol fails
D. to support load balancing via static routing
E. to control the return path of traffic that is sent from the router

Answer: AC

NEW QUESTION 85
- (Topic 2)
How does WPA3 improve security?

A. It uses SAE for authentication.
B. It uses a 4-way handshake for authentication.
C. It uses RC4 for encryption.
D. It uses TKIP for encryption.

Answer: A

NEW QUESTION 88
- (Topic 2)
Refer to the exhibit.

```
SiteA#show interface TenGigabitEthernet0/1/0
TenGigabitEthernet0/1/0 is up, line protocol is up
    Hardware is BUILT-IN-EPA-8x10G, address is 780c.f02a.db91 (bia 780a.f02b.db91)
    Description: Connection to SiteB
    Internet address is 10.10.10.1/30
    MTU 8146 bytes, BW 10000000 Kbit/sec, DLY 10 usec,
        reliability 166/255, txload 1/255, rxload 1/255
    Full Duplex, 10000Mbps, link type is force-up, media type is SFP-LR
    5 minute input rate 264797000 bits/sec, 26672 packets/sec
    5 minute output rate 122464000 bits/sec, 15724 packets/sec

SiteB#show interface TenGigabitEthernet0/1/0
TenGigabitEthernet0/1/0 is up, line protocol is up
    Hardware is BUILT-IN-EPA-8x10G, address is 780c.f02c.db26 (bia 780c.f02c.db26)
    Description: Connection to SiteA
    Internet address is 10.10.10.2/30
    MTU 8146 bytes, BW 10000000 Kbit/sec, DLY 10 usec,
        reliability 255/255, txload 1/255, rxload 1/255
    Full Duplex, 10000Mbps, link type is force-up, media type is SFP-LR
    5 minute input rate 122464000 bits/sec, 15724 packets/sec
    5 minute output rate 264797000 bits/sec, 26672 packets/sec
```

Shortly after SiteA was connected to SiteB over a new single-mode fiber path users at SiteA report intermittent connectivity issues with applications hosted at SiteB
What is the cause of the intermittent connectivity issue?
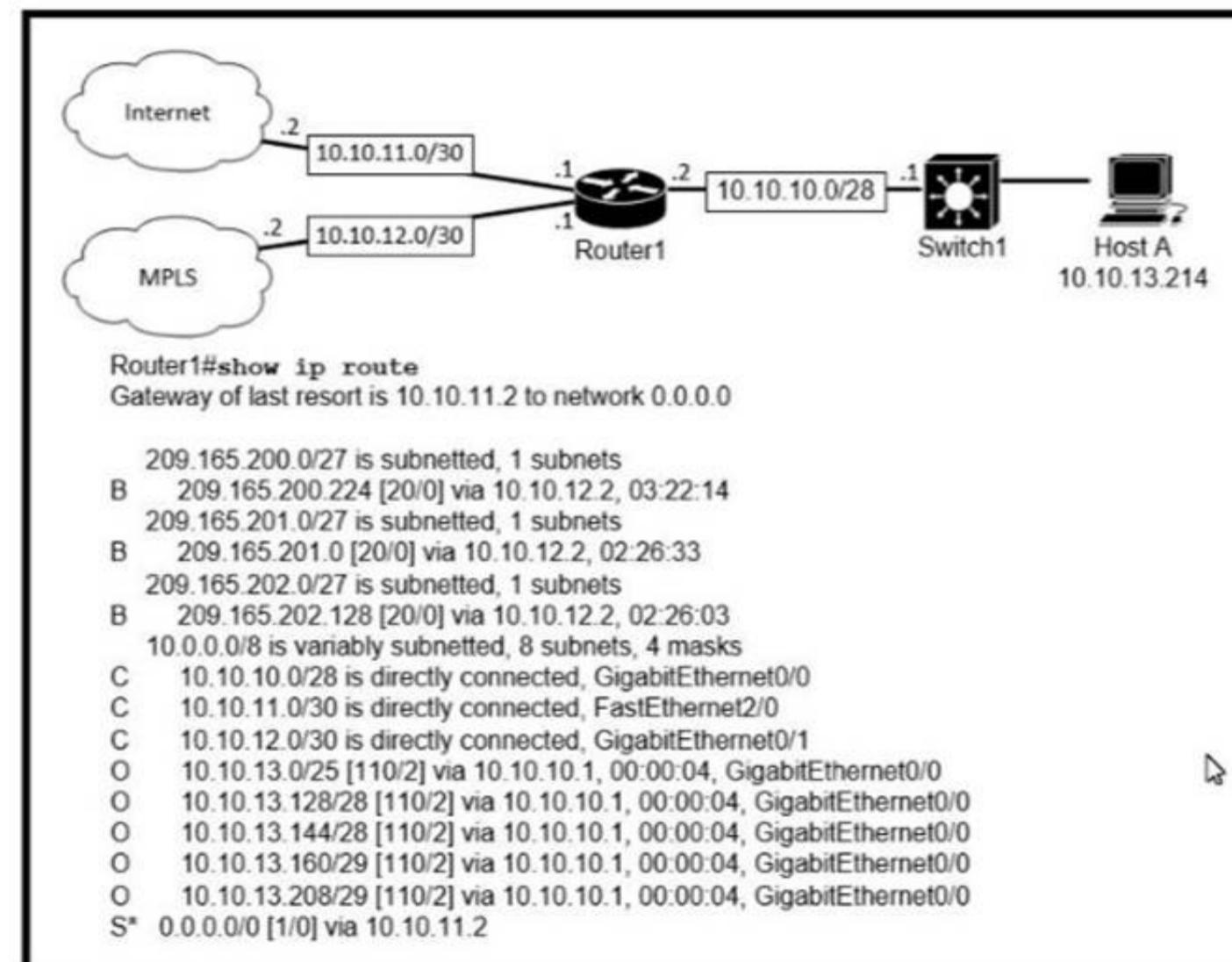
A. Interface errors are incrementing
B. An incorrect SFP media type was used at SiteA
C. High usage is causing high latency
D. The sites were connected with the wrong cable type

Answer: A

NEW QUESTION 89
- (Topic 2)
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
```

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 90

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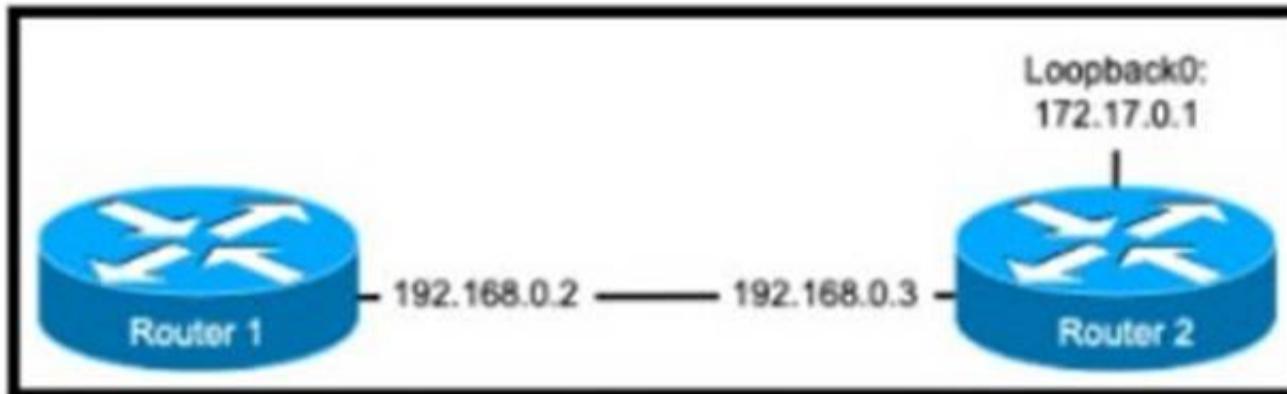
Explanation:
 Reference: https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-2/config-guide/b_cg82/b_cg82_chapter_010101011.html

NEW QUESTION 94
- (Topic 2)
Refer to the exhibit.

The nip server 192.168.0.3 command has been configured on router 1 to make it an NTP client of router 2. Which command must be configured on router 2 so that it operates in server-only mode and relies only on its internal clock?

A. Router2(config)#ntp passive
B. Router2(config)#ntp server 172.17.0.1
C. Router2(config)#ntp master 4
D. Router2(config)#ntp server 192.168.0.2

Answer: B

Explanation:
 • To use internal clock of this router, use any configured IP address in any interface of this router.

NEW QUESTION 95
DRAG DROP - (Topic 2)
Refer to the exhibit.

An engineer is required to verify that the network parameters are valid for the users wireless LAN connectivity on a /24 subnet. Drag and drop the values from the left onto the network parameters on the right. Not all values are used.

192.168.1.1	broadcast address
192.168.1.20	default gateway
192.168.1.254	host IP address
192.168.1.255	last assignable IP address in the subnet
B8-76-3F-7C-57-DF	MAC address
1A-76-3F-7C-57-DF	network address
192.168.1.0	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

192.168.1.1	192.168.1.255
192.168.1.20	192.168.1.1
192.168.1.254	192.168.1.20
192.168.1.255	192.168.1.254
B8-76-3F-7C-57-DF	B8-76-3F-7C-57-DF
1A-76-3F-7C-57-DF	192.168.1.0
192.168.1.0	

NEW QUESTION 99
- (Topic 2)
What is the benefit of configuring PortFast on an interface?

A. After the cable is connected, the interface uses the fastest speed setting available for that cable type
B. After the cable is connected, the interface is available faster to send and receive user data
C. The frames entering the interface are marked with higher priority and then processed faster by a switch.
D. Real-time voice and video frames entering the interface are processed faster

Answer: B

NEW QUESTION 102
- (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 103
- (Topic 2)
Refer to the exhibit.

```
R1# show ip route

D       192.168.16.0/26 [90/2679326] via 192.168.1.1
R       192.168.16.0/24 [120/3] via 192.168.1.2
O       192.168.16.0/21 [110/2] via 192.168.1.3
i L1    192.168.16.0/27 [115/30] via 192.168.1.4
```

Which route does R1 select for traffic that is destined to 192 168.16.2?

A. 192.168.16.0/21
B. 192.168.16.0/24
C. 192.168 26.0/26
D. 192.168.16.0/27

Answer: D

Explanation:
 The destination IP addresses match all four entries in the routing table but the 192.168.16.0/27 has the longest prefix so it will be chosen. This is called the "longest prefix match" rule.

NEW QUESTION 106
- (Topic 2)
An office has 8 floors with approximately 30-40 users per floor What command must be configured on the router Switched Virtual Interface to use address space efficiently?

A. ip address 192.168.0.0 255.255.0.0
B. ip address 192.168.0.0 255.255.254.0
C. ip address 192.168.0.0 255.255.255.128
D. ip address 192.168.0.0 255.255.255.224

Answer: B

NEW QUESTION 107
DRAG DROP - (Topic 2)
Refer to the exhibit.

```
[root@HostTest ~]# ip route
default via 192.168.1.193 dev eth1  proto static
192.168.1.0/26 dev eth1  proto kernel  scope link  src 192.168.1.200  metric 1

[root@HostTest ~]# ip addr show eth1
eth1:  mtu 1500 qdisc pfifo_fast qlen 1000
   link/ether 00:0C:22:83:79:A3 brd ff:ff:ff:ff:ff:ff
   inet 192.168.1.200/26 brd 192.168.1.255 scope global eth1
   inet6 fe80::20c:29ff:fe89:79b3/64 scope link
   valid_lft forever preferred_lft forever
```

Drag and drop the networking parameters from the left onto the correct values on the right.

default gateway	00:0C:22
host IP address	00:0C:22:83:79:A3
NIC MAC address	192.168.1.193
NIC vendor OUI	192.168.1.200
subnet mask	255.255.255.192

A. Mastered
B. Not Mastered

Answer: A

Explanation:
NIC vendor OUI –> 00:0C:22NIC MAC address –> 00:0C:22:83:79:A3default gateway –>192.168.1.193host IP address –> 192.168.1.200subnet mask –> 255.255.255.192
The "ip route" and "ip addr show eth1" are Linux commands.+ "ip route": display the routing table+ "ip addr show eth1": get depth information (only on eth1 interface) about your network interfaces like IP Address, MAC Address information

NEW QUESTION 111
- (Topic 2)
Which configuration is needed to generate an RSA key for SSH on a router?

A. Configure the version of SSH
B. Configure VTY access.
C. Create a user with a password.
D. Assign a DNS domain name

Answer: D

NEW QUESTION 115
- (Topic 2)
A user configured OSPF and advertised the Gigabit Ethernet interface in OSPF By default, which type of OSPF network does this interface belong to?

A. point-to-multipoint
B. point-to-point
C. broadcast
D. nonbroadcast

Answer: C

Explanation:
 https://www.oreilly.com/library/view/cisco-ios- cookbook/0596527225/ch08s15.html
The Broadcast network type is the default for an OSPF enabled ethernet interface (while Point-toPoint is the default OSPF network type for Serial interface with HDLC and PPP encapsulation).

NEW QUESTION 119
- (Topic 2)
What is the effect when loopback interfaces and the configured router ID are absent during the OSPF Process configuration?

A. No router ID is set, and the OSPF protocol does not run.
B. The highest up/up physical interface IP address is selected as the router ID.
C. The lowest IP address is incremented by 1 and selected as the router ID.
D. The router ID 0.0.0.0 is selected and placed in the OSPF process.

Answer: B

NEW QUESTION 123
- (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 124
- (Topic 2)
Which type of API allows SDN controllers to dynamically make changes to the network?

A. northbound API
B. REST API
C. SOAP API
D. southbound API

Answer: D

Explanation:
Cisco overview doc for SDN here: https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Data_Center/VMDC/SDN/SDN. html

NEW QUESTION 125
- (Topic 2)
An engineer must configure traffic for a VLAN that is untagged by the switch as it crosses a trunk link. Which command should be used?

A. switchport trunk allowed vlan 10
B. switchport trunk native vlan 10

C. switchport mode trunk
D. switchport trunk encapsulation dot1q

Answer: B

NEW QUESTION 130
- (Topic 2)
Which goal is achieved by the implementation of private IPv4 addressing on a network?
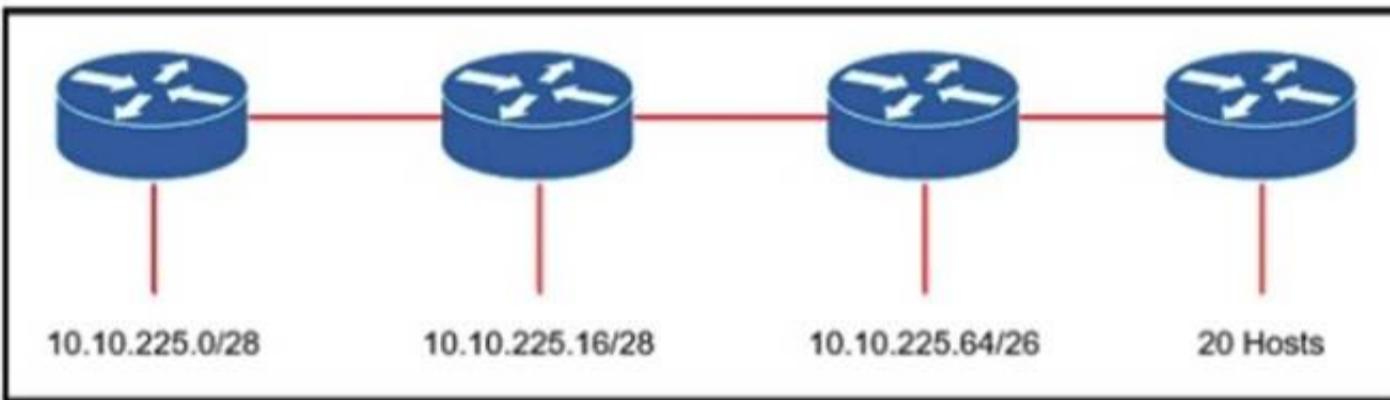
A. provides an added level of protection against Internet exposure
B. provides a reduction in size of the forwarding table on network routers
C. allows communication across the Internet to other private networks
D. allows servers and workstations to communicate across public network boundaries

Answer: A

NEW QUESTION 133
- (Topic 2)

10.10.225.0/28   10.10.225.16/28   10.10.225.64/26   20 Hosts

Refer to the exhibit. An engineer must add a subnet for a new office that will add 20 users to the network. Which IPv4 network and subnet mask combination does the engineer assign to minimize wasting addresses?

A. 10.10.225.48 255.255.255.240
B. 10.10.225.32 255.255.255.240
C. 10.10.225.48 255.255.255.224
D. 10.10.225.32 255.255.255.224

Answer: D

NEW QUESTION 135
- (Topic 2)
What are two characteristics of an SSID? (Choose Two)

A. It can be hidden or broadcast in a WLAN
B. It uniquely identifies an access point in a WLAN
C. It uniquely identifies a client in a WLAN
D. It is at most 32 characters long.
E. IT provides secured access to a WLAN

Answer: BE

NEW QUESTION 140
- (Topic 2)
How does CAPWAP communicate between an access point in local mode and a WLC?

A. The access point must directly connect to the WLC using a copper cable
B. The access point must not be connected to the wired network, as it would create a loop
C. The access point must be connected to the same switch as the WLC
D. The access point has the ability to link to any switch in the network, assuming connectivity to the WLC

Answer: D

NEW QUESTION 141
- (Topic 2)
Refer to the exhibit.

```
R1# sh ip ospf int gig0/0
Gig0/0 is up, line protocol is up
  Internet Address 10.201.24.8/28, Area 1, Attached via Network Statement
  Process ID 100, Router ID 192.168.1.1, Network Type BROADCAST, Cost: 1
  Topology-MTID    Cost    Disabled    Shutdown        Topology Name
      0             1        no          no                Base
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 192.168.1.1, Interface address 10.201.24.8
  No backup designated router on this network
  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
    oob-resync timeout 40
    Hello due in 00:00:07

R2#sh ip ospf int gig0/0
gig0/0 is up, line protocol is up
  Internet Address 10.201.24.1/28, Area 1
  Process ID 100, Router ID 172.16.1.1, Network Type BROADCAST, Cost: 1
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 172.16.1.1, Interface address 10.201.24.1
  No backup designated router on this network
  Timer intervals configured, Hello 20, Dead 80, Wait 80, Retransmit 5
```

What action establishes the OSPF neighbor relationship without forming an adjacency?

A. modify hello interval
B. modify process ID
C. modify priority
D. modify network type

Answer: A

NEW QUESTION 143
- (Topic 2)
What benefit does controller-based networking provide versus traditional networking?

A. moves from a two-tier to a three-tier network architecture to provide maximum redundancy
B. provides an added layer of security to protect from DDoS attacks
C. allows configuration and monitoring of the network from one centralized port
D. combines control and data plane functionality on a single device to minimize latency

Answer: C

NEW QUESTION 144
- (Topic 2)
Where does wireless authentication happen?

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

Answer: D

NEW QUESTION 148
- (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 151
- (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 153
- (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 156
- (Topic 2)
Refer to the exhibit.

```
R1#show ip interface brief
Interface               IP-Address      OK? Method Status                 Protocol
FastEthernet0/0         unassigned      YES NVRAM  administratively down  down
GigabitEthernet1/0      192.168.0.1     YES NVRAM  up                     up
GigabitEthernet2/0      10.10.1.10      YES manual up                     up
GigabitEthernet3/0      10.10.10.20     YES manual up                     up
GigabitEthernet4/0      unassigned      YES NVRAM  administratively down  down
Loopback0               172.16.15.10    YES manual
```

What does router R1 use as its OSPF router-ID?

A. 10.10.1.10
B. 10.10.10.20
C. 172.16.15.10
D. 192.168.0.1

Answer: C

Explanation:
 OSPF uses the following criteria to select the router ID:1. Manual configuration of the router ID (via the "router-id x.x.x.x" command under OSPF router configuration mode).2. Highest IP address on a loopback interface.3. Highest IP address on a non-loopback and active (no shutdown) interface.

NEW QUESTION 160
- (Topic 2)
An organization secures its network with multi-factor authentication using an authenticator app on employee smartphone. How is the application secured in the case of a user's smartphone being lost or stolen?

A. The application requires an administrator password to reactivate after a configured Interval.
B. The application requires the user to enter a PIN before it provides the second factor.
C. The application challenges a user by requiring an administrator password to reactivate when the smartphone is rebooted.
D. The application verifies that the user is in a specific location before it provides the second factor.

Answer: B

NEW QUESTION 162
- (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 163
- (Topic 2)
Which IPv6 address type provides communication between subnets and is unable to route on the Internet?

A. global unicast
B. unique local
C. link-local
D. multicast

Answer: B

NEW QUESTION 166
- (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 170
- (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 174
- (Topic 1)
Why was the RFC 1918 address space defined?

A. conserve public IPv4 addressing
B. preserve public IPv6 address space
C. reduce instances of overlapping IP addresses
D. support the NAT protocol

Answer: A

NEW QUESTION 176
- (Topic 1)
Refer to the exhibit.

```
Router#
Capability Codes: R - Router, T - Trans Bridge, B - Source Route Bridge
                  S - Switch, H - Host, I - IGMP, r - Repeater, P - Phone,
                  D - Remote, C - CVTA, M - Two-port Mac Relay

Device ID    Local Intrfce Holdtme  Capability  Platform  Port ID
10.1.1.2     Gig 37/3      176                  R I       CPT 600   Gig 36/41
10.1.1.2     Gig 37/1      174                  R I       CPT 600   Gig 36/43
10.1.1.2     Gig 36/41     134                  R I       CPT 600   Gig 37/3
10.1.1.2     Gig 36/43     134                  R I       CPT 600   Gig 37/1
10.1.1.2     Ten 3/2       132                  R I       CPT 600   Ten 4/2
10.1.1.2     Ten 4/2       174                  R I       CPT 600   Ten 3/2
```

Which command provides this output?

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

Answer: D

NEW QUESTION 177
- (Topic 1)
Which network action occurs within the data plane?

A. compare the destination IP address to the IP routing table.
B. run routing protocols (OSPF, EIGRP, RIP, BGP)
C. make a configuration change from an incoming NETCONF RPC

D. reply to an incoming ICMP echo request

Answer: A

NEW QUESTION 180
- (Topic 1)
Which type of information resides on a DHCP server?

A. a list of the available IP addresses in a pool
B. a list of public IP addresses and their corresponding names
C. usernames and passwords for the end users in a domain
D. a list of statically assigned MAC addresses

Answer: A

NEW QUESTION 184
- (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 185
- (Topic 1)
Which 802.11 frame type is association response?

A. management
B. protected frame
C. control
D. action

Answer: A

Explanation:
Reference: https://en.wikipedia.org/wiki/802.11_Frame_Types

NEW QUESTION 189
- (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 192
- (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 193
- (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 194
- (Topic 1)
What are two benefits of controller-based networking compared to traditional networking?

A. controller-based increases network bandwidth usage, while traditional lightens the load on the network.
B. controller-based inflates software costs, while traditional decreases individual licensing costs
C. Controller-based reduces network configuration complexity, while traditional increases the potential for errors
D. Controller-based provides centralization of key IT function
E. While traditional requires distributes management function
F. controller-based allows for fewer network failure, while traditional increases failure rates.

Answer: CD

Explanation:
Cisco DNA Center Device Management
* 3. Monitor the cloud for software update
* 5. Uses CLI templates to apply a consistent configuration to multiple devices at an individual location
* 6. Uses NetFlow to analyse potential security threats throughout the network and take appropriate action on that traffic
Traditional device management
* 2. Manages device configuration on a per-device basis
* 4. Security is managed near the perimeter of the network with firewalls, VPNs, and IPS
? Implements changes via an SSH terminal

NEW QUESTION 195
- (Topic 1)
Which two minimum parameters must be configured on an active interface to enable OSPFv2 to operate? (Choose two)

A. OSPF area
B. OSPF MD5 authentication key
C. iPv6 address
D. OSPf process ID
E. OSPf stub flag

Answer: AD

NEW QUESTION 196
- (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
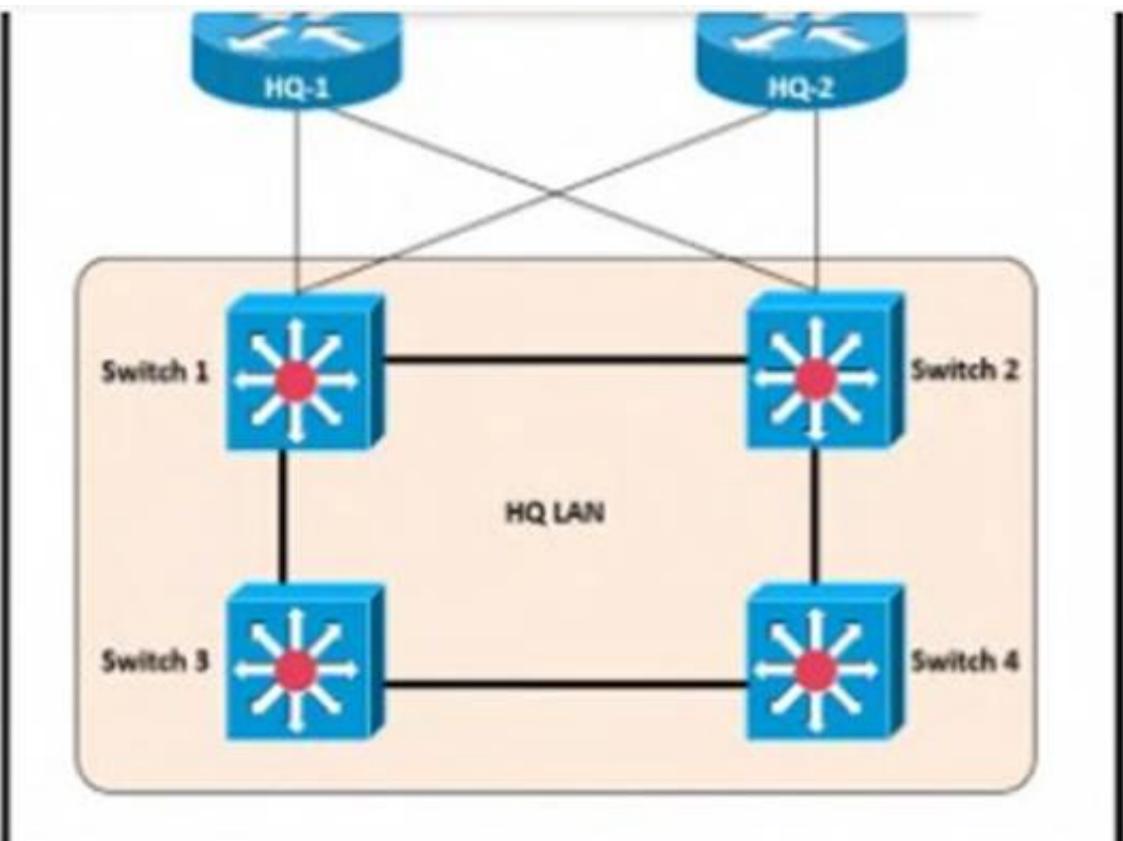
Explanation:
If neither the enable password command nor the enable secret command is configured, and if there is a line password configured for the console, the console line password serves as the enable password for all VTY sessions -> The "enable secret" will be used first if available, then "enable password" and line password.

NEW QUESTION 198
- (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
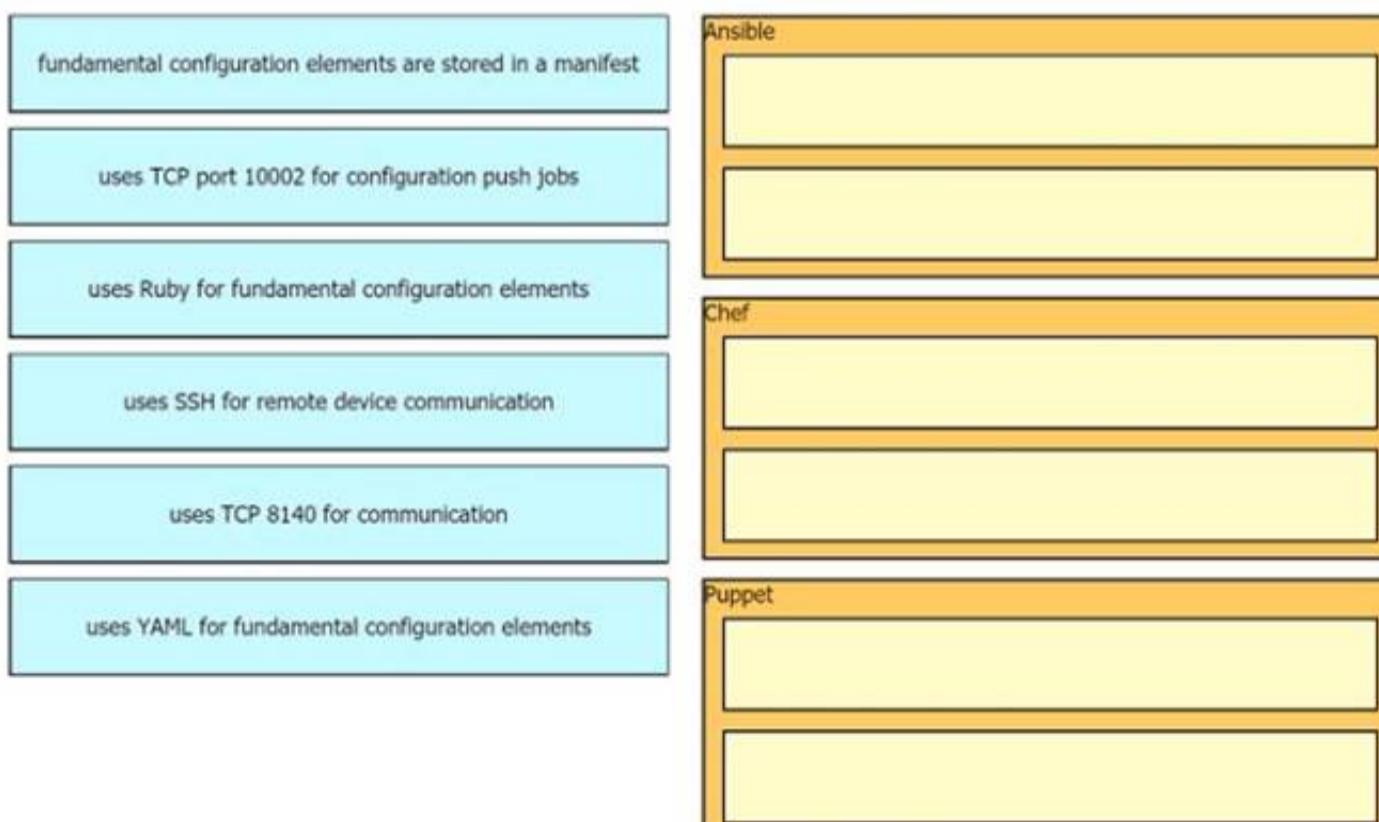
Explanation:

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 201
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.
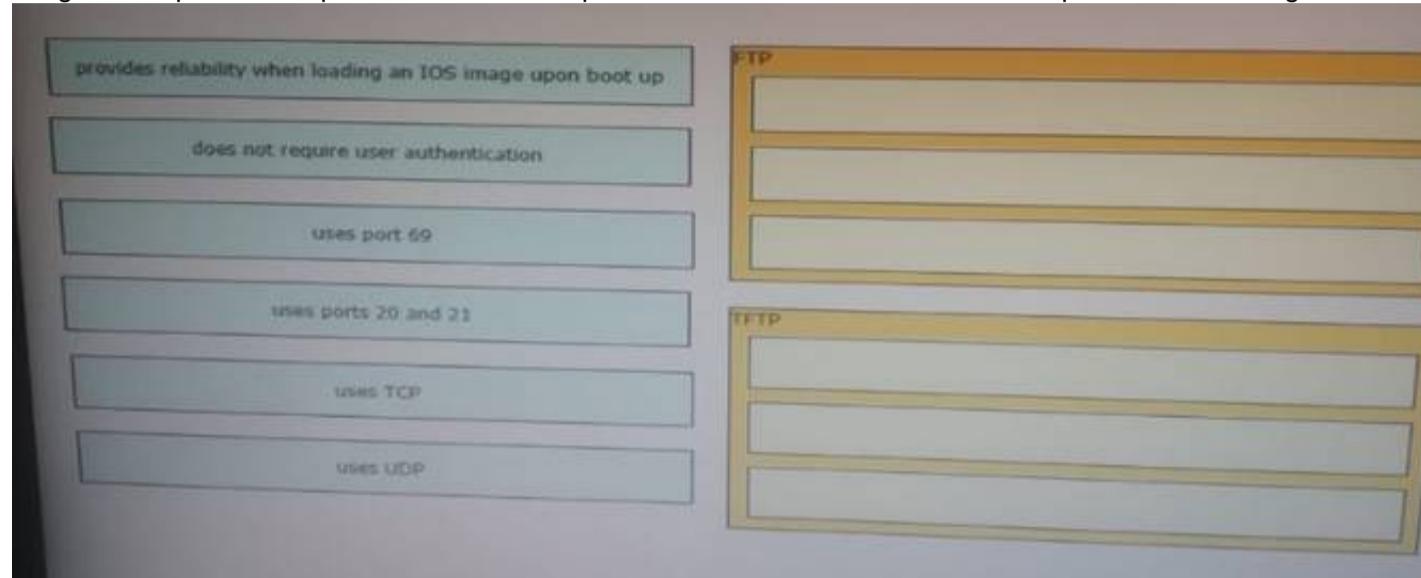
NEW QUESTION 205
DRAG DROP - (Topic 1)
Drag and drop the descriptions of file-transfer protocols from the left onto the correct protocols on the right.
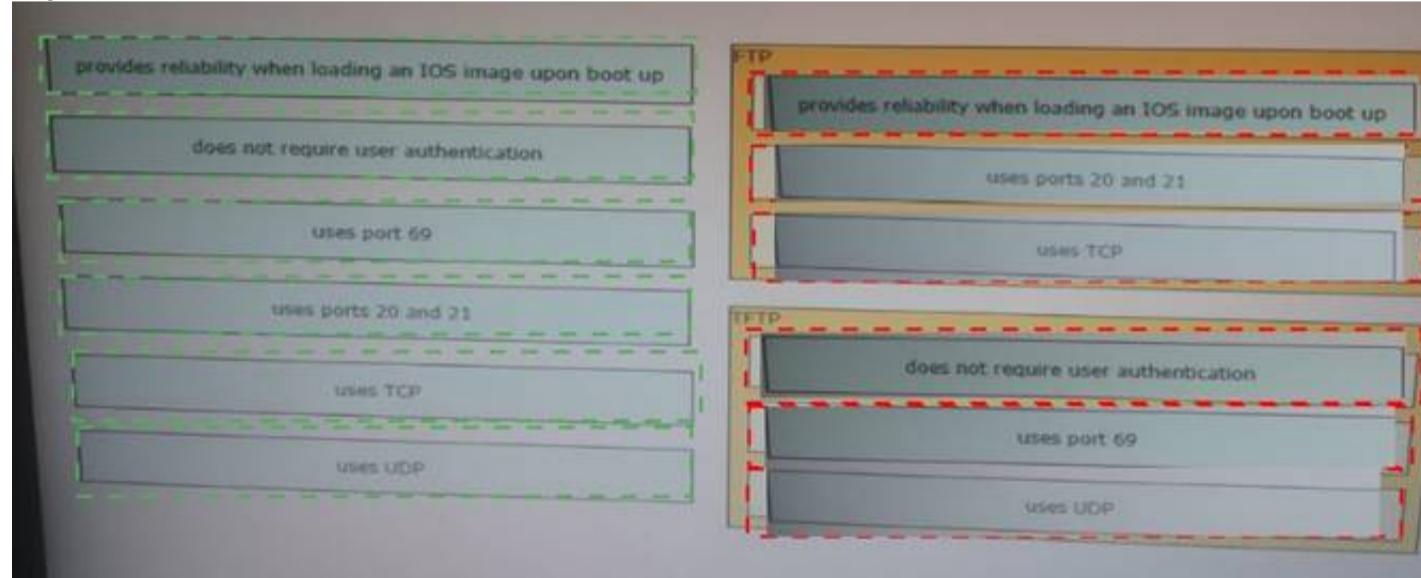
A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 210
- (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 215
- (Topic 1)
What is a DHCP client?

A. a host that is configured to request an IP address automatically
B. a server that dynamically assigns IP addresses to hosts
C. a workstation that requests a domain name associated with its IP address
D. a rooter that statically assigns IP addresses to hosts

Answer: A

NEW QUESTION 220
- (Topic 1)
Which type of wireless encryption is used for WPA2 in preshared key mode?
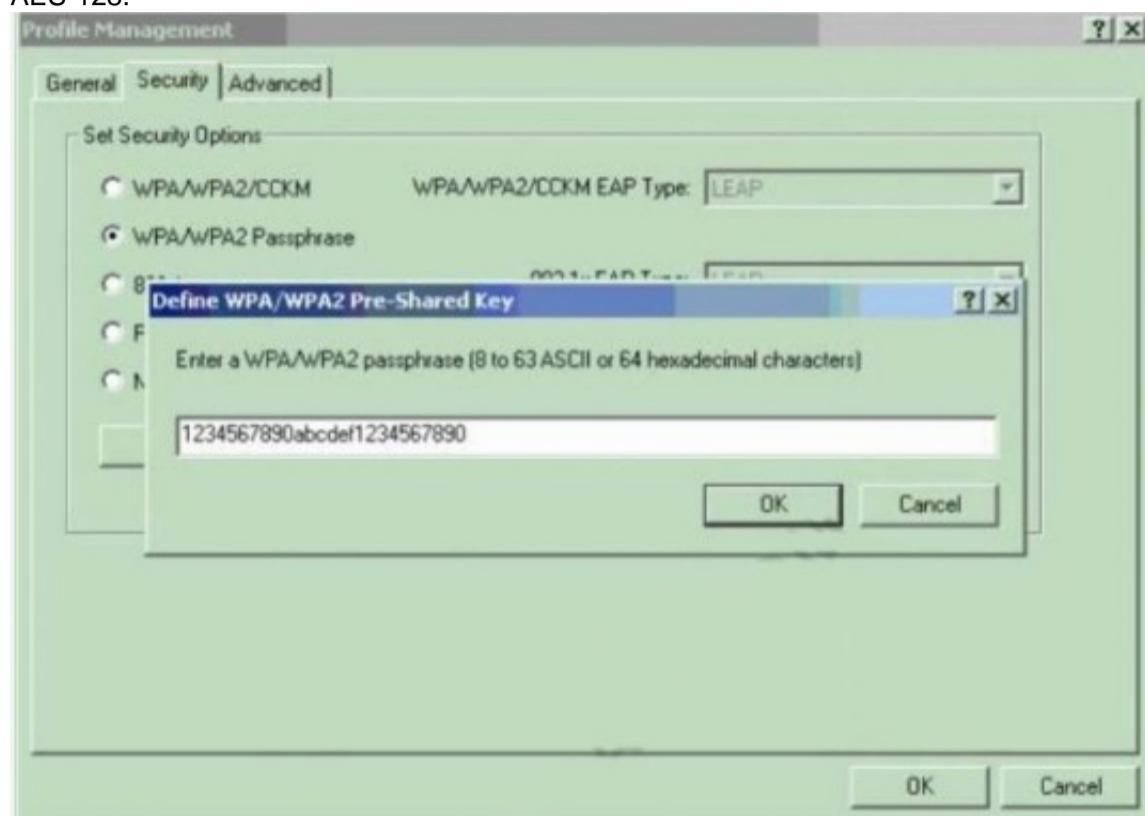
A. TKIP with RC4
B. RC4
C. AES-128
D. AES-256

Answer: D

Explanation:
We can see in this picture we have to type 64 hexadecimal characters (256 bit) for the WPA2 passphrase so we can deduce the encryption is AES-256, not AES-128.


https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/67134- wpa2-config.html
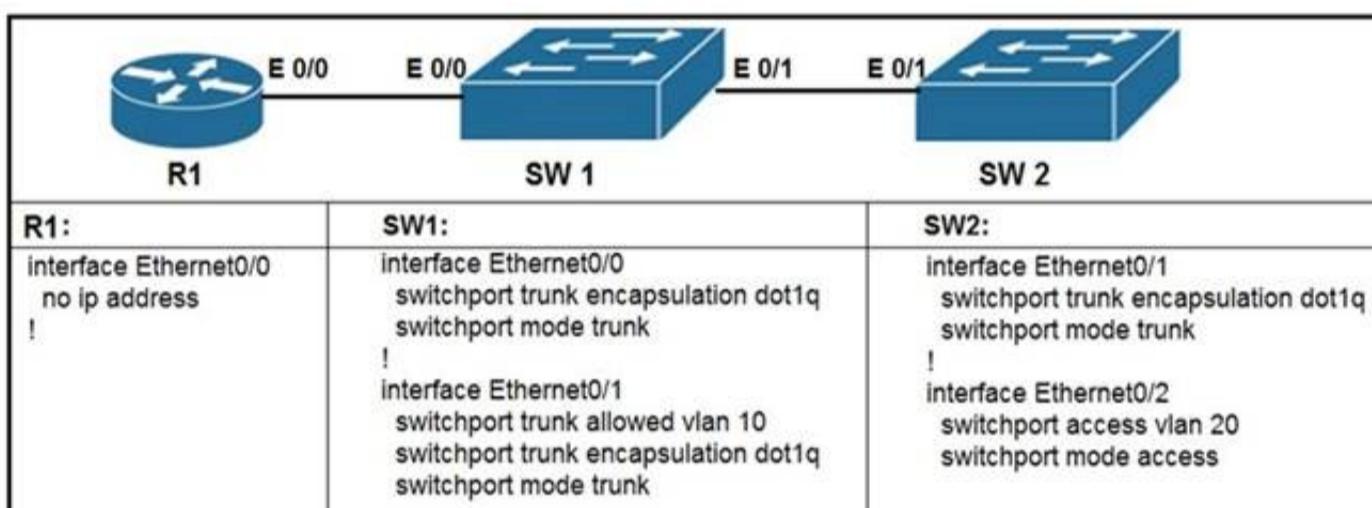
NEW QUESTION 224
- (Topic 1)
Refer to the exhibit.

What commands are needed to add a subinterface to Ethernet0/0 on R1 to allow for VLAN 20, with IP address 10.20.20.1/24?

A. R1(config)#interface ethernet0/0 R1(config)#encapsulation dot1q 20R1(config)#ip address 10.20.20.1 255.255.255.0
B. R1(config)#interface ethernet0/0.20 R1(config)#encapsulation dot1q 20R1(config)#ip address 10.20.20.1 255.255.255.0
C. R1(config)#interface ethernet0/0.20 R1(config)#ip address 10.20.20.1 255.255.255.0
D. R1(config)#interface ethernet0/0 R1(config)#ip address 10.20.20.1 255.255.255.0

Answer: B

NEW QUESTION 229
- (Topic 1)
Refer to the exhibit.

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 234
- (Topic 1)
Which command prevents passwords from being stored in the configuration as plain text on a router or switch?
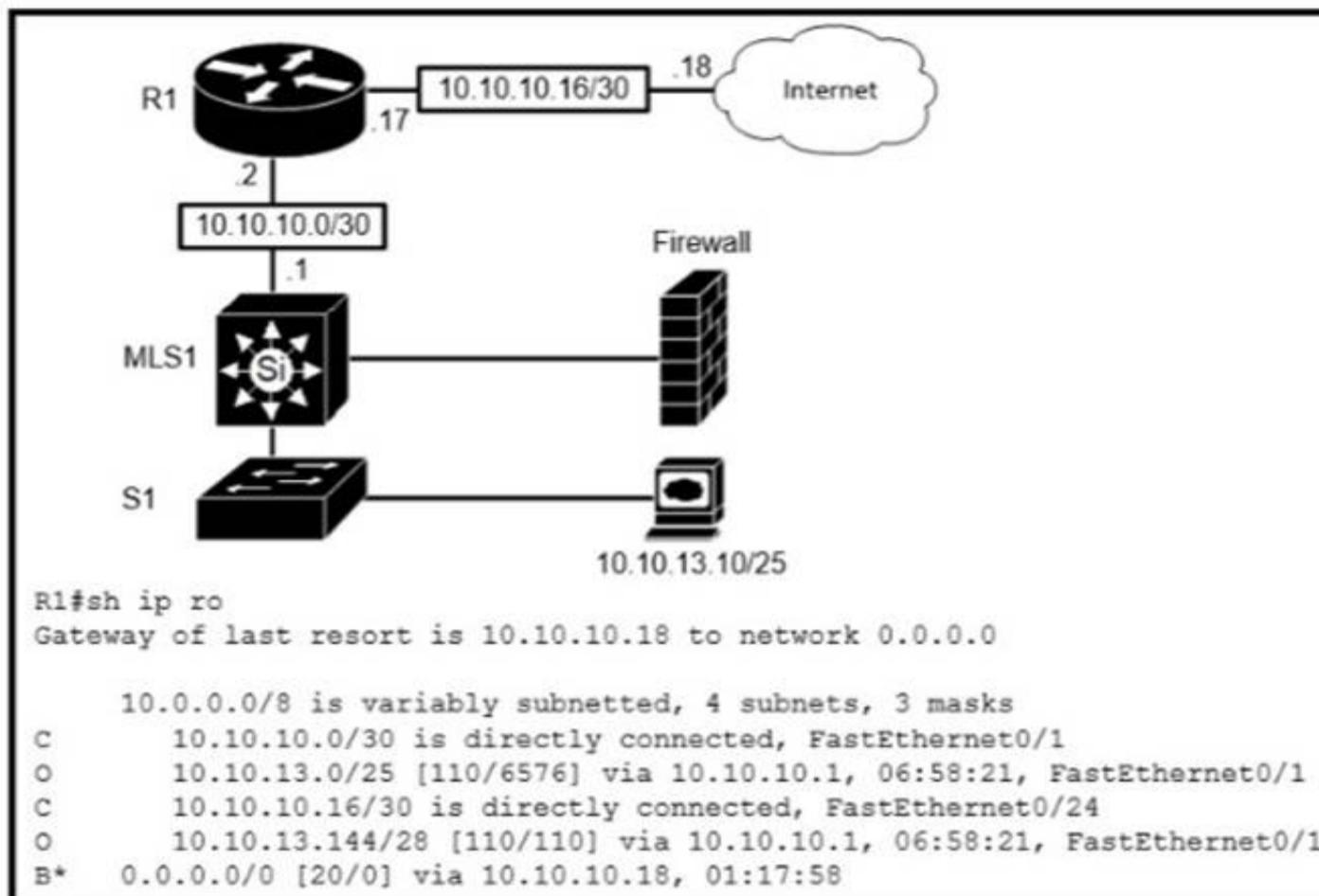
A. enable secret
B. service password-encryption
C. username Cisco password encrypt
D. enable password

Answer: B

NEW QUESTION 239
- (Topic 1)
Refer to the exhibit.


```
R1#sh ip ro
Gateway of last resort is 10.10.10.18 to network 0.0.0.0

     10.0.0.0/8 is variably subnetted, 4 subnets, 3 masks
C       10.10.10.0/30 is directly connected, FastEthernet0/1
O       10.10.13.0/25 [110/6576] via 10.10.10.1, 06:58:21, FastEthernet0/1
C       10.10.10.16/30 is directly connected, FastEthernet0/24
O       10.10.13.144/28 [110/110] via 10.10.10.1, 06:58:21, FastEthernet0/1
B*   0.0.0.0/0 [20/0] via 10.10.10.18, 01:17:58
```

Which type of route does R1 use to reach host 10.10.13.10/32?

A. floating static route
B. host route
C. default route
D. network route

Answer: D

Explanation:
From the output, we see R1 will use the entry "O 10.10.13.0/25 [110/4576] via 10.10.10.1, …" to reach host 10.10.13.10. This is a network route.Note: "B* 0.0.0.0/0…" is a default route.

NEW QUESTION 243
- (Topic 1)
Which two encoding methods are supported by REST APIs? (Choose two)

A. YAML
B. JSON
C. EBCDIC
D. SGML
E. XML

Answer: BE

Explanation:
https://www.cisco.com/c/en/us/td/docs/switches/datacenter/aci/apic/sw/2-x/rest_cfg/2_1_x/b_Cisco_APIC_REST_API_Configuration_Guide/b_Cisco_APIC_REST_API_Configuration_Guide_chapter_01.html
Reference:
https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus1000/sw/5_x/rest_api_config/b_Cisco_N1KV_VMware_REST_API_Config_5x/b_Cisco_N1KV_VMware_REST_API_Config_5x_chapter_010.pdf
The Application Policy Infrastructure Controller (APIC) REST API is a programmatic interface that uses REST architecture. The API accepts and returns HTTP (not enabled by default) or HTTPS messages that contain JavaScript Object Notation (JSON) or Extensible Markup Language (XML) documents.
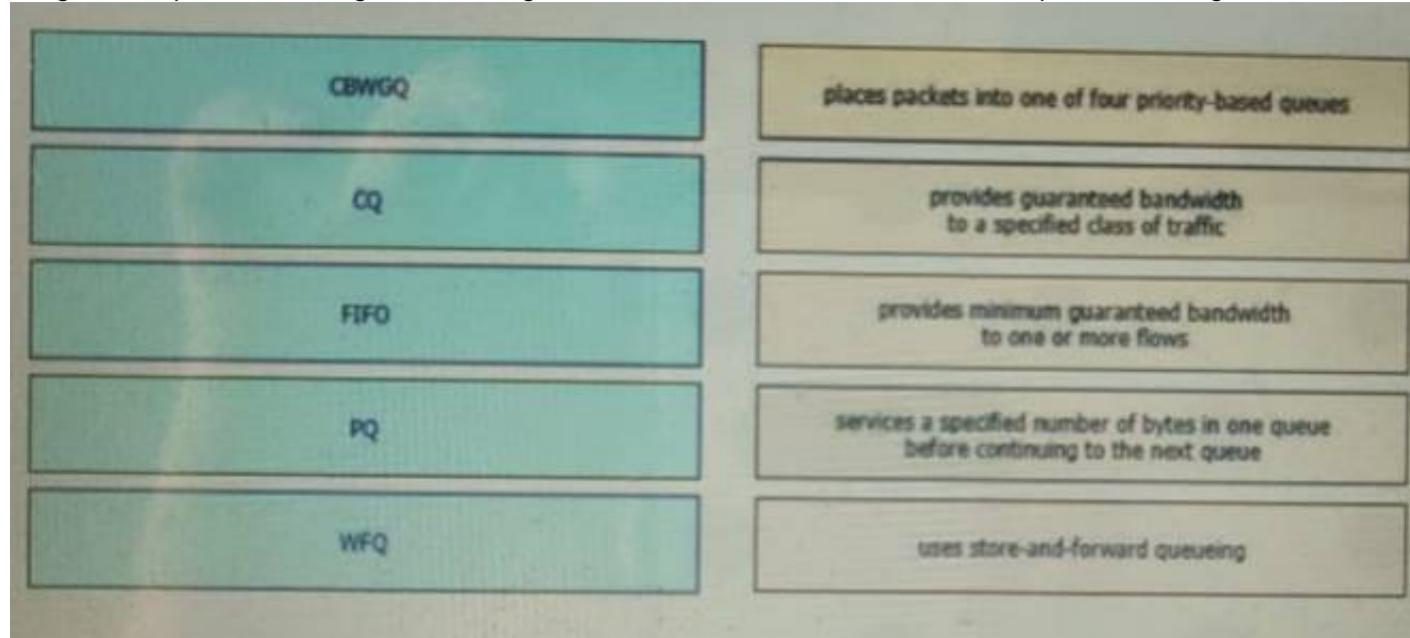
NEW QUESTION 245
DRAG DROP - (Topic 1)
Drag and drop the QoS congestion management terms from the left onto the description on the right.
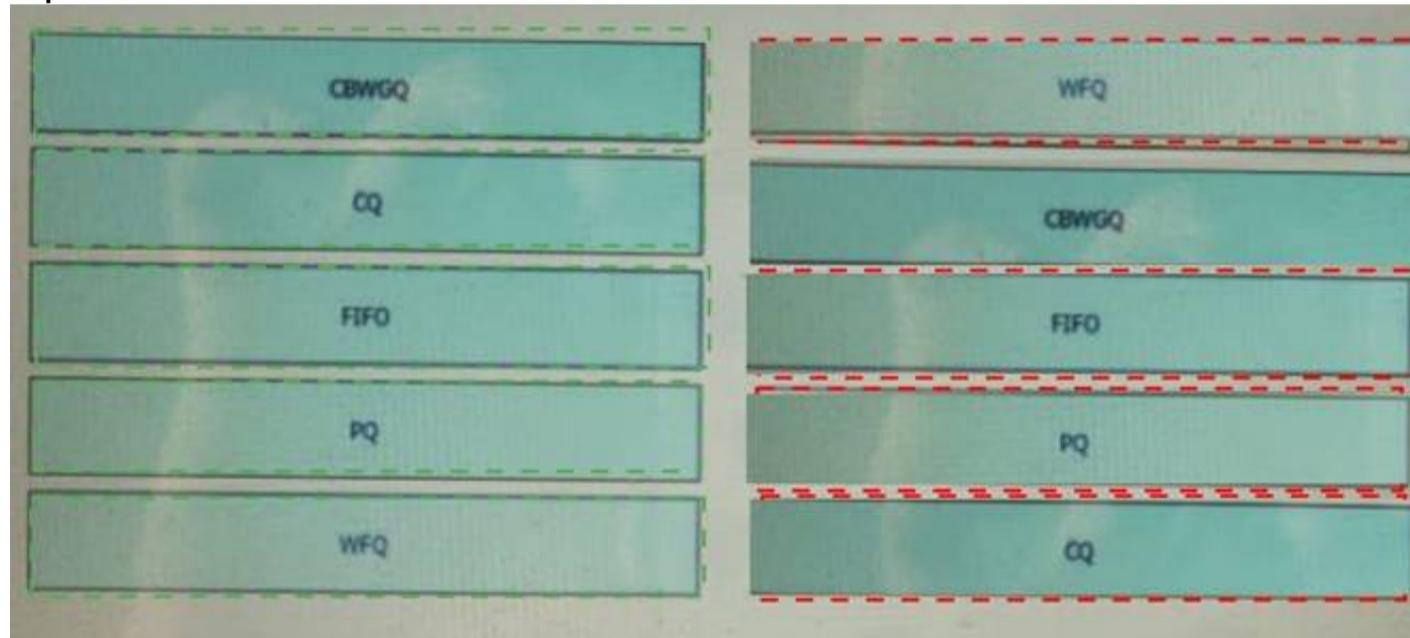
CBWGQ		places packets into one of four priority-based queues
CQ		provides guaranteed bandwidth to a specified class of traffic
FIFO		provides minimum guaranteed bandwidth to one or more flows
PQ		services a specified number of bytes in one queue before continuing to the next queue
WFQ		uses store-and-forward queueing

A. Mastered
B. Not Mastered

Answer: A

Explanation:

CBWGQ		WFQ
CQ		CBWGQ
FIFO		FIFO
PQ		PQ
WFQ		CQ

NEW QUESTION 250
- (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 253
- (Topic 1)
Which two capacities of Cisco DNA Center make it more extensible as compared to traditional campus device management? (Choose two)

A. adapters that support all families of Cisco IOS software
B. SDKs that support interaction with third-party network equipment
C. customized versions for small, medium, and large enterprises
D. REST APIs that allow for external applications to interact natively with Cisco DNA Center
E. modular design that is upgradable as needed

Answer: BD

Explanation:
Cisco DNA Center offers 360-degree extensibility through four distinct types of platform capabilities:+ Intent-based APIs leverage the controller and enable

business and IT applications to deliver intent to the network and to reap network analytics and insights for IT and business innovation.+ Process adapters, built on integration APIs, allow integration with other IT and network systems to streamline IT operations and processes.+ Domain adapters, built on integration APIs, allow integration with other infrastructure domains such as data center, WAN, and security to deliver a consistent intent-based infrastructure across the entire IT environment.+ SDKs allow management to be extended to third-party vendor's network devices to offer support for diverse environments.

NEW QUESTION 256
- (Topic 1)
An engineer is asked to protect unused ports that are configured in the default VLAN on a switch.
Which two steps will fulfill the request? (Choose two)

A. Configure the ports in an EtherChannel.
B. Administratively shut down the ports
C. Configure the port type as access and place in VLAN 99
D. Configure the ports as trunk ports
E. Enable the Cisco Discovery Protocol

Answer: BC

NEW QUESTION 261
- (Topic 1)
Refer to exhibit.

```
Router(config)#interface GigabitEthernet 1/0/1
Router(config-if)#ip address 192.168.16.143 255.255.255.240
Bad mask /28 for address 192.168.16.143
```

Which statement explains the configuration error message that is received?

A. It is a broadcast IP address
B. The router does not support /28 mask.
C. It belongs to a private IP address range.
D. IT is a network IP address.

Answer: A

NEW QUESTION 266
- (Topic 1)
What is a difference between local AP mode and FlexConnet AP mode?

A. Local AP mode creates two CAPWAP tunnels per AP to the WLC
B. FlexConnect AP mode fails to function if the AP loses connectivity with the WLC
C. FlexConnect AP mode bridges the traffic from the AP to the WLC when local switching is configured
D. Local AP mode causes the AP to behave as if it were an autonomous AP

Answer: A

NEW QUESTION 268
- (Topic 1)
Several new coverage cells are required to improve the Wi-Fi network of an organization. Which two standard designs are recommended? (choose two.)

A. 5GHz provides increased network capacity with up to 23 nonoveriapping channels.
B. For maximum throughput, the WLC is configured to dynamically set adjacent access points to the same channel.
C. 5GHz channel selection requires an autonomous access point.
D. Adjacent cells with overlapping channels use a repeater access point.
E. Cells that overlap one another are configured to use nonoveriapping channels.

Answer: BE

NEW QUESTION 272
- (Topic 1)
What is the maximum bandwidth of a T1 point-to-point connection?

A. 1.544 Mbps
B. 2.048 Mbps
C. 34.368 Mbps
D. 43.7 Mbps

Answer: A

Explanation:
https://www.bsimplify.com/what-is-point-to-point-t1/#:~:text=A%20Point%20to%20Point%20T1,data%20speeds%20(1.54Mbps).
Point to Point T1
A Point to Point T1 service is a private data connection securely connecting two or more locations with T1 data speeds (1.54Mbps).

NEW QUESTION 273
- (Topic 1)
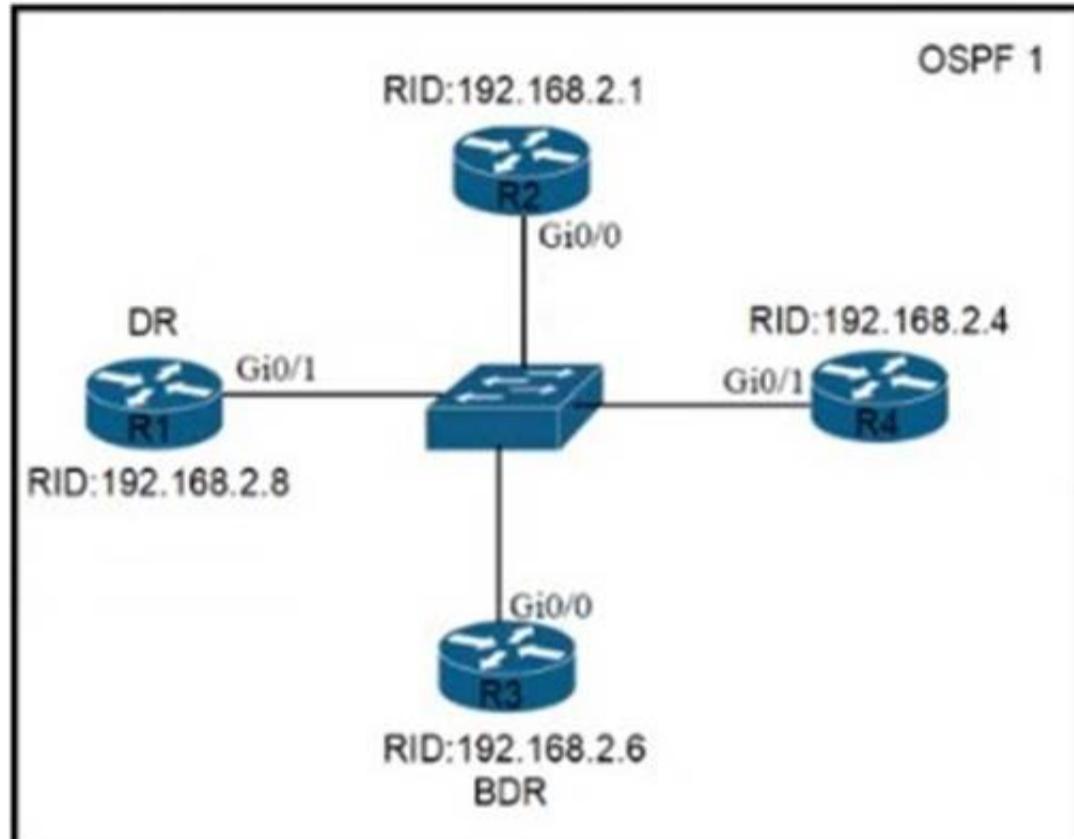
How is the native VLAN secured in a network?

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 278
- (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 279
- (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 282
DRAG DROP - (Topic 1)
Drag and drop the IPv6 address type characteristics from the left to the right.

attached to a single subnet		Link-Local Address
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:

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

NEW QUESTION 287
- (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 291
- (Topic 1)
Which HTTP status code is returned after a successful REST API request?

A. 200
B. 301
C. 404
D. 500

Answer: A

NEW QUESTION 296
- (Topic 1)
By default, how Does EIGRP determine the metric of a route for the routing table?
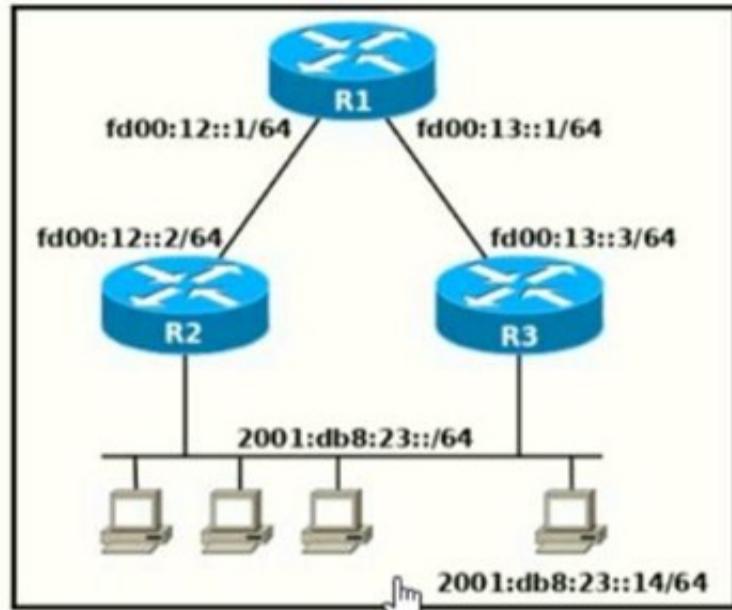
A. it uses the bandwidth and delay values of the path to calculate the route metric
B. it uses a default metric of 10 for all routes that are learned by the router
C. it uses a reference Bandwidth and the actual bandwidth of the connected link to calculate the route metric
D. it counts the number of hops between the receiving and destination routers and uses that value as the metric

Answer: A

NEW QUESTION 298
- (Topic 1)
Refer to the exhibit.

Which two commands, when configured on router R1, fulfill these requirements? (Choose two.)
Packets towards the entire network 2001:db8:2::/64 must be forwarded through router R2. Packets toward host 2001:db8:23::14 preferably must be forwarded through R3.

A. Ipv6 route 2001:db8:23::/128 fd00:12::2
B. Ipv6 route 2001:db8:23::14/128 fd00:13::3
C. Ipv6 route 2001:db8:23::14/64 fd00:12::2
D. Ipv6 route 2001:db8:23::/64 fd00:12::2
E. Ipv6 route 2001:db8:23::14/64 fd00:12::2 200

Answer: DE

NEW QUESTION 301
DRAG DROP - (Topic 1)
Drag and drop the 802.11 wireless standards from the left onto the matching statements on the right
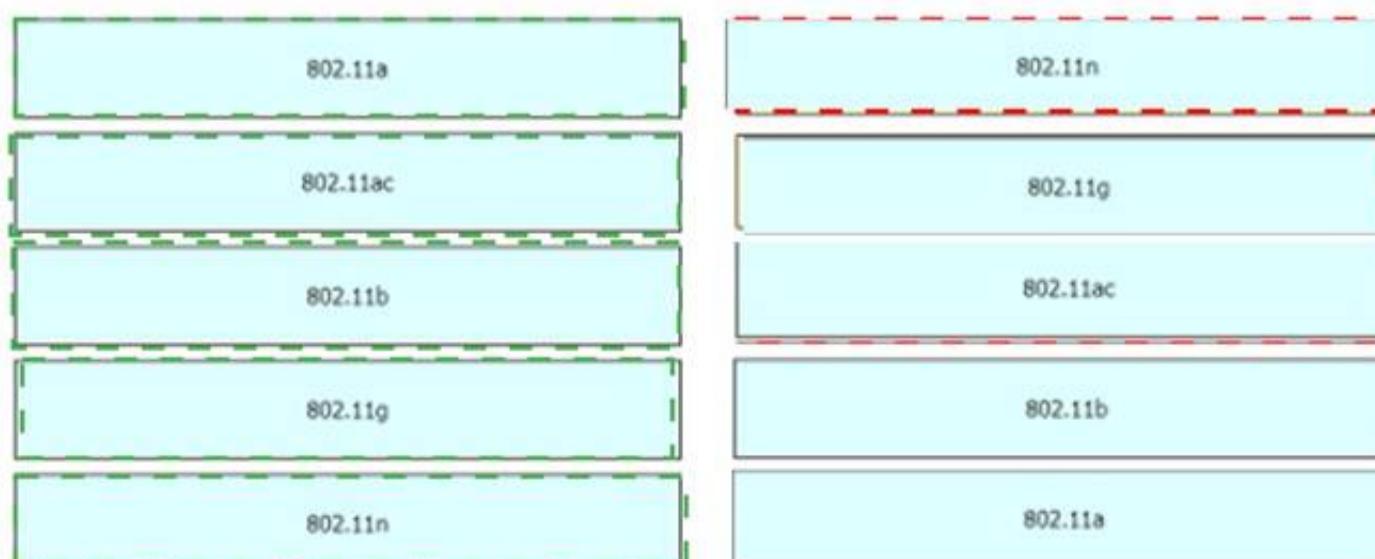
A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 305
- (Topic 1)
How does Cisco DNA Center gather data from the network?

A. Network devices use different services like SNMP, syslog, and streaming telemetry to send data to the controller
B. Devices establish an iPsec tunnel to exchange data with the controller
C. Devices use the call-home protocol to periodically send data to the controller.
D. The Cisco CU Analyzer tool gathers data from each licensed network device and streams it to the controller.

Answer: A

NEW QUESTION 309
- (Topic 1)
Which two actions are performed by the Weighted Random Early Detection mechanism? (Choose two)

A. It drops lower-priority packets before it drops higher-priority packets
B. It can identify different flows with a high level of granularity
C. It guarantees the delivery of high-priority packets
D. It can mitigate congestion by preventing the queue from filling up
E. it supports protocol discovery

Answer: AD

Explanation:
Weighted Random Early Detection (WRED) is just a congestion avoidance mechanism. WRED drops packets selectively based on IP precedence. Edge routers assign IP precedences to packets as they enter the network. When a packet arrives, the following events occur:
* 1. The average queue size is calculated.2. If the average is less than the minimum queue threshold, the arriving packet is queued.3. If the average is between the minimum queue threshold for that type of traffic and the maximum threshold for the interface, the packet is either dropped or queued, depending on the packet drop probability for that type of traffic.4. If the average queue size is greater than the maximum threshold, the packet is dropped. WRED reduces the chances of tail drop (when the queue is full, the packet is dropped) by selectively dropping packets when the output interface begins to show signs of congestion (thus it can mitigate congestion by preventing the queue from filling up). By dropping some packets early rather than waiting until the queue is full, WRED avoids dropping large numbers of packets at once and minimizes the chances of global synchronization. Thus, WRED allows the transmission line to be usedfully at all times. WRED generally drops packets selectively based on IP precedence. Packets with a higher IP precedence are less likely to be dropped than packets with a lower precedence. Thus, the higher the priority of a packet, the higher the probability that the packet will be delivered

NEW QUESTION 314
- (Topic 1)
Which two outcomes are predictable behaviors for HSRP? (Choose two.)

A. The two routers synchronize configurations to provide consistent packet forwarding
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 share a virtual IP address that is used as the default gateway for devices on the LAN
E. The two routers share the same interface IP address and default gateway traffic is load-balanced between them

Answer: BD

NEW QUESTION 318
- (Topic 1)
What is a characteristic of a SOHO network?

A. connects each switch to every other switch in the network
B. enables multiple users to share a single broadband connection
C. provides high throughput access for 1000 or more users
D. includes at least three tiers of devices to provide load balancing and redundancy

Answer: B

NEW QUESTION 323
- (Topic 1)
What is a function of a remote access VPN?
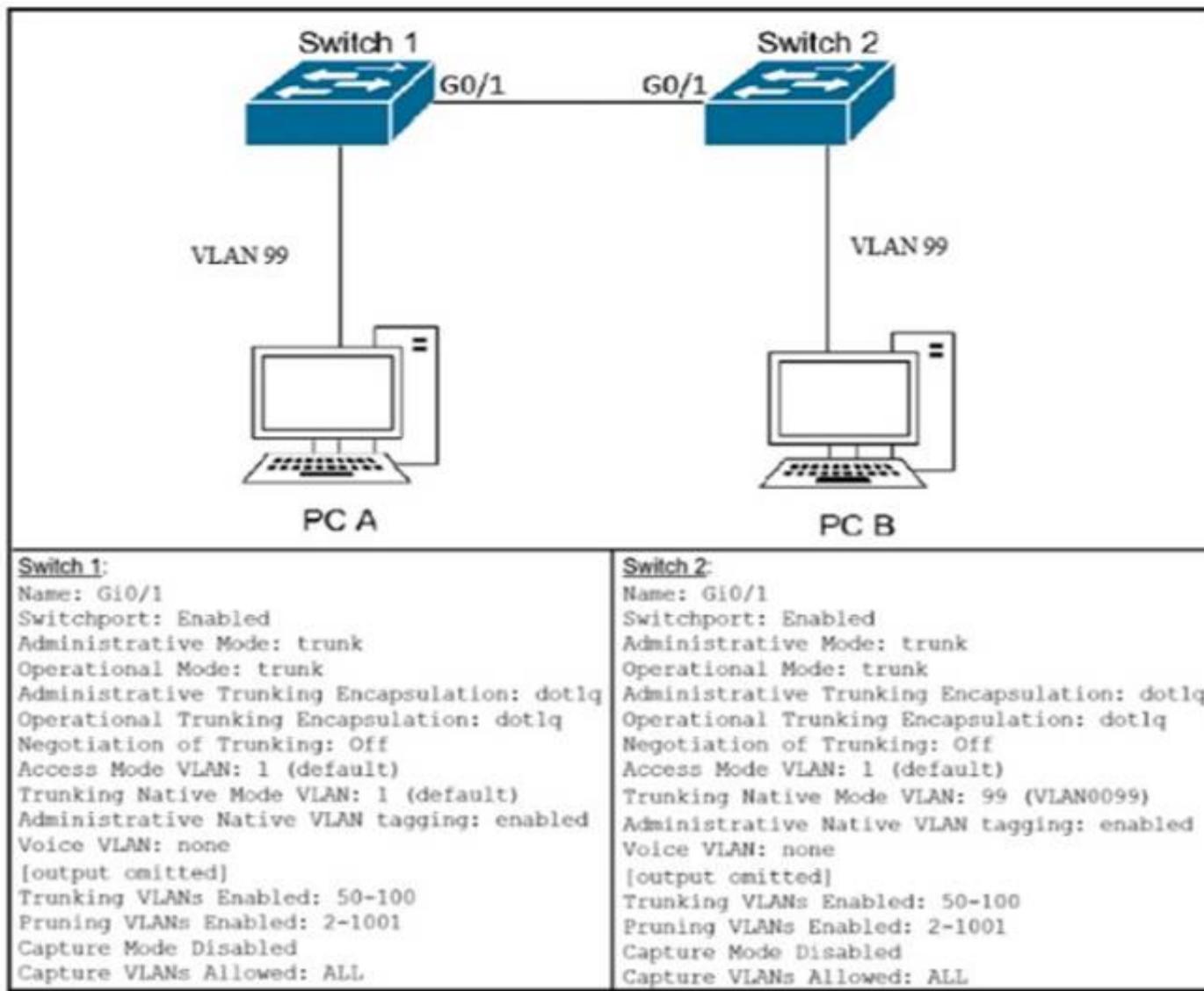
A. used cryptographic tunneling to protect the privacy of data for multiple users simultaneously
B. used exclusively when a user is connected to a company's internal network
C. establishes a secure tunnel between two branch sites
D. allows the users to access company internal network resources through a secure tunnel

Answer: D

NEW QUESTION 324
- (Topic 1)
Refer to the Exhibit.

```
Switch 1:
Name: Gi0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dotlq
Operational Trunking Encapsulation: dotlq
Negotiation of Trunking: Off
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
[output omitted]
Trunking VLANs Enabled: 50-100
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
```

```
Switch 2:
Name: Gi0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dotlq
Operational Trunking Encapsulation: dotlq
Negotiation of Trunking: Off
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 99 (VLAN0099)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
[output omitted]
Trunking VLANs Enabled: 50-100
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
```

After the switch configuration the ping test fails between PC A and PC B Based on the output for switch 1. which error must be corrected?

A. There is a native VLAN mismatch
B. Access mode is configured on the switch ports.
C. The PCs are m the incorrect VLAN
D. All VLANs are not enabled on the trunk

Answer: A

Explanation:
From the output we see the native VLAN of Switch1 on Gi0/1 interface is VLAN 1 while that of Switch2 is VLAN 99 so there would be a native VLAN mismatch.

NEW QUESTION 327
- (Topic 1)
What is the purpose of using First Hop Redundancy Protocol in a specific subnet?

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

Answer: D

Explanation:
FHRP is layer 3 protocol whose purpose is to protect the default gateway by offering redundancy of the gateway in a subnet. This is achieved by allowing two or more routers to provide a backup for the first-hop IP router address. If a failure of an active router occurs, the backup router will take over the address. The routers negotiate their roles (Active/Standby) with each other by multicast hello messages to share the VIP (virtual IP address) between the FHRP routers. The terms Active/Standby vary between the different types of FHRP. The active router will act as the default gateway and the standby router acts as a backup the active router.

NEW QUESTION 328
- (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?
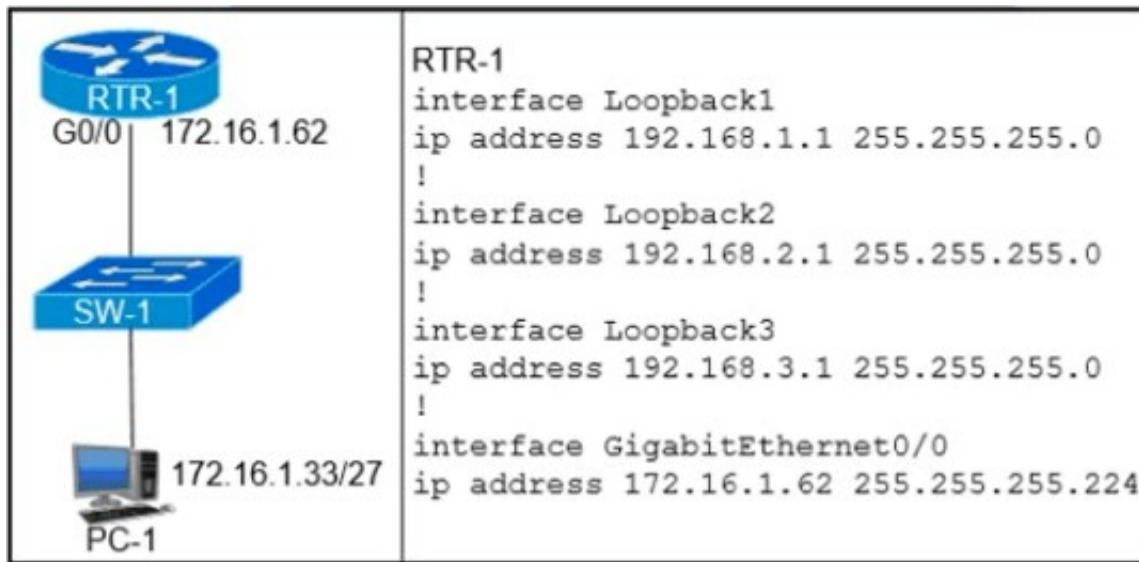
A. intrusion detection
B. user awareness
C. physical access control
D. network authorization

Answer: C

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

Which configuration on RTR-1 denies 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 ip access-group 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 ip access-group 100 in

Answer: B

NEW QUESTION 336
- (Topic 1)
Where does the configuration reside when a helper address Is configured lo support DHCP?

A. on the router closest to the server
B. on the router closest to the client
C. on every router along the path
D. on the switch trunk interface

Answer: B

NEW QUESTION 340
- (Topic 1)
Which two functions are performed by the core layer in a three-tier architecture? (Choose two)

A. Provide uninterrupted forwarding service.
B. Police traffic that is sent to the edge of the network.
C. Provide direct connectivity for end user devices.
D. Ensure timely data transfer between layers.
E. Inspect packets for malicious activity.

Answer: AD

Explanation:
 Cisco is very clear about the purpose of this layer. Its only role is to forward traffic, the fastest it can. Here you don't apply any policy, as you must try to reduce the load of the core so it can focus on routing. https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Campus/campover.html#wp708 831

NEW QUESTION 344
- (Topic 1)
An engineer must configure Interswitch VLAN communication between a Cisco switch and a third-party switch. Which action should be taken?

A. configure IEEE 802.1p
B. configure IEEE 802.1q
C. configure ISL
D. configure DSCP

Answer: B

NEW QUESTION 347
- (Topic 1)
Which QoS Profile is selected in the GUI when configuring a voice over WLAN deployment?

A. Bronze
B. Platinum
C. Silver
D. Gold

Answer: B

Explanation:
 Reference: https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/81831-qos-wlc-lap.html
Cisco Unified Wireless Network solution WLANs support four levels of QoS: Platinum/Voice, Gold/Video, Silver/Best Effort (default), and Bronze/Background.

NEW QUESTION 350
- (Topic 1)
A network administrator must enable DHCP services between two sites. What must be configured for the router to pass DHCPDISCOVER messages on to the server?

A. a DHCP Relay Agent
B. DHCP Binding
C. a DHCP Pool
D. DHCP Snooping

Answer: A

NEW QUESTION 354
- (Topic 1)
What is a benefit of VRRP?

A. It provides traffic load balancing to destinations that are more than two hops from the source.
B. It provides the default gateway redundancy on a LAN using two or more routers.
C. It allows neighbors to share routing table information between each other.
D. It prevents loops in a Layer 2 LAN by forwarding all traffic to a root bridge, which then makes the final forwarding decision.

Answer: B

NEW QUESTION 355
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
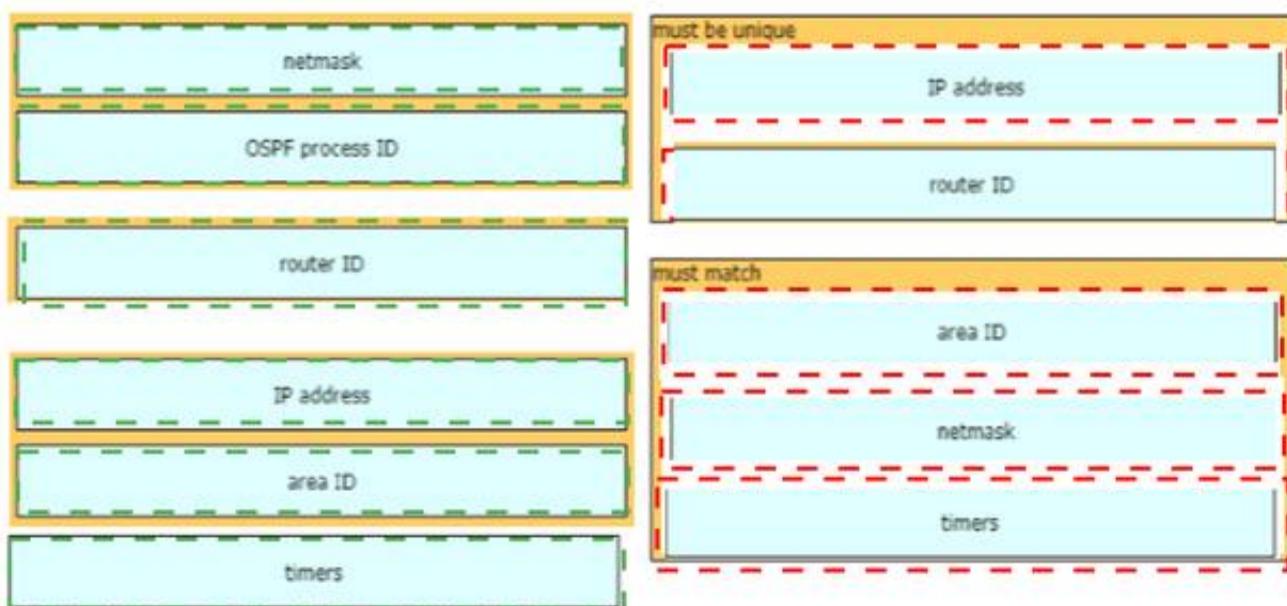
A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 360
SIMULATION - (Topic 5)
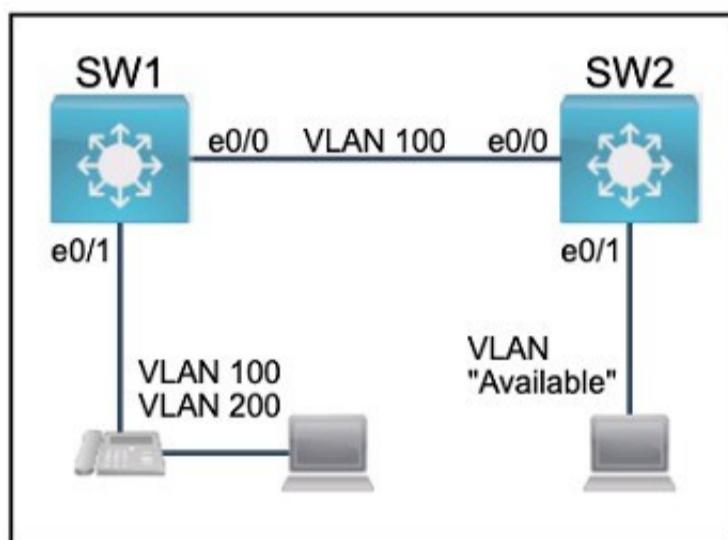
Guidelines

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.

All physical cabling between the two switches is installed. Configure the network connectivity between the switches using the designated VLANs and interfaces.
* 1. Configure VLAN 100 named Compute and VLAN 200 named Telephony where required for each task.
* 2. Configure Ethernet0/1 on SW2 to use the existing VLAN named Available.
* 3. Configure the connection between the switches using access ports.
* 4. Configure Ethernet0/1 on SW1 using data and voice VLANs.
* 5. Configure Ethernet0/1 on SW2 so that the Cisco proprietary neighbor discovery protocol is turned off for the designated interface only.

A. Mastered
B. Not Mastered

Answer: A
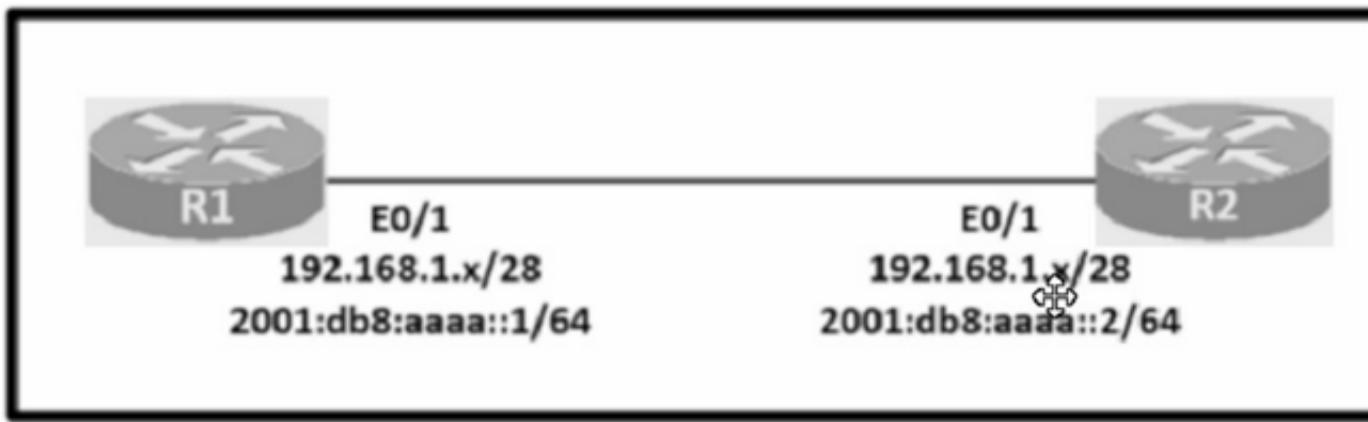
Explanation:
Answer as below configuration:
on sw1 enable conf t vlan 100
name Compute vlan 200
name Telephony int e0/1
switchport voice vlan 200 switchport access vlan 100 int e0/0
switchport mode access do wr
on sw2
Vlan 99
Name Available Int e0/1
Switchport access vlan 99 do wr

NEW QUESTION 363
SIMULATION - (Topic 5)
Configure IPv4 and IPv6 connectivity between two routers. For IPv4, use a /28 network from the 192.168.1.0/24 private range. For IPv6, use the first /64 subnet from the 2001:0db8:aaaa::/48 subnet.
* 1. Using Ethernet0/1 on routers R1 and R2, configure the next usable/28 from the 192.168.1.0/24 range. The network 192.168.1.0/28 is unavailable.
* 2. For the IPv4 /28 subnet, router R1 must be configured with the first usable host address.
* 3. For the IPv4 /28 subnet, router R2 must be configured with the last usable host address.
* 4. For the IPv6 /64 subnet, configure the routers with the IP addressing provided from the topology.
* 5. A ping must work between the routers on the IPv4 and IPv6 address ranges.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Answer as below configuration:
on R1
config terminal
ipv6 unicast-routing inter eth0/1
ip addre 192.168.1.1 255.255.255.240
ipv6 addre 2001:db8:aaaa::1/64 not shut
end
copy running start
on R2
config terminal
ipv6 unicast-routing inter eth0/1
ip address 192.168.1.14 255.255.255.240
ipv6 address 2001:db8:aaaa::2/64 not shut
end
copy running start
----
for test from R1
ping ipv6 2001:db8:aaaa::1
for test from R2
ping ipv6 2001:db8:aaaa::2

NEW QUESTION 367
- (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 368
- (Topic 4)

What is a reason to implement LAG on a Cisco WLC?

A. Increase the available throughput on the link.
B. Increase security by encrypting management frames
C. Allow for stateful failover between WLCs
D. Enable the connected switch ports to use different Layer 2 configurations

Answer: A

Explanation:
 Link Aggregation Group (LAG) is a feature that allows you to bundle multiple physical Ethernet links into a single logical link, and is used to increase the available throughput on the link. LAG is supported on the Cisco Wireless LAN Controller (WLC) and the connected switch ports [1], and can be used to provide greater bandwidth and increased redundancy. It also enables the connected switch ports to use different Layer 2 configurations, such as Spanning Tree Protocol (STP) and Hot Standby Router Protocol (HSRP).

NEW QUESTION 372
DRAG DROP - (Topic 4)
Drag and drop the IPv6 addresses from the left onto the corresponding address types on the right.
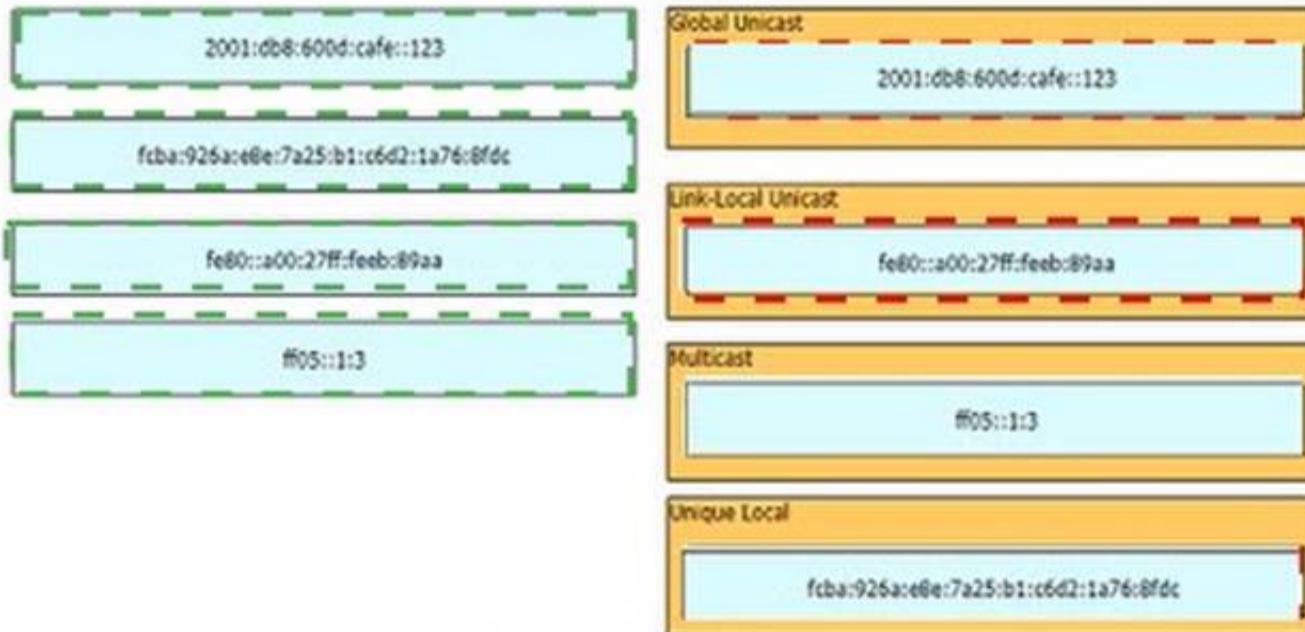
A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 376
- (Topic 4)
What are two differences between WPA2 and WPA3 wireless security? (Choose two.)

A. WPA3 um AES for stronger protection than WPA2 which uses SAE
B. WPA2 uses 1 M-bit key encryption and WPA3 requires 256-brt key encryption
C. WPA3 uses AES for stronger protection than WPA2 which uses TKIP WPA3 uses
D. SAE tor stronger protection than WPA2 which uses AES
E. WPA2 uses 12B-M key encryption and WPA3 supports 128 bit and 192 bit key encryption

Answer: CE

NEW QUESTION 381
- (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 382
- (Topic 4)
Which REST method updates an object in the Cisco DNA Center Intent API?

A. CHANGE
B. UPDATE
C. POST
D. PUT

Answer: D

Explanation:
PUT is most-often utilized for **update** capabilities, PUT-ing to a known
resource URI with the request body containing the newly-updated representation of the original resource.However, PUT can also be used to create a resource in the case where the resource ID is chosen by the client instead of by the server. In other words, if the PUT is to a URI that contains the value of a non-existent resource ID. Again, the request body contains a resource representation. Many feel this is convoluted and confusing. Consequently, this method of creation should be used sparingly, if at all.Alternatively, use POST to create new resources and provide the client-defined ID in the body representation—presumably to a URI that doesn't include the ID of the resource (see POST below).On successful update, return 200 (or 204 if not returning any content in the body) from a PUT. If using PUT for create, return HTTP status 201 on successful creation. A body in the response is optional—providing one consumes more bandwidth. It is not necessary to return a link via a Location header in the creation case since the client already set the resource ID.PUT is not a safe operation, in that it modifies (or creates) state on the server, but it is idempotent. In other words, if you create or update a resource using PUT and then make that same call again, the resource is still there and still has the same state as it did with the first call.If, for instance, calling PUT on a resource increments a counter within the resource, the call is no longer idempotent. Sometimes that happens and it may be enough to document that the call is not idempotent. However, it's recommended to keep PUT requests idempotent. It is strongly recommended to use POST for non-idempotent requests.Examples:
https://www.restapitutorial.com/lessons/httpmethods.html

NEW QUESTION 384
- (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 388
- (Topic 4)
Refer to the exhibit.

A network administrator must permit traffic from the 10.10.0.0/24 subnet to the WAN on interlace Seria10. What is the effect of the configuration as the administrator applies the command?

A. The permit command fails and returns an error code.
B. The router accepts all incoming traffic to Seria10 with the last octet of the source IP set to 0.

C. The sourced traffic from IP range 10.0.0.0 -10.0.0.255 is allowed on Seria10.
D. The router fails to apply the access list to the interface.

Answer: C

NEW QUESTION 390
- (Topic 4)
Which two features introduced in SNMPv2 provides the ability to retrieve large amounts of data in one request
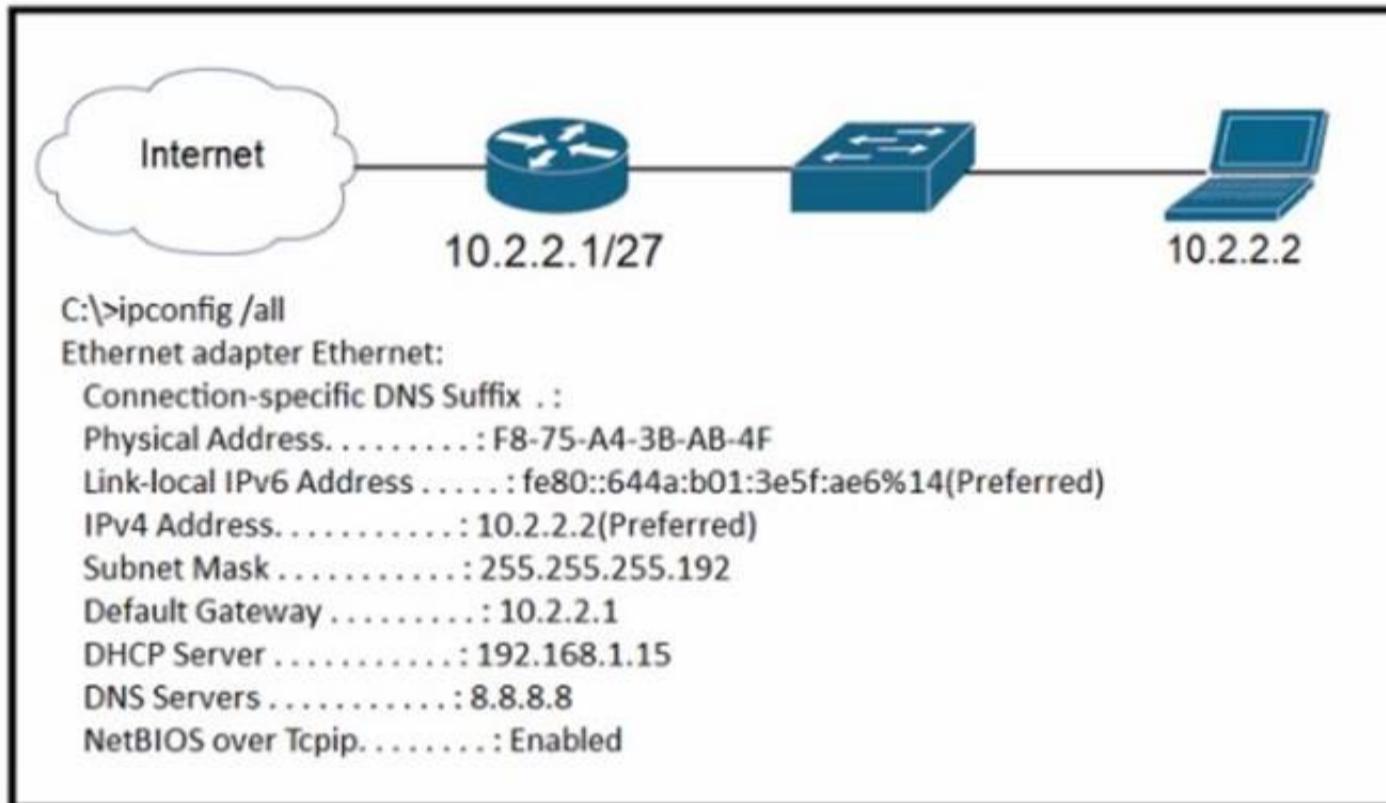
A. Get
B. GetNext
C. Set
D. GetBulk
E. Inform

Answer: AD

NEW QUESTION 392
- (Topic 4)
Refer to the exhibit.

A newly configured PC fails to connect to the internet using TCP port 80 to www cisco com Which setting must be modified for the connection to work?

A. Subnet Mask
B. DNS Servers
C. Default Gateway
D. DHCP Server

Answer: B

NEW QUESTION 396
- (Topic 4)
Which cipher is supported for wireless encryption only with the WPA2 standard?
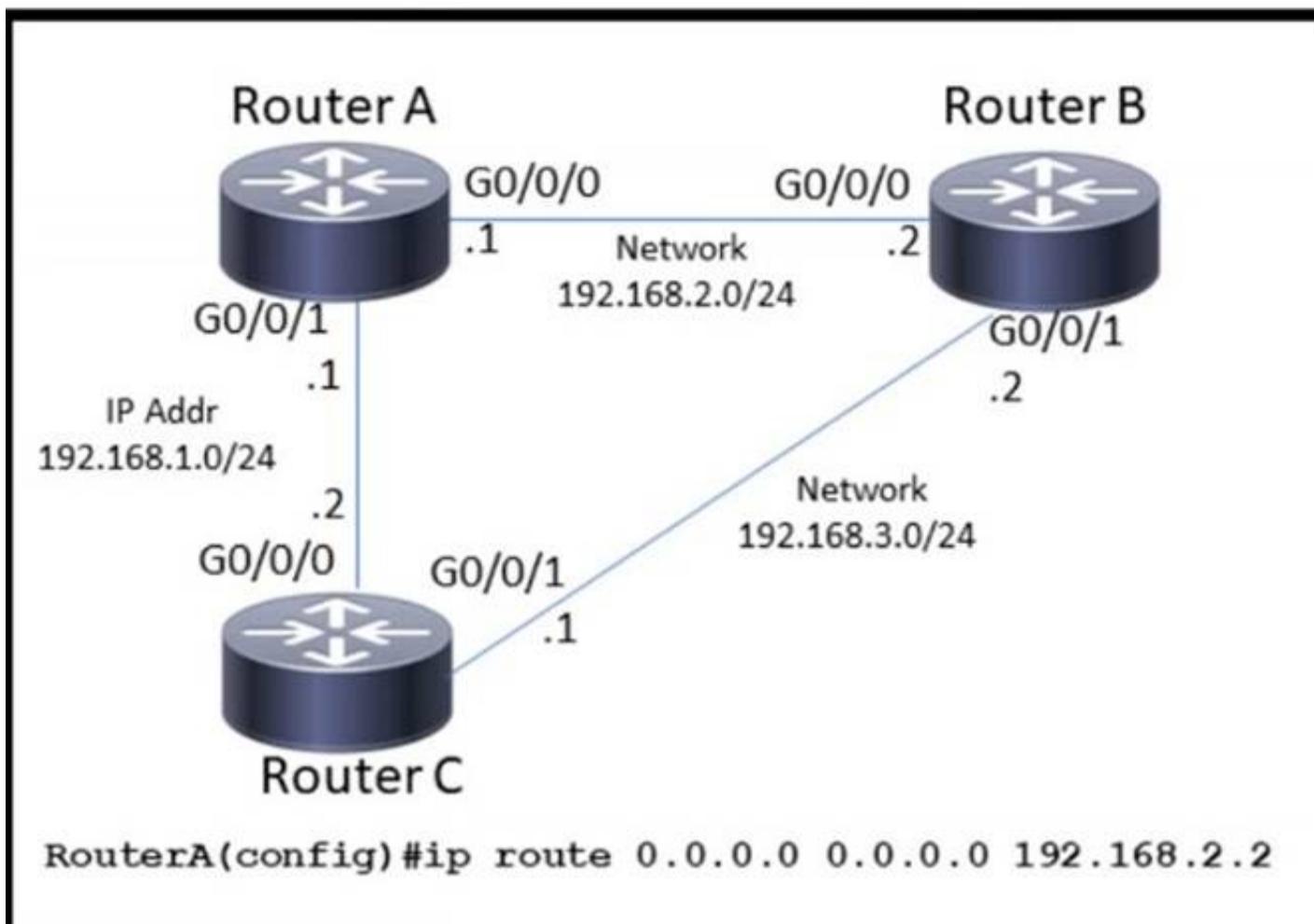
A. AES256
B. AES
C. RC4
D. SHA

Answer: B

NEW QUESTION 398
- (Topic 4)
Refer to the exhibit.

```
RouterA(config)#ip route 0.0.0.0 0.0.0.0 192.168.2.2
```

Which command must be enable a floating default route on router A?

A. ip route 0.0.0.0 0.0.0.0 192.168.1.2
B. ip default-gateway 192.168.2.1
C. ip route 0.0.0.0 0.0.0.0 192.168.1.2 10
D. ip route 0.0.0.0 0.0.0.0 192.168.2.1 10

Answer: C

NEW QUESTION 402
- (Topic 4)
A router has two static routes to the same destination network under the same OSPF process. How does the router forward packets to the destination if the next-hop devices are different?

A. The router chooses the route with the oldest age.
B. The router load-balances traffic over all routes to the destination.
C. The router chooses the next hop with the lowest MAC address.
D. The router chooses the next hop with the lowest IP address.

Answer: B

NEW QUESTION 406
- (Topic 4)
Refer to the exhibit.

```
MacOs$ ifconfig

en0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
     options=400<CHANNEL_IO>
     ether f0:18:98:64:60:32
     inet6 fe80::492:c09f:57cf:8c36%en0 prefixlen 64 secured scopeid 0x6
     inet 10.8.138.14 netmask 0xffffe000 broadcast 10.8.159.255
     nd6 options=201<PERFORMNUD,DAD>
     media: autoselect
     status: active
```

A network engineer must provide configured IP addressing details to investigate a firewall rule Issue. Which subnet and mask Identify what is configured on the en0 interface?

A. 10.8.0.0/16
B. 10.8.64.0/18
C. 10.8.128.0/19
D. 10.8.138.0/24

Answer: D

NEW QUESTION 407
- (Topic 4)
What is the purpose of using First Hop Redundancy Protocol on a specific subnet?
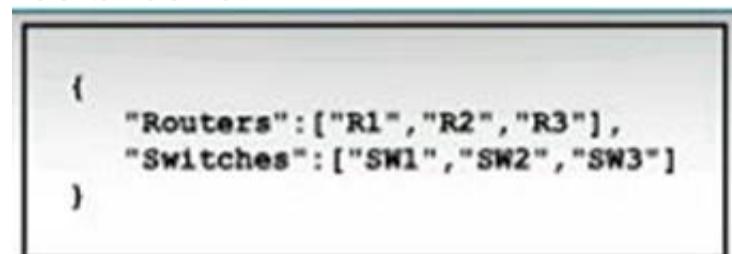
A. ensures a loop-free physical topology
B. filters traffic based on destination IP addressing
C. sends the default route to the hosts on a network
D. forwards multicast hello messages between routers

Answer: D

NEW QUESTION 410
- (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?
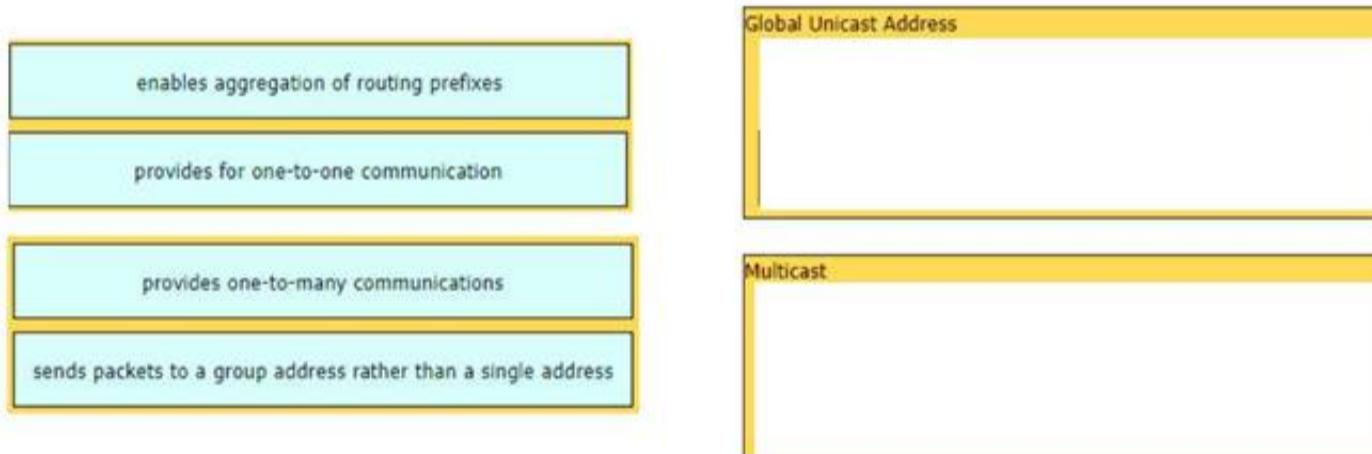
A. key
B. array
C. value
D. object

Answer: C

NEW QUESTION 415
DRAG DROP - (Topic 4)
Drag and drop the characteristic from the left onto the IPv6 address type on the right.
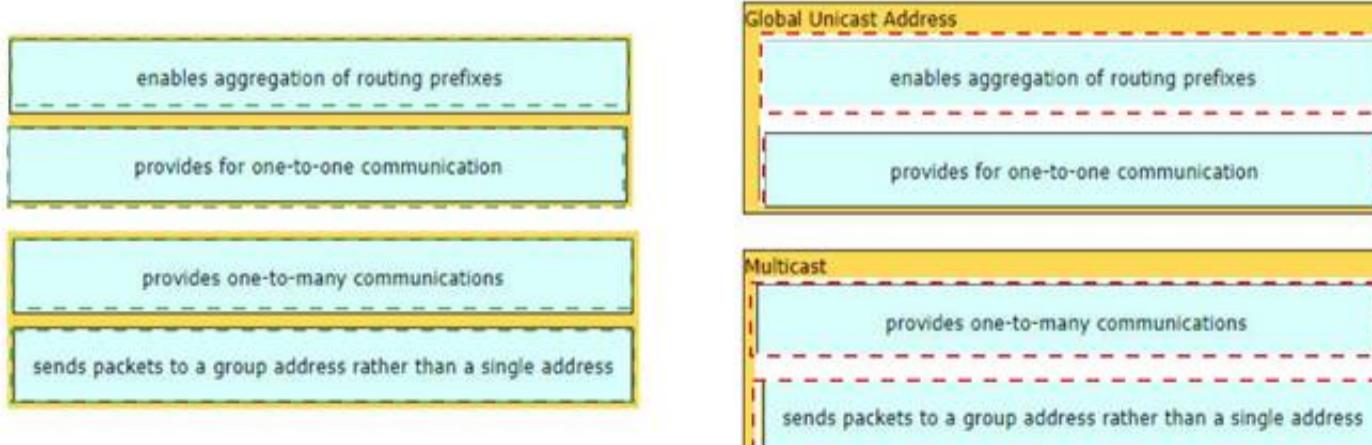
A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 416
- (Topic 4)
Which security method is used to prevent man-in-the-middle attack?
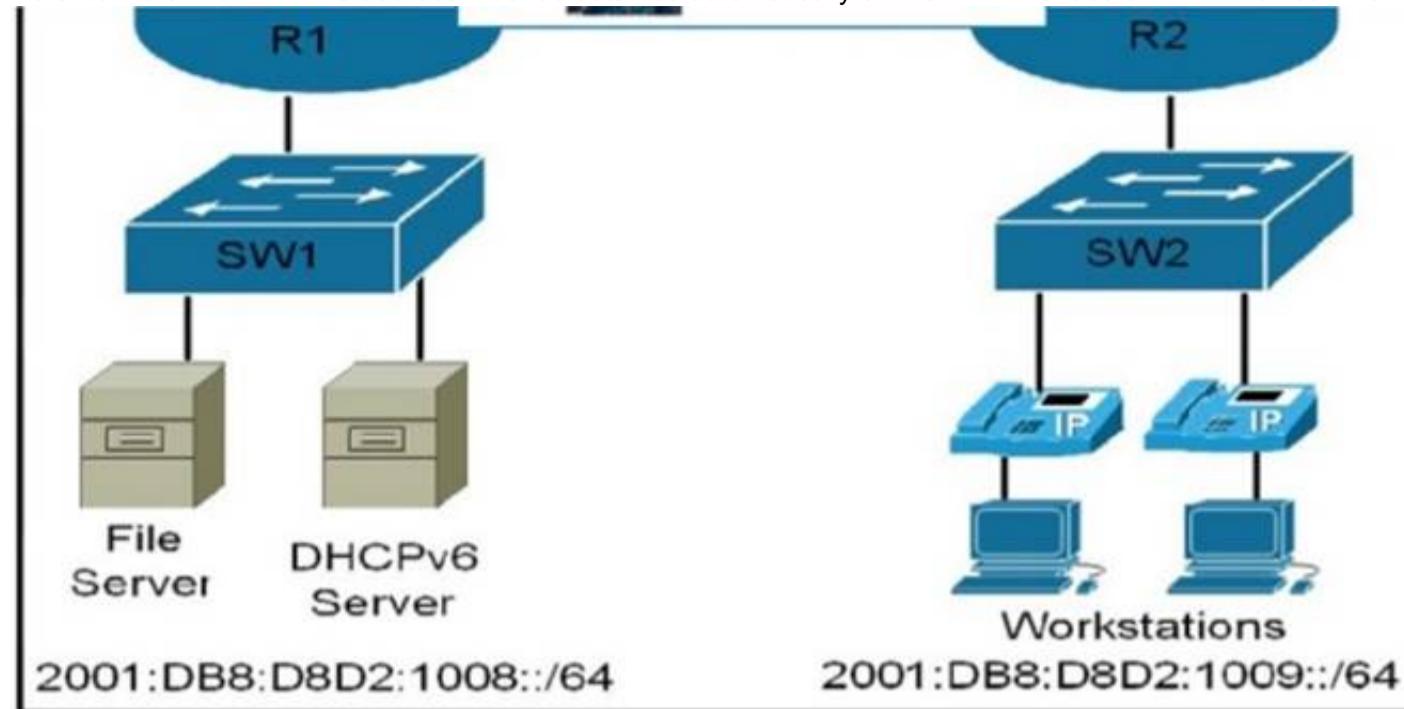
A. authorization
B. authentication
C. anti-replay
D. accounting

Answer: B

NEW QUESTION 417
- (Topic 4)
Refer to the exhibit An IPv6 address must be obtained automatically on the LAN interface on R1 Which command must be implemented to accomplish the task?

A. Ipv6 address 2001:dbB:d8d2:1008:4343:61:0010::/64
B. Ipv6 address autoconfig
C. Ipv6 address fe80::/10
D. Ipv6 address dhcp

Answer: B

NEW QUESTION 421
- (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 424
- (Topic 4)
Refer to the exhibit.


What are two conclusions about this configuration? {Choose two.)
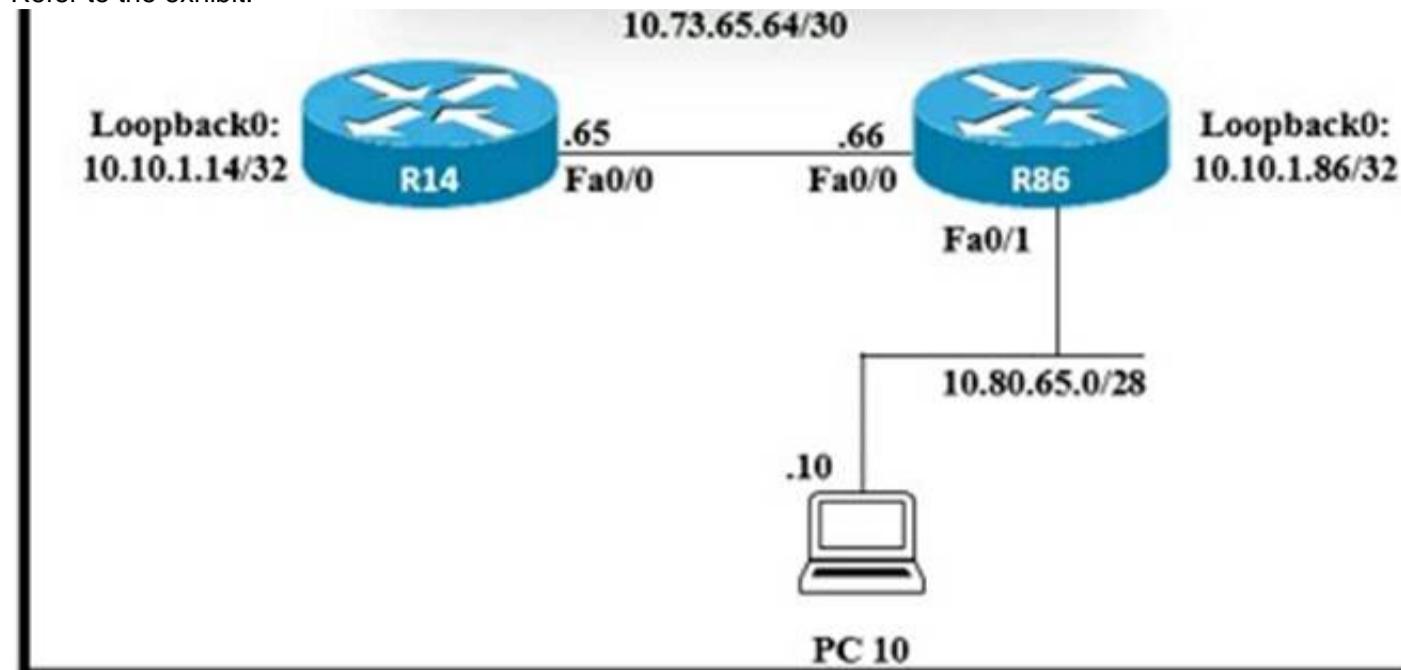
A. The spanning-tree mode is Rapid PVST+.
B. This is a root bridge.
C. The root port is FastEthernet 2/1.
D. The designated port is FastEthernet 2/1.
E. The spanning-tree mode is PVST+.

Answer: A

NEW QUESTION 427
- (Topic 4)
Refer to the exhibit.

Router R14 is in the process of being configured. Which configuration must be used to establish a host route to PC 10?

A. ip route 10.80.65.10 255.255.255.254 10.80.65.1
B. ip route 10.8065.10 255.255.255.255 10.73.65.66
C. ip route 1073.65.65 255.0.0.0 10.80.65.10
D. ip route 10.73.65.66 0.0.0.255 10.80.65.10

Answer: B

NEW QUESTION 432
- (Topic 4)
Which benefit does Cisco ONA Center provide over traditional campus management?

A. Cisco DNA Center leverages SNMPv3 tor encrypted management, and traditional campus management uses SNMPv2.
B. Cisco DNA Center automates HTTPS for secure web access, and traditional campus management uses HTTP.
C. Cisco DNA Center leverages APIs, and traditional campus management requires manual data gathering.
D. Cisco DNA Center automates SSH access for encrypted entry, and SSH Is absent from traditional campus management.

Answer: B

NEW QUESTION 437
- (Topic 4)
What is the role of disaggregation in controller-based networking?

A. It divides the control-plane and data-plane functions.
B. It summarizes the routes between the core and distribution layers of the network topology.
C. It enables a network topology to quickly adjust from a ring network to a star network
D. It streamlines traffic handling by assigning individual devices to perform either Layer 2 or Layer 3 functions.

Answer: A

NEW QUESTION 438
- (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 442
DRAG DROP - (Topic 4)
Drag and drop the AAA features from the left onto the corresponding AAA security services on the right. Not all options are used.

Left Options
It enables the device to allow user- or group-based access.
It leverages a RADIUS server to grant user access to a reverse Telnet session.
It records the amount of time for which a user accesses the network on a remote server.
It restricts the CLI commands that a user is able to perform.
It uses TACACS+ to log the configuration commands entered by a network administrator.
It verifies the user before granting access to the device.

Authentication

Authorization

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Authentication
It records the amount of time for which a user accesses the network on a remote server.
It uses TACACS+ to log the configuration commands entered by a network administrator.

Authorization
It leverages a RADIUS server to grant user access to a reverse Telnet session.
It restricts the CLI commands that a user is able to perform.

Left Options (explanation):
- It enables the device to allow user- or group-based access.
- It leverages a RADIUS server to grant user access to a reverse Telnet session.
- It records the amount of time for which a user accesses the network on a remote server.
- It restricts the CLI commands that a user is able to perform.
- It uses TACACS+ to log the configuration commands entered by a network administrator.
- It verifies the user before granting access to the device.

NEW QUESTION 445
DRAG DROP - (Topic 4)
Drag and drop the characteristic from the left onto the IPv6 address type on the right.
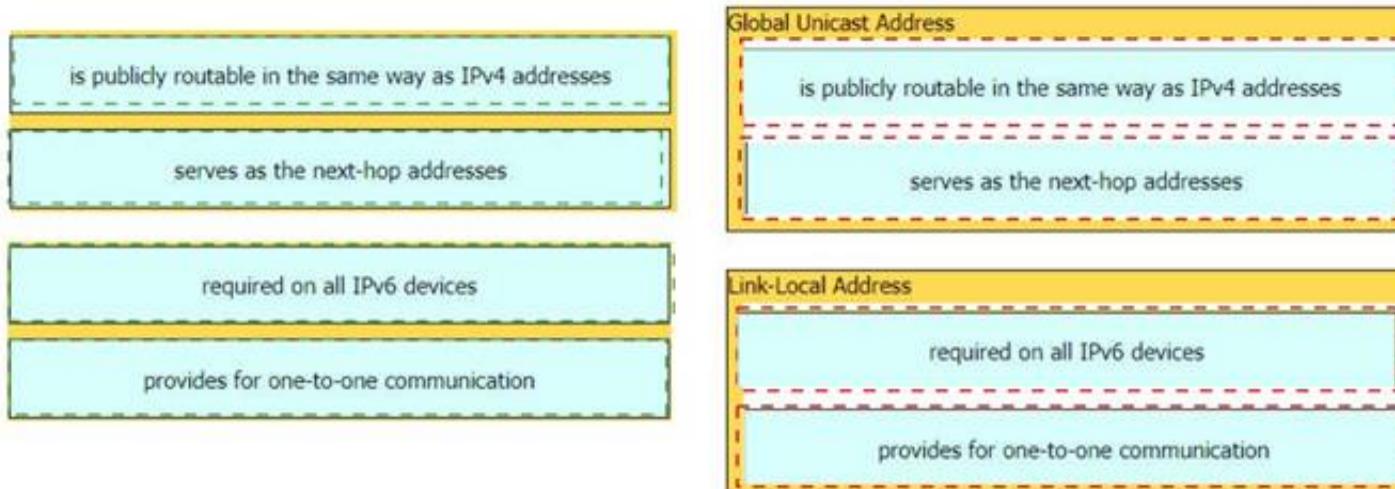
| Left Options |
| --- |
| is publicly routable in the same way as IPv4 addresses |
| serves as the next-hop addresses |
| required on all IPv6 devices |
| provides for one-to-one communication |

Global Unicast Address

Link-Local Address

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Global Unicast Address

is publicly routable in the same way as IPv4 addresses	is publicly routable in the same way as IPv4 addresses
serves as the next-hop addresses	serves as the next-hop addresses
required on all IPv6 devices	

Link-Local Address

provides for one-to-one communication	required on all IPv6 devices
	provides for one-to-one communication

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

Layer 2 | **Layer 3** | **AAA Servers**

Layer 2 Security [6]   WPA+WPA2

MAC Filtering[9] ☐

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 [19]

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
[14]

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 454
- (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 457
- (Topic 4)
What is the role of the root port in a switched network?

A. It replaces the designated port when the designated port fails
B. It is the best path to the root from a nonroot switch.
C. It replaces the designated port when the root port fails.
D. It is administratively disabled until a failover occurs.

Answer: B

Explanation:
The root port is the port on a nonroot switch that has the lowest cost to reach the root bridge in a switched network. The root bridge is the switch that is elected as the central point of the network by the spanning tree protocol (STP). The root port is responsible for forwarding traffic to the root bridge, and it is always in a forwarding state. The cost of a port is determined by the speed and bandwidth of the link, and the lower the cost, the better the path. If there are multiple paths to the root bridge with the same cost, the switch will choose the one with the lowest bridge ID as the tiebreaker. The root port does not replace or replace any designated port, which is the port that forwards traffic on a network segment. The root port is also not administratively disabled or enabled, but it is dynamically selected by STP1234.
References:
? 1: Solved: STP: Root port vs. designated port - Cisco Community
? 2: Difference between Root Port and Designated Port - GeeksforGeeks
? 3: What is a Root Port - Snabay Networking
? 4: What is a Root Port - omnisecu.com

NEW QUESTION 459
- (Topic 4)
Refer to the exhibit.

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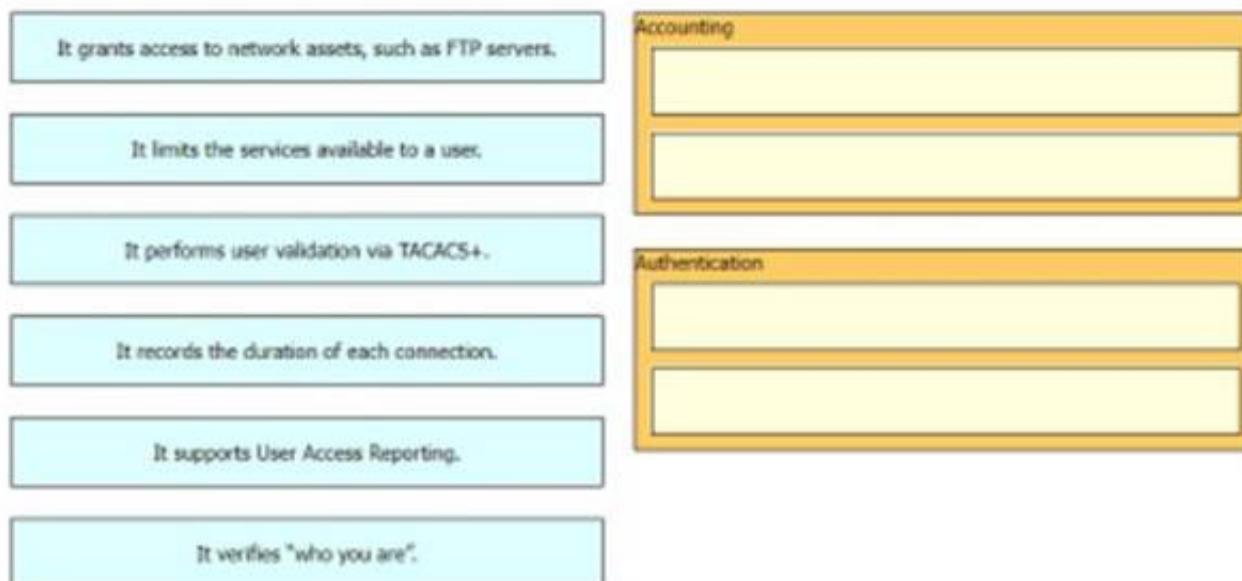
A. SW1(config)#enable secret ccnaTest123
B. SW1(config)#username NEW secret R3mote123
C. SW1(config)#line vty 0 15 SW1(config-line)#transport input ssh
D. SW1(config)# crypto key generate rsa
E. SW1(config)# interface f0/1 SW1(confif-if)# switchport mode trunk

Answer: CD

NEW QUESTION 461
DRAG DROP - (Topic 4)
Drag and drop the statements about AAA services firm the left onto the corresponding AAA services on the right Not all options are used.

It grants access to network assets, such as FTP servers.

It limits the services available to a user.

It performs user validation via TACACS+.

It records the duration of each connection.

It supports User Access Reporting.

It verifies "who you are".

Accounting

Authentication

A. Mastered
B. Not Mastered

Answer: A
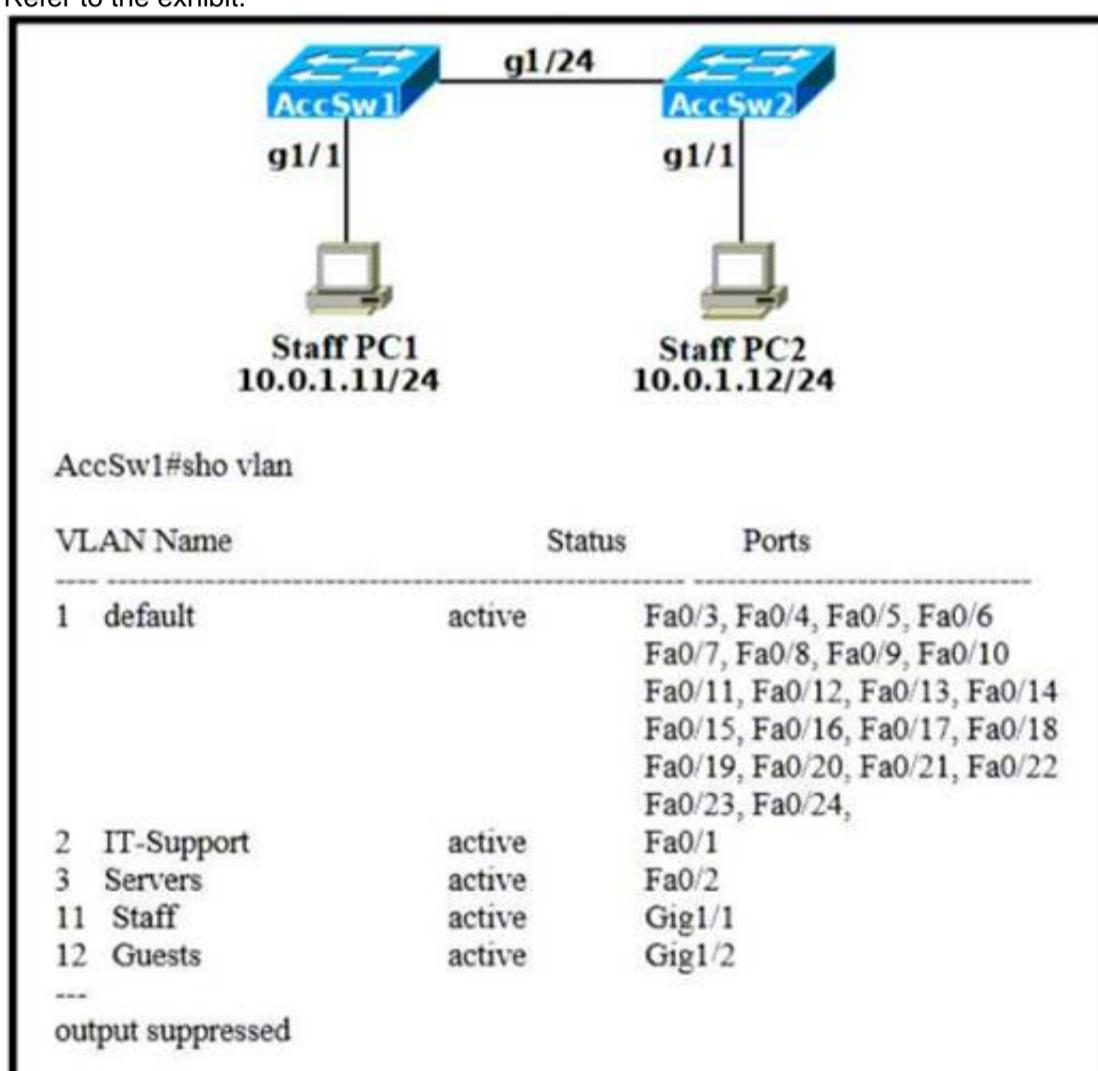
Explanation:
1&6 authentication 2&4 authorization

NEW QUESTION 464
- (Topic 4)
Refer to the exhibit.

```
                    g1/24
AccSw1 ────────────── AccSw2
g1/1                   g1/1
  │                      │
Staff PC1            Staff PC2
10.0.1.11/24         10.0.1.12/24
```

AccSw1#sho vlan

VLAN	Name	Status	Ports
1	default	active	Fa0/3, Fa0/4, Fa0/5, Fa0/6 Fa0/7, Fa0/8, Fa0/9, Fa0/10 Fa0/11, Fa0/12, Fa0/13, Fa0/14 Fa0/15, Fa0/16, Fa0/17, Fa0/18 Fa0/19, Fa0/20, Fa0/21, Fa0/22 Fa0/23, Fa0/24,
2	IT-Support	active	Fa0/1
3	Servers	active	Fa0/2
11	Staff	active	Gig1/1
12	Guests	active	Gig1/2

output suppressed

Switch AccSw2 has just been added to the network along with PC2. All VLANs have been implemented on AccSw2. How must the ports on AccSw2 be configured to establish Layer 2 connectivity between PC1 and PC2?
A.

○ interface GigabitEthernet1/1
    switchport mode access
    switchport access vlan 11
    !
    interface GigabitEthernet1/24
    switchport mode trunk

B.

○ interface GigabitEthernet1/2
   switchport mode access
   switchport access vlan 12
  !
interface GigabitEthernet1/24
switchport mode trunk
 switchport trunk allowed vlan 11,12

C.

○ interface GigabitEthernet1/24
   switchport mode trunk
   switchport trunk allowed vlan 11,12
  !
interface GigabitEthernet1/1
  switchport access vlan 11

D.

○ interface GigabitEthernet1/2
   switchport mode access
   switchport access vlan 2
  !
interface GigabitEthernet1/24
switchport mode trunk

A.

Answer: A

NEW QUESTION 467
- (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 471
- (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 474
DRAG DROP - (Topic 4)
Drag and drop the configuration management terms from the left onto the descriptions on the right. Not all terms are used.
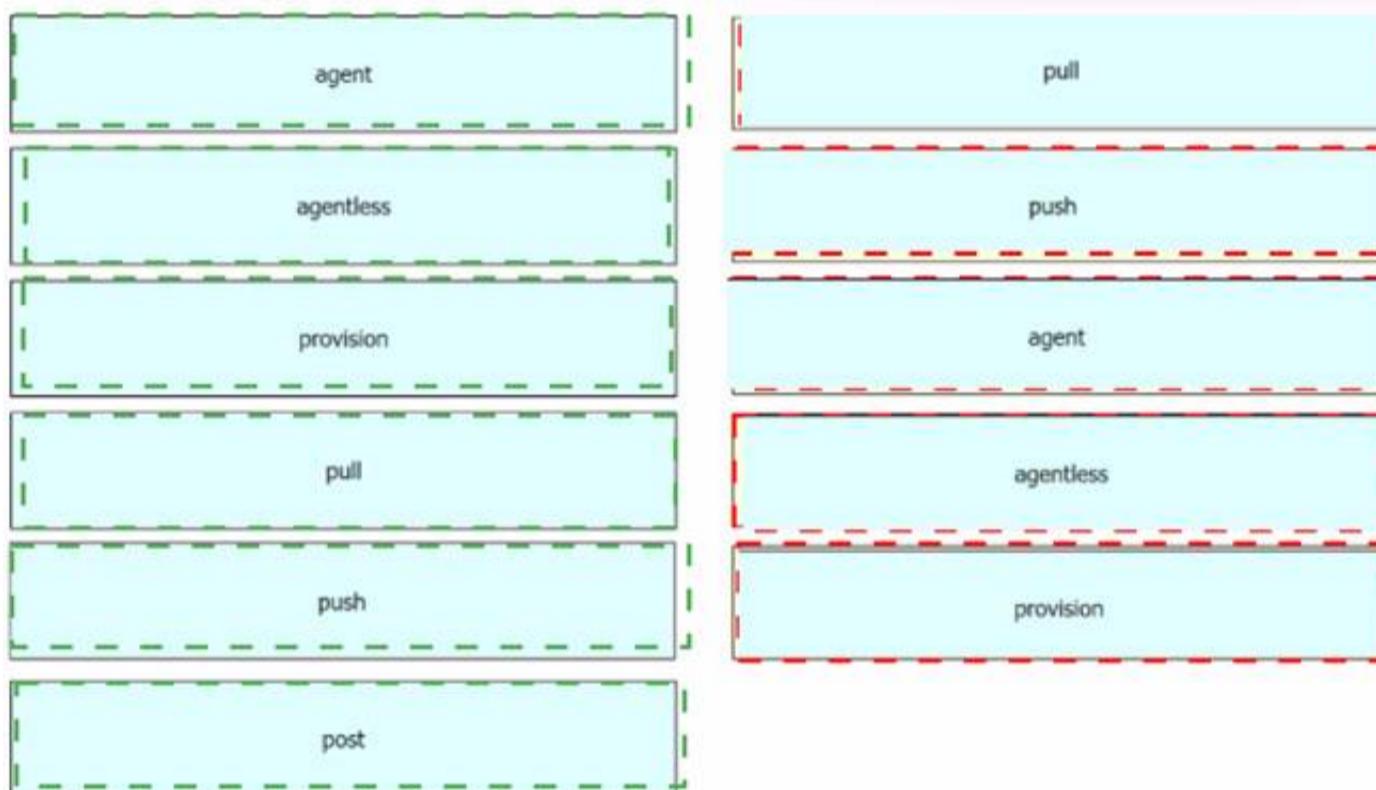
agent		daemon that determines when the central authority has updates available
agentless		model in which the central server sends updates to nodes on an as-needed basis
provision		easy-to-manage deployment option that may lack scalability
pull		device hardware that runs without embedded management features
push		to automatically install or deploy a configuration or update
post		

A. Mastered
B. Not Mastered

Answer: A

Explanation:

agent		pull
agentless		push
provision		agent
pull		agentless
push		provision
post		

NEW QUESTION 478
- (Topic 4)
What is the role of SNMP in the network?

A. to monitor network devices and functions using a TCP underlay that operates on the presentation layer
B. to collect data directly from network devices using an SSL underlay that operates on the transport layer
C. to monitor and manage network devices using a UDP underlay that operates on the application layer
D. to collect telemetry and critical information from network devices using an SSH underlay that operates on the network layer

Answer: C

NEW QUESTION 479
- (Topic 4)
Which command enables HTTP access to the Cisco WLC?

A. config network secureweb enable
B. config certificate generate web admin
C. config network webmode enable
D. config network telnet enable

Answer: C

NEW QUESTION 484

- (Topic 4)
A network engineer must configure an interface with IP address 10.10.10.145 and a subnet mask equivalent to 11111111.11111111.11111111.11111000. Which subnet mask must the engineer use?

A. /29
B. /30
C. /27
D. /28

Answer: A

NEW QUESTION 486
DRAG DROP - (Topic 4)
Drag and drop the Rapid PVST+ forwarding state actions from the left to the right. Not all actions are used.

BPDUs received are forwarded to the system module.	action
BPDUs received from the system module are processed and transmitted.	action
Frames received from the attached segment are discarded.	action
Frames received from the attached segment are processed.	action
Switched frames received from other ports are advanced.	
The port in the forwarding state responds to network management messages.	

A. Mastered
B. Not Mastered

Answer: A

Explanation:
* 1. BPDUs received are forwarded to the system module.
* 2. Frames received from the attached segment are processed.
* 3. Switched frames received from other ports are advanced.
* 4. The port in the forwarding state responds to network management messages.
https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/layer2/503_n1_1/Cisco_n5k_layer2_config_gd_rel_503_N1_1_chapter9.html

NEW QUESTION 491
- (Topic 4)
Refer to the exhibit.

Host A switch interface is configured in VLAN 2. Host D sends a unicast packet destined for the IP address of host A.

```
Sw1#show mac-address table
        Mac Address Table
------------------------------------------
Vlan   Mac Address      Type      Ports
-----  --------------   -------   -------
2      000c.859c.bb7b   DYNAMIC   e0/1
3      000c.859c.bb7b   DYNAMIC   e0/1
2      0010.11dc.3e91   DYNAMIC   e0/2
3      0010.11dc.3e91   DYNAMIC   e0/2
2      0043.49d4.c383   DYNAMIC   e0/3
Sw1#
```

What does the switch do when it receives the frame from host D?

A. It creates a broadcast storm.
B. It drops the frame from the MAC table of the switch.
C. It shuts down the source port and places It In err-disable mode.
D. It floods the frame out of every port except the source port.

Answer: C

NEW QUESTION 493
- (Topic 4)
Refer to the exhibit.

```
    Last clearing of "show interface" counters never
    Input queue: 1/75/1/0 (size/max/drops/flushes); Total output drops: 0
    Queueing strategy: random early detection(RED)
    Output queue :0/40 (size/max)
    5 minute input rate 1000 bits/sec, 2 packets/sec
    5 minute output rate 0 bits/sec, 0 packets/sec
       7558065 packets input, 783768942 bytes, 1 no buffer
       Received 8280963 broadcasts, 0 runts, 0 giants, 1 throttles
       15 input errors,14278 CRC, 0 frame, 0 overrun, 3 ignored
       0 input packets with dribble condition detected
       798092 packets output, 50280266 bytes, 0 underruns
       0 output errors,15000 collisions,0 interface resets
       0 babbles, 0 late collision, 179 deferred
       0 lost carrier, 0 no carrier
       0 output buffer failures, 0 output buffers swapped out
```

An administrator received a call from a branch office regarding poor application performance hosted at the headquarters. Ethernet 1 is connected between Router1 and the LAN switch. What identifies the issue?
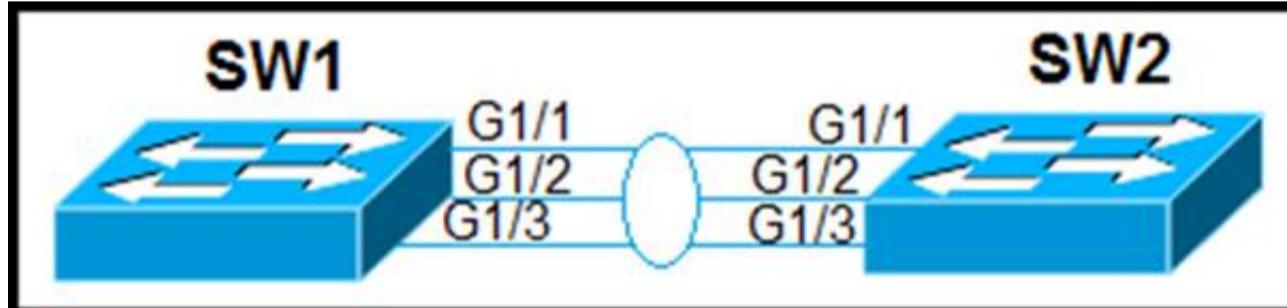
A. The QoS policy is dropping traffic.
B. There is a duplex mismatch.
C. The link is over utilized.
D. The MTU is not set to the default value.

Answer: C

NEW QUESTION 494
- (Topic 4)
Refer to the exhibit.

Which configuration establishes a Layer 2 LACP EtherChannel when applied to both switches?

A. Interface range G1/1 – 1/3 switchport mode trunk channel-group 1 mode active no shutdown
B. Interface range G1/1 – 1/3 switchport mode access channel-group 1 mode passive no shutdown
C. Interface range G1/1 – 1/3 switchport mode trunk channel-group 1 mode desirableno shutdown
D. Interface range G1/1 – 1/3 switchport mode access channel-group 1 mode on no shutdown

Answer: A

NEW QUESTION 496
- (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    10.0.0.0/8 is directly connected, Loopback0
     10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O       10.0.1.3/32 [110/100] via 10.0.1.100, 00:39:08, Serial0
C       10.0.1.0/24 is directly connected, Serial0
O       10.0.1.5/32 [110/5] via 10.0.1.50, 00:39:08, Gigabit Ethernet 0/0
D       10.0.1.4/32 [110/10] via 10.0.1.4, 00:39:08, Gigabit Ethernet 0/0
```

What does route 10.0.1.3/32 represent in the routing table?

A. the 10.0.0.0 network
B. a single destination address
C. the source 10.0.1.100
D. all hosts in the 10.0.1.0 subnet

Answer: A

NEW QUESTION 500
DRAG DROP - (Topic 4)
Drag and drop the virtualization concepts from the left onto the matching statements on the right.

guest operating system	An operating system instance that is decoupled from the server hardware.
host operating system	Each core can run more than one process simultaneously.
hypervisor	Runs on a physical server, manages, and allocates the physical resources.
multithreading	The software that manages the basic functions of the physical hardware.
virtual machine	The software that manages the basic functions of the vital machine.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

guest operating system	virtual machine
host operating system	multithreading
hypervisor	hypervisor
multithreading	guest operating system
virtual machine	host operating system

NEW QUESTION 502
DRAG DROP - (Topic 4)
Drag and drop the REST API call method for HTTP from the left onto the action they perform on the right.

DELETE	creates a resource on the server
GET	reads data from the server
POST	removes a resource from the server
PUT	updates an entry in the database
PATCH	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

DELETE		POST
GET		GET
POST		DELETE
PUT		PUT
PATCH		

NEW QUESTION 504
- (Topic 4)
Refer to the exhibit.

```
R1#show ip ospf interface g0/0/0
GigabitEthernet0/0/0 is up, line protocol is up
   Internet address is 192.168.1.2/24, Area 0
   Process ID 1, Router ID 192.168.1.2, Network Type POINT-TO-POINT, Cost: 1
   Transmit Delay is 1 sec, State POINT-TO-POINT,
   Timer intervals configured, Hello 15, Dead 20, Wait 20, Retransmit 5
      Hello due in 00:00:08
   Index 1/1, flood queue length 0
   Next 0x0(0)/0x0(0)
   Last flood scan length is 1, maximum is 1
   Last flood scan time is 0 msec, maximum is 0 msec
   Suppress hello for 0 neighbor(s)

R2#show ip ospf interface g0/0/0
GigabitEthernet0/0/0 is up, line protocol is up
   Internet address is 192.168.1.1/24, Area 0
   Process ID 1, Router ID 10.1.1.1, Network Type POINT-TO-POINT, Cost: 1
   Transmit Delay is 1 sec, State POINT-TO-POINT,
   Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
      Hello due in 00:00:11
   Index 1/1, flood queue length 0
   Next 0x0(0)/0x0(0)
   Last flood scan length is 1, maximum is 1
   Last flood scan time is 0 msec, maximum is 0 msec
   Suppress hello for 0 neighbor(s)
```

The network engineer is configuring router R2 as a replacement router on the network After the initial configuration is applied it is determined that R2 failed to show
R1 as a neighbor Which configuration must be applied to R2 to complete the OSPF configuration and enable it to establish the neighbor relationship with R1?
A)

```
R2(config)#router ospf 1
R2(config-router)#network 192.168.1.0 255.255.255.0 area 2
R2(config-router)#network 10.1.1.0 255.255.255.255 area 2
```

B)

```
R2(config)#router ospf 1
R2(config-router)#router-id 192.168.1.2
```

C)

```
R2(config)#interface g0/0/0
R2(config-if)#ip ospf dead-interval 20
```

D)

```
R2(config)#interface g0/0/0
R2(config-if)#ip ospf hello-interval 15
R2(config-if)#ip ospf dead-interval 20
```

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

Answer: D

NEW QUESTION 507

- (Topic 4)
Which type of encryption does WPA1 use for data protection?

A. AES
B. TKIP
C. PEAP
D. EAP

Answer: B

NEW QUESTION 511
- (Topic 4)
What is a function of MAC address learning?

A. It is enabled by default on all VLANs and interfaces
B. It increases the potential for MAC address flooding.
C. It is disabled by default on all interfaces connected to trunks
D. It increases security on the management VLAN

Answer: A

NEW QUESTION 512
- (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
```
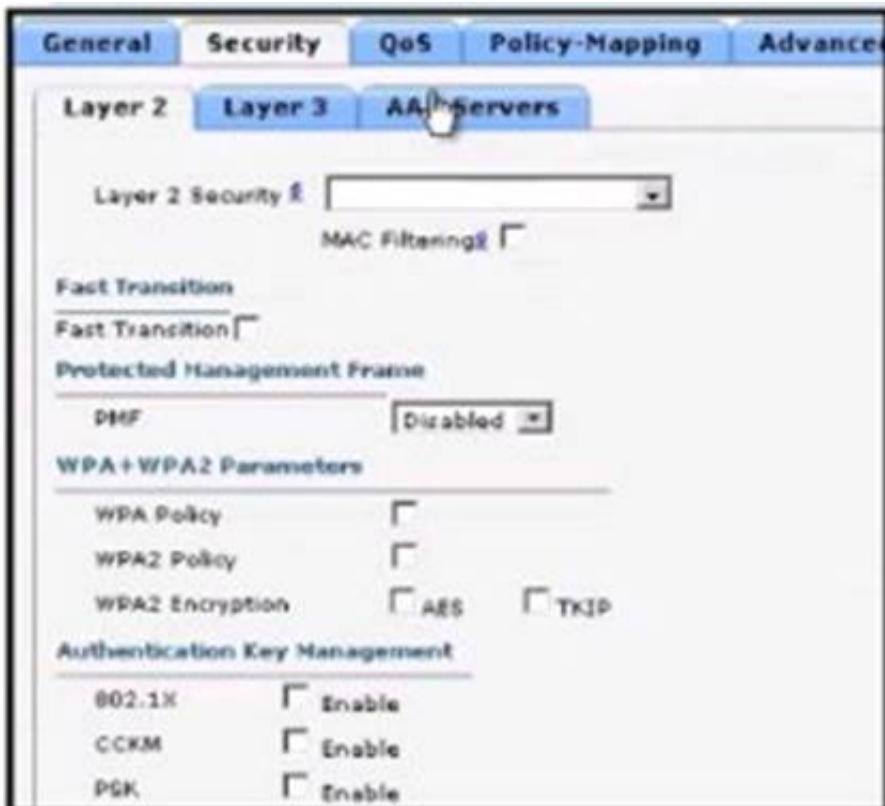
A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

NEW QUESTION 515
- (Topic 4)
Refer to the exhibit.

What are the two steps an engineer must take to provide the highest encryption and authentication using domain credentials from LDAP?
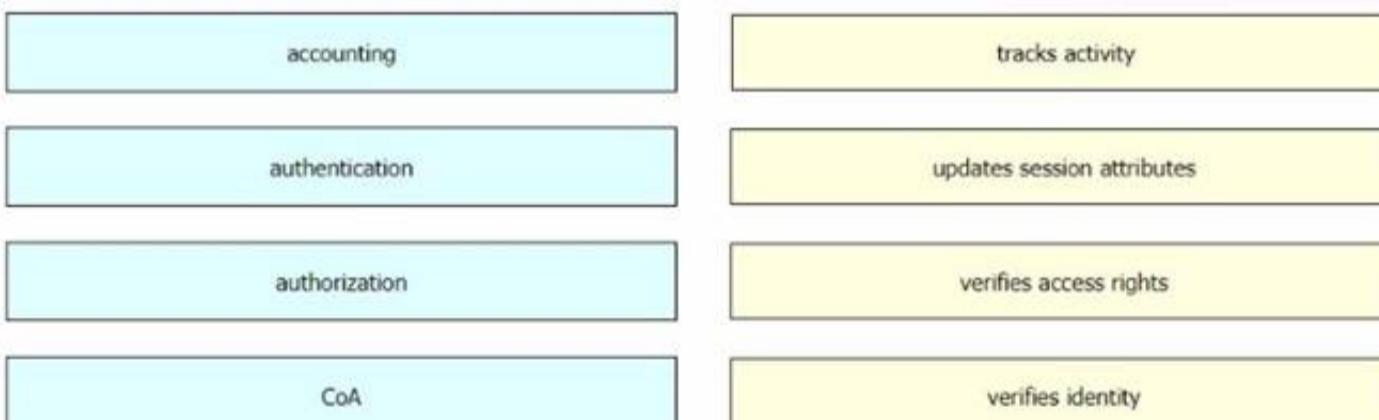
A. Select PSK under Authentication Key Management
B. Select WPA+WPA2 on Layer 2 Security
C. Select Static-WEP + 802.1X on Layer 2 Security
D. Select WPA Policy with TKIP Encryption
E. Select 802.1X from under Authentication Key Management

Answer: BE

NEW QUESTION 520
DRAG DROP - (Topic 4)
Drag and drop the AAA lerms from the left onto the descriptions on the right.
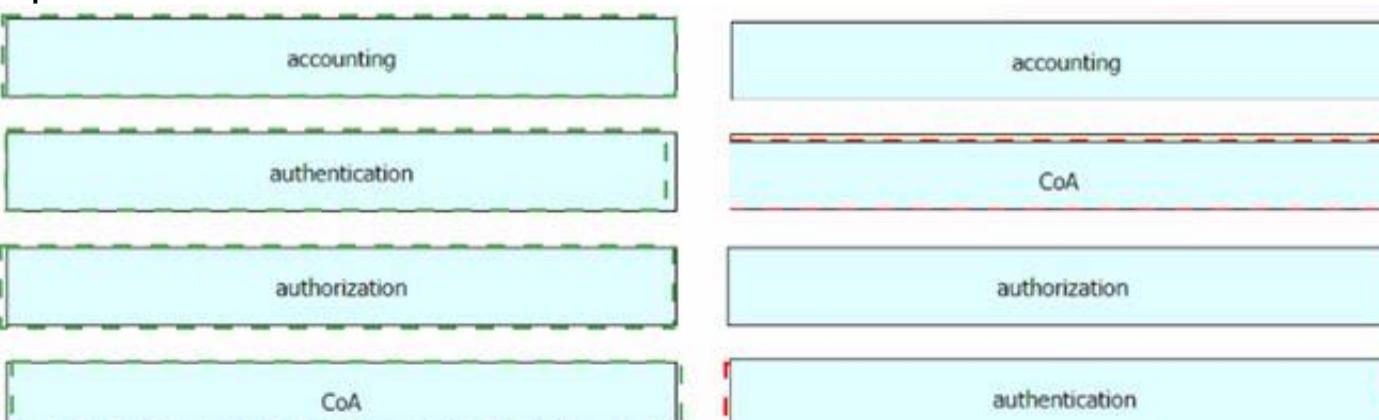
A. Mastered
B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 522
- (Topic 4)

```
{
   "Routers": ["R1", "R2", "R3"],
   "Switches": ["SW1", "SW2", "SW3"]
}
```

Refer to the exhibit. What is represented by "R1" and "SW1" within the JSON output?
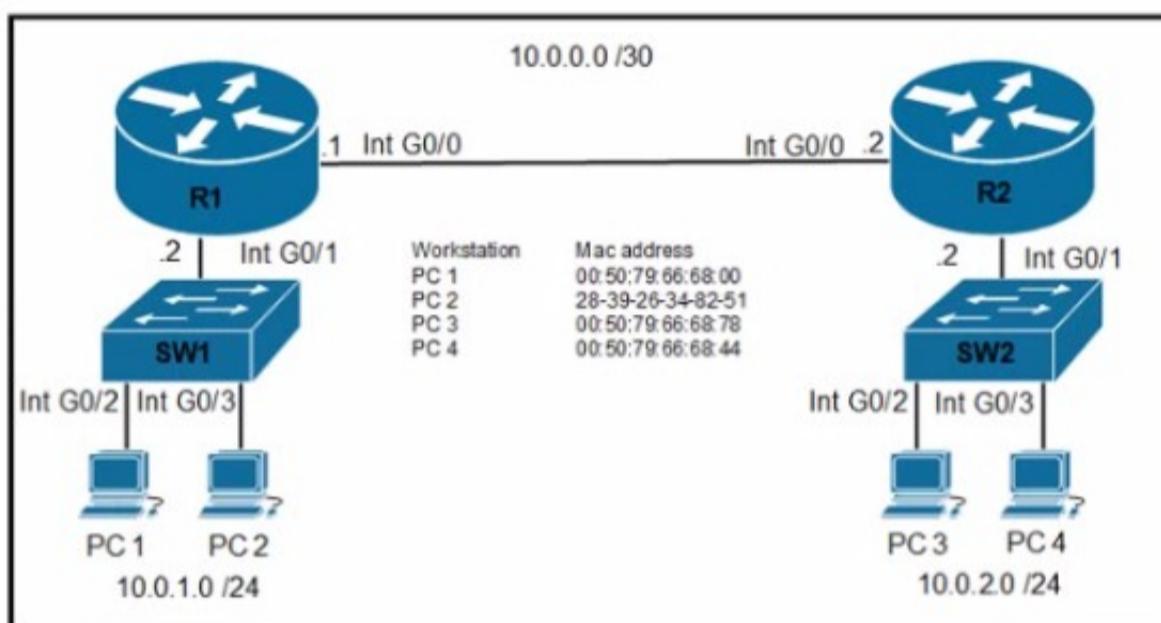
A. object
B. value
C. key
D. array

Answer: B

NEW QUESTION 525
- (Topic 4)
Refer to the exhibit.

An engineer must configure the interface that connects to PC 1 and secure it in a way that only PC1 is allowed to use the port No VLAN tagging can be used except for a voice VLAN. Which command sequence must be entered to configure the switch?

A)

```
SW1(config-if)#switchport mode nonegotiate
SW1(config-if)#switchport port-security
SW1(config-if)#switchport port-security maximum 1
```

B)

```
SW1(config-if)#switchport mode access
SW1(config-if)#switchport port-security
SW1(config-if)#switchport port-security mac-address 0050.7966.6800
```

C)

```
SW1(config-if)#switchport mode dynamic auto
SW1(config-if)#switchport port-security
SW1(config-if)#switchport port-security violation restrict
```

D)

```
SW1(config-if)#switchport mode dynamic desirable
SW1(config-if)#switchport port-security mac-address 0050.7966.6800
SW1(config-if)#switchport port-security mac-address sticky
```

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

Answer: B

NEW QUESTION 526
- (Topic 4)
Refer to the exhibit.
When router R1 receives a packet with destination IP address 10.56.0 62. through which interface does it route the packet?

A. Null0
B. Vlan58
C. Vlan60
D. Vlan59

Answer: B

NEW QUESTION 529
- (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?
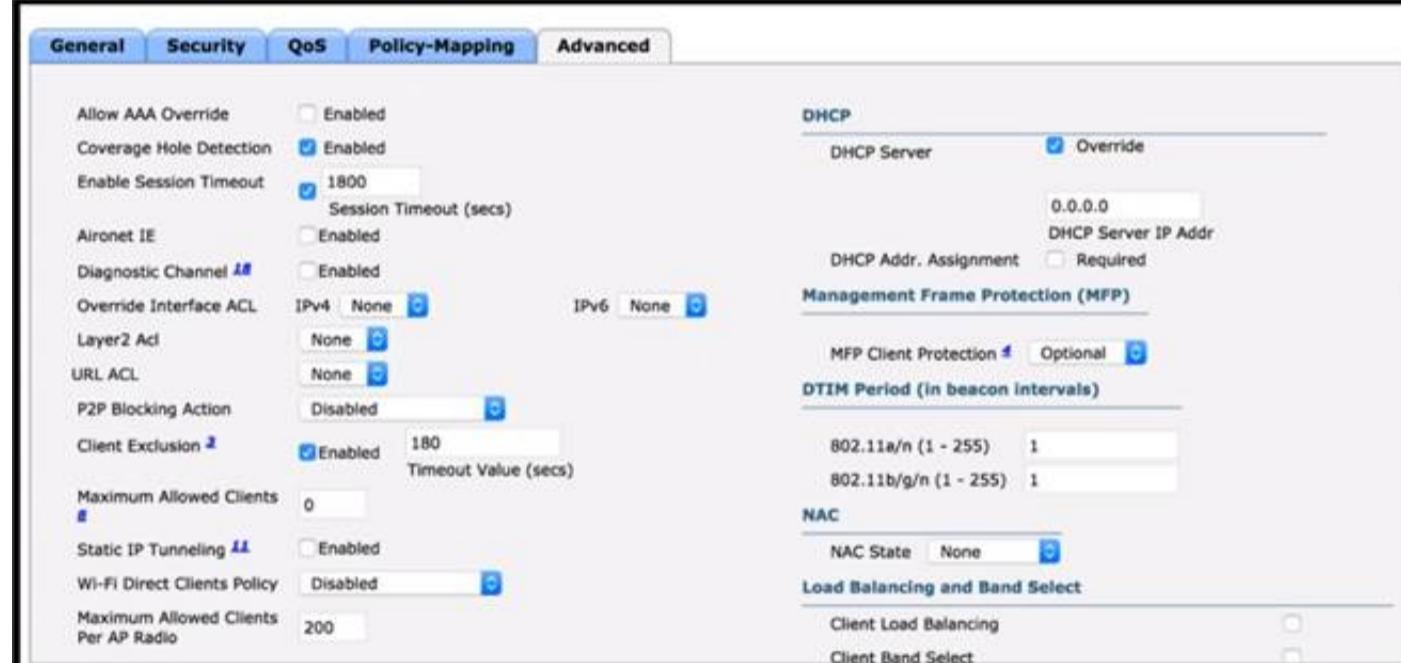
A. 192.168.7.4
B. 192.168.7.7
C. 192.168.7.35
D. 192.168.7.40

Answer: D

NEW QUESTION 534
- (Topic 4)
Refer to the exhibit.

The P2P blocking action option is disabled on the WLC.

A. Enable the Static IP Tunneling option.
B. Disable the Coverage Hole Detection option.
C. Check the DHCP Add
D. Assignment check box.
E. Set the P2P Blocking Action option to Forward-UpStream.
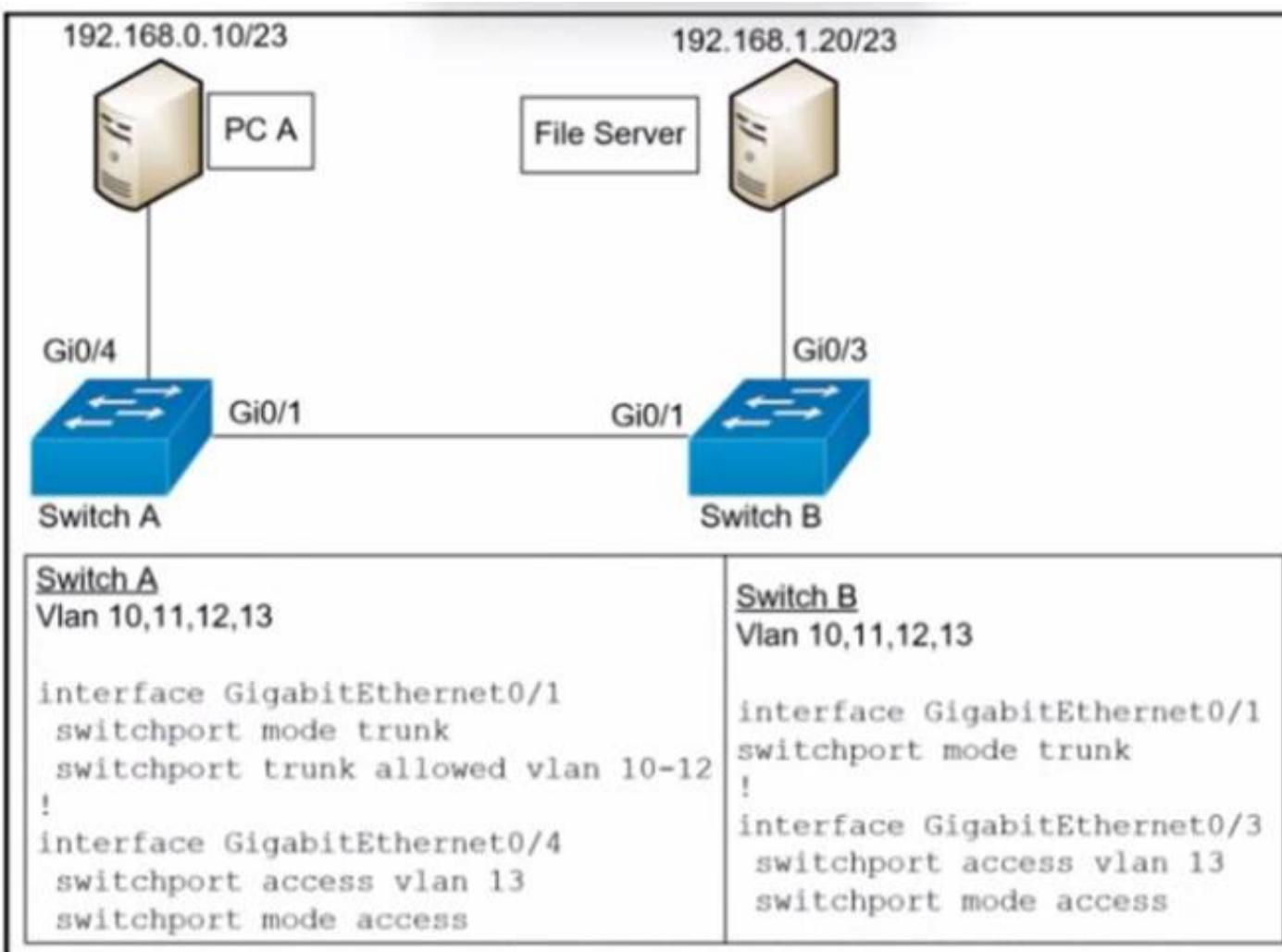
**Answer:** A

NEW QUESTION 539
- (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?

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 544
- (Topic 4)
What describes the functionality of southbound APIs?

A. They use HTTP messages to communicate.
B. They enable communication between the controller and the network device.
C. They convey information from the controller to the SDN applications.
D. They communicate with the management plane.

Answer: B

NEW QUESTION 546
- (Topic 4)
What is a specification for SSIDS?

A. They are a Cisco proprietary security feature.
B. They must include one number and one letter.
C. They define the VLAN on a switch.
D. They are case sensitive.

Answer: B

NEW QUESTION 550
- (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 555
FILL IN THE BLANK - (Topic 4)
A network architect is deciding whether to implement Cisco autonomous access points or lightweight access points. Which fact about firmware updates must the architect consider?

A. Unlike lightweight access points, which require
B. Unlike lightweight access points, which require redundant WLCs to support firmware upgrades, autonomous access points require only one WLC.

C. Unlike autonomous access points, lightweight access points store a complete copy of the current firmware for backup.
D. Unlike lightweight access points, autonomous access points can recover automatically from a corrupt firmware update.
E. Unlike autonomous access points, lightweight access points require a WLC to implement remote firmware updates.

Answer: D

NEW QUESTION 556
- (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 558
- (Topic 4)
What describes a northbound REST API for SON?

A. application-facing interface for SNMP GET requests
B. network-element-facing interface for GET POST PUT and DELETE methods
C. network-element-facing interface for the control and data planes
D. application-facing interface far GET, POST, PUT, and DELETE methods

Answer: D

NEW QUESTION 561
- (Topic 4)
What is the put method within HTTP?

A. It is a read-only operation.
B. It is a nonldempotent operation.
C. It replaces data at the destination.
D. It displays a web site.

Answer: D

NEW QUESTION 565
- (Topic 4)
When the LAG configuration is updated on a Cisco WLC which additional task must be performed when changes are complete?

A. Flush all MAC addresses from the WLC
B. Re-associate the WLC with the access point.
C. Re-enable the WLC interfaces
D. Reboot the WLC

Answer: C

NEW QUESTION 570
- (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 574
DRAG DROP - (Topic 4)
Drag and drop the HTTP methods used with REST-Based APIs from the left onto the descriptions on the right.
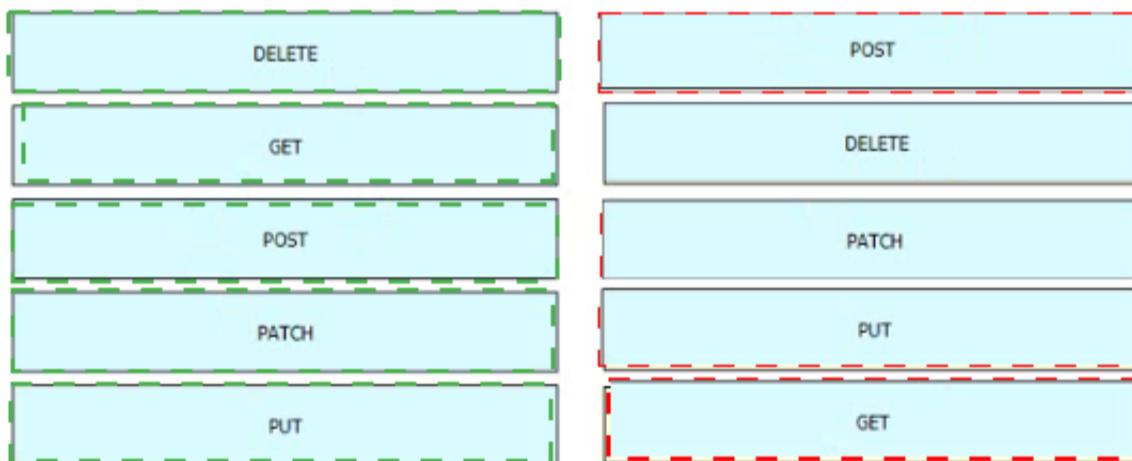
Methods	Descriptions
DELETE	creates a resource and returns its URI in the response header
GET	creates or replaces a previously modified resource using information in the request body
POST	removes a resource
PATCH	retrieves a list of a resource's URIs
PUT	updates a resource using instructions included in the request body

A. Mastered
B. Not Mastered

Answer: A

Explanation:

DELETE	POST
GET	DELETE
POST	PATCH
PATCH	PUT
PUT	GET

NEW QUESTION 578
- (Topic 4)
An administrator must use the password complexity not manufacturer-name command to prevent users from adding "cisco" as a password. Which command must be issued before this command?

A. Password complexity enable
B. confreg 0x2142
C. Login authentication my-auth-list
D. service password-encryption

Answer: A

NEW QUESTION 581
- (Topic 4)
Refer to the exhibit.

Security	RADIUS Authentication Servers > New	
▼ **AAA**	Server Index (Priority)	1 ▾
General	Server IP Address(Ipv4/Ipv6)	192.168.25.2
▼ RADIUS	Shared Secret Format	ASCII ▾
Authentication		
Accounting	Shared Secret	•••••••
Fallback	Confirm Shared Secret	•••••••
DNS		
Downloaded AVP	Key Wrap	☐ (Designed for FIPS customers and requires a key wrap compliant RADIUS server)
▶ TACACS+		
LDAP	Port Number	1812
Local Net Users		
MAC Filtering	Server Status	Enabled ▾
▼ Disabled Clients	Support for CoA	Disabled ▾
User Login Policies		
AP Policies	Server Timeout	2 seconds
Password Policies	Network User	☐ Enable
▶ **Local EAP**	Management	☐ Enable
Advanced EAP	Management Retransmit Timeout	2 seconds
▶ **Priority Order**	Tunnel Proxy	☐ Enable
▶ **Certificate**	IPSec	☐ Enable
▶ **Access Control Lists**		
▶ **Wireless Protection Policies**		

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 584
DRAG DROP - (Topic 4)
Drag and drop the Wi-Fi terms from the left onto the descriptions on the right.

distribution system	Wi-Fi option in which cells from different access points are linked together
extended service set	Wi-Fi option that enables two or more clients to communicate directly without a central access point
independent basic service set	Wi-Fi option based around one or more access points
infrastructure mode	alphanumeric text string that identifies a wireless network
SSID	entire wireless cell of an access point and the linkage to the wired network

A. Mastered
B. Not Mastered

Answer: A

Explanation:

distribution system	distribution system
extended service set	independent basic service set
independent basic service set	extended service set
infrastructure mode	SSID
SSID	infrastructure mode

NEW QUESTION 588
- (Topic 4)
Which two VPN technologies are recommended by Cisco for multiple branch offices and large-scale deployments? (Choose two.)

A. site-to-site VPN
B. IDMVPN
C. IGETVPN
D. IPsec remote access
E. clientless VPN

Answer: BE

NEW QUESTION 593
- (Topic 4)
SIP-based Call Admission Control must be configured in the Cisco WLC GUI. SIP call- snooping ports are configured. Which two actions must be completed next? (Choose two.)

A. Set the QoS level to silver or greater for voice traffic.
B. Set the QoS level to platinum for voice traffic.
C. Enable Media Session Snooping on re WLAN.
D. Enable traffic shaping for the LAN interlace of the WLC.
E. Configure two different QoS rotes tor data and voice traffic.

Answer: DE

NEW QUESTION 596
- (Topic 4)
Which signal frequency appears 60 times per minute?
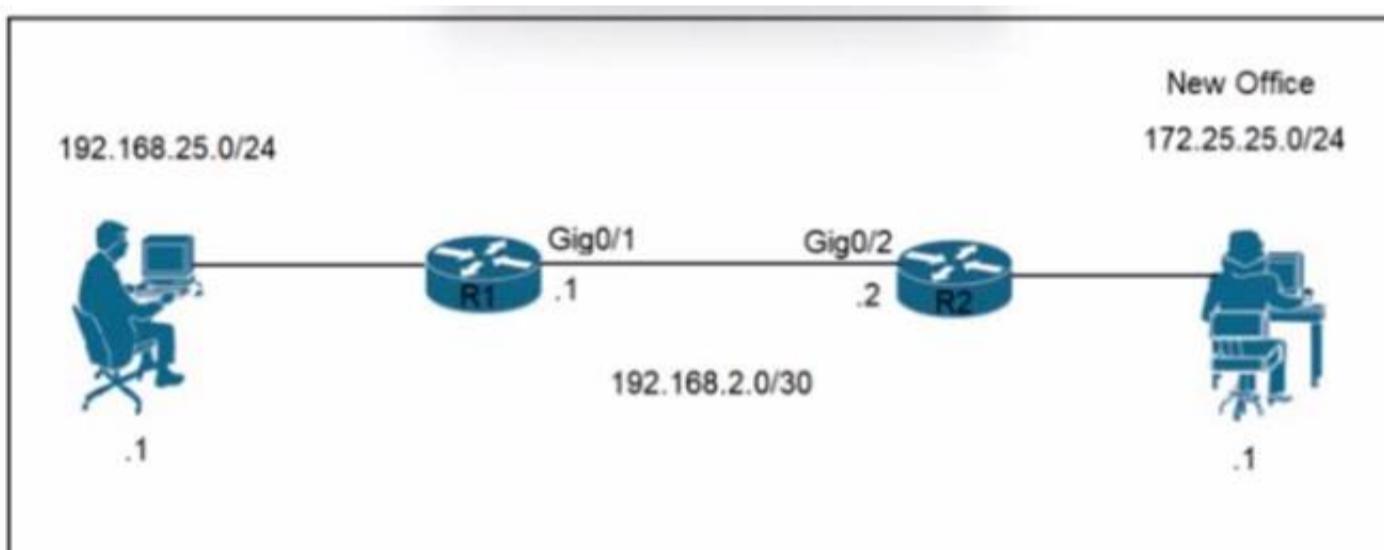
A. 1 Hz signal
B. 1 GHz signal
C. 60 Hz signal
D. 60 GHz signal

Answer: B

NEW QUESTION 599
- (Topic 4)
Refer to the exhibit.

A network engineer is updating the configuration on router R1 to connect a new branch office to the company network R2 has been configured correctly. Which command must the engineer configure so that devices at the new site communicate with the main office?

A. ip route 172.25.25 0 255 255 255.0 192.168.2.1
B. ip route 172.25.25 1 255 255 255 255 g0/1
C. ip route 172.25.25.0.255.255.255.0.192.168.2.2

Answer: C

NEW QUESTION 601
- (Topic 4)
Refer to the exhibit.

What is the subnet mask for route 172.16.4.0?

A. 255.255.248.0
B. 255.255.254.0
C. 255.255.255.192
D. 255.255.240.0

Answer: A

NEW QUESTION 606
- (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, 3 subnets, 3 masks
          10.10.100.0/26 is directly connected, GigabitEthernet0/0/6
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 10.10.10.32 is destined for the internet.

A. 1
B. 2
C. 32

Answer: B

NEW QUESTION 610
- (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 613
- (Topic 4)
Refer to the exhibit.

```
R1
interface GigabitEthernet0/1
    ip address 192.168.12.1 255.255.255.128
    no shutdown
router ospf 1
    network 192.168.12.1 0.0.0.0 area 1


R2
interface GigabitEthernet0/1
    ip address 192.168.12.2 255.255.255.128
    no shutdown
```

A network engineer started to configure two directly-connected routers as shown. Which command sequence must the engineer configure on R2 so that the two routers become
OSPF neighbors?
A)

```
router ospf 1
    network 192.168.12.1 0.0.0.0 area 1
```

B)

```
interface GigabitEthernet0/1
   ip ospf 1 area 1
```

C)
```
interface GigabitEthernet0/1
   ip ospf 1 area 0
```
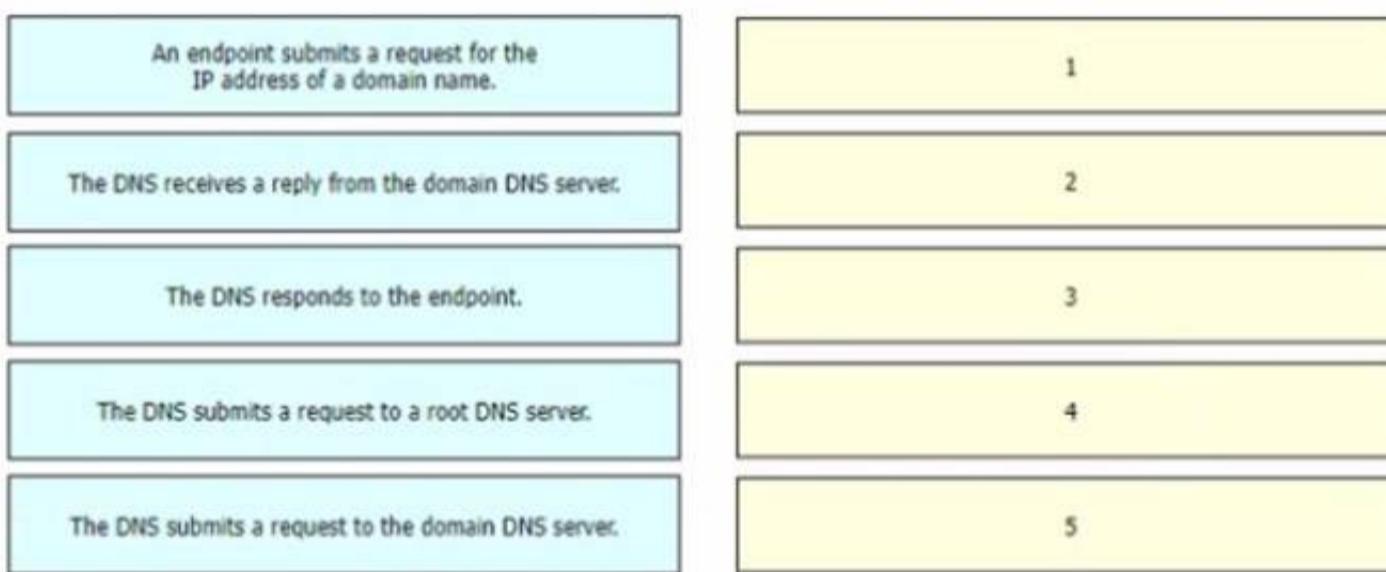
D)
```
router ospf 1
   network 192.168.12.0 0.0.0.127 area 0
```

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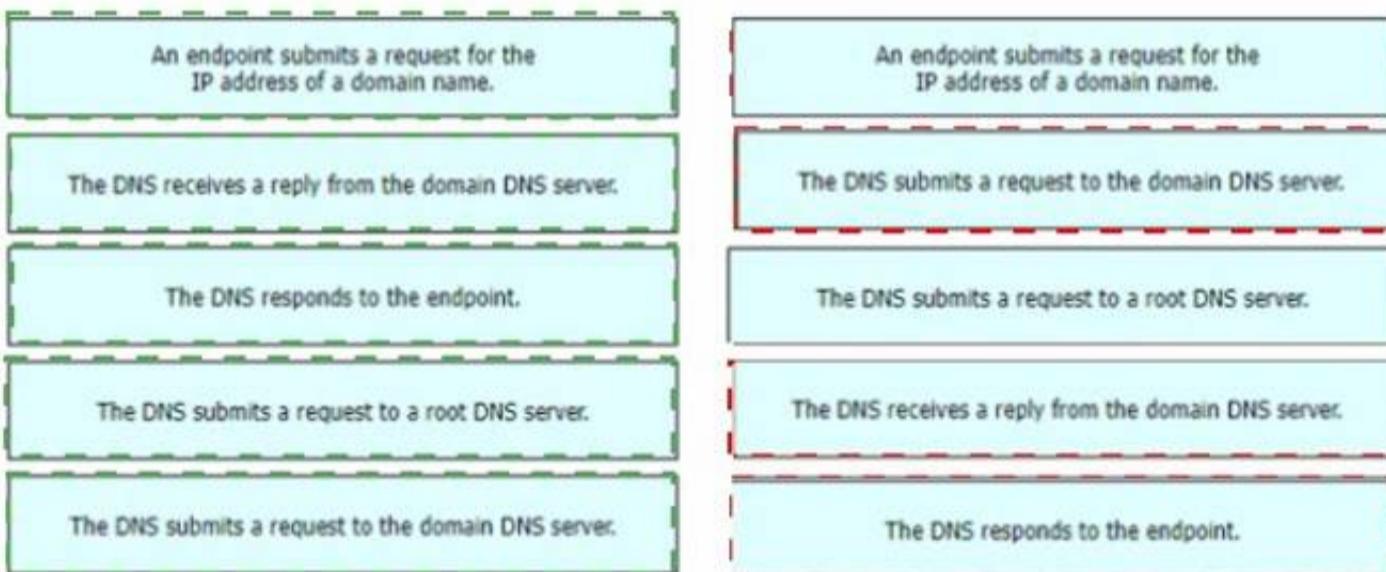
Answer: D

NEW QUESTION 618
DRAG DROP - (Topic 4)
Drag and drop the steps in a standard DNS lookup operation from the left into the order on the right.

An endpoint submits a request for the IP address of a domain name.	1
The DNS receives a reply from the domain DNS server.	2
The DNS responds to the endpoint.	3
The DNS submits a request to a root DNS server.	4
The DNS submits a request to the domain DNS server.	5

A. Mastered
B. Not Mastered

Answer: A

Explanation:

An endpoint submits a request for the IP address of a domain name.	An endpoint submits a request for the IP address of a domain name.
The DNS receives a reply from the domain DNS server.	The DNS submits a request to the domain DNS server.
The DNS responds to the endpoint.	The DNS submits a request to a root DNS server.
The DNS submits a request to a root DNS server.	The DNS receives a reply from the domain DNS server.
The DNS submits a request to the domain DNS server.	The DNS responds to the endpoint.

NEW QUESTION 623
DRAG DROP - (Topic 4)
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

Global Unicast Address

Link-Local Address

confined to a single link
required on all IPv6 devices

is publicly routable in the same way as IPv4 addresses
provides for one-to-one communication

A.

Answer: B

Explanation:

confined to a single link
required on all IPv6 devices

is publicly routable in the same way as IPv4 addresses
provides for one-to-one communication

Global Unicast Address
is publicly routable in the same way as IPv4 addresses
provides for one-to-one communication

Link-Local Address
confined to a single link
required on all IPv6 devices

614. - (Topic 4)
Refer to the exhibit.

```
router# show ip route

....
D   172.18.32.0/26 [90/25789217] via 10.1.1.1
R   172.18.32.0/24 [120/4] via 10.1.1.2
O   172.18.32.0/19 [110/229840] via 10.1.1.3
C   172.18.32.32/32 is directly connected, Loopback0
C   172.18.32.36/30 is directly connected, GigabitEthernet0/0
L   172.18.32.37/32 is directly connected, GigabitEthernet0/0
```
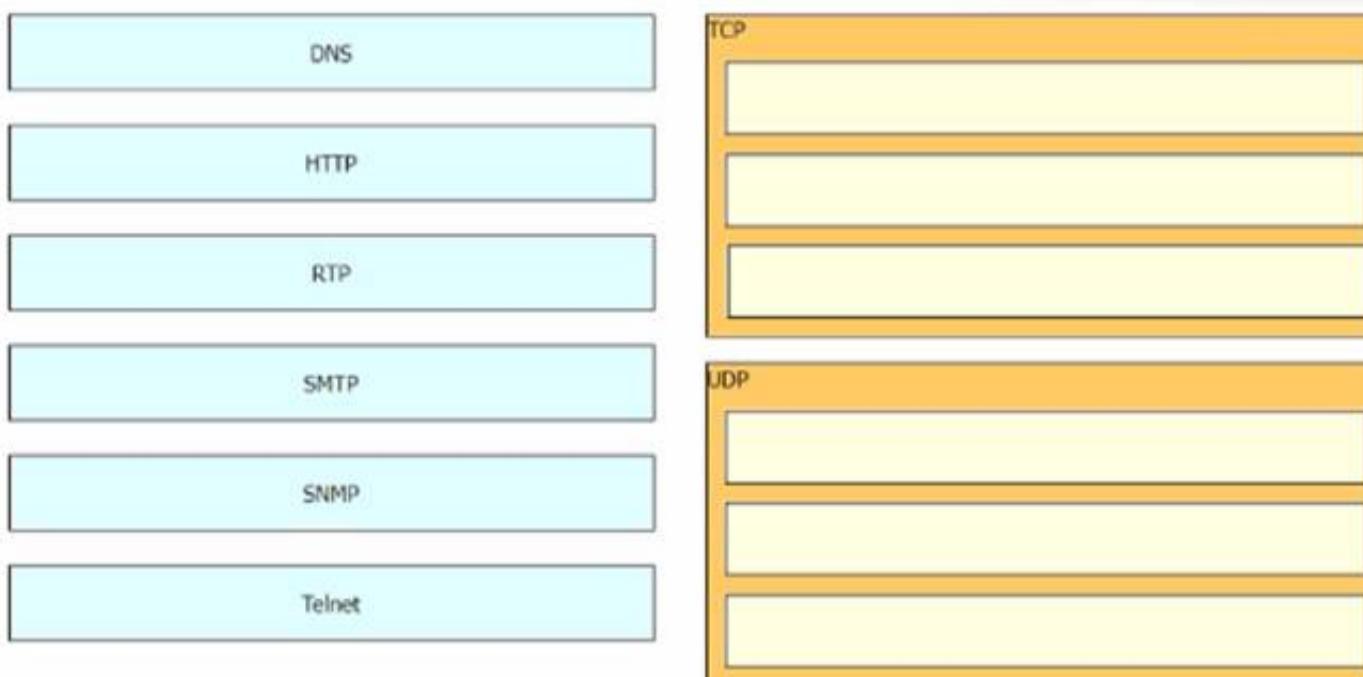
A packet sourced from 172.18.33.2 is destined for 172.18.32.38. Where does the router forward the packet?
A. GigabitEthernet0/0
B. Loopback0
C. 10.1.1.1
D. 10.1.1.3

NEW QUESTION 625
DRAG DROP - (Topic 4)
Drag and chop the TCP/IP protocols from the left onto their primary transmission protocols on the right.
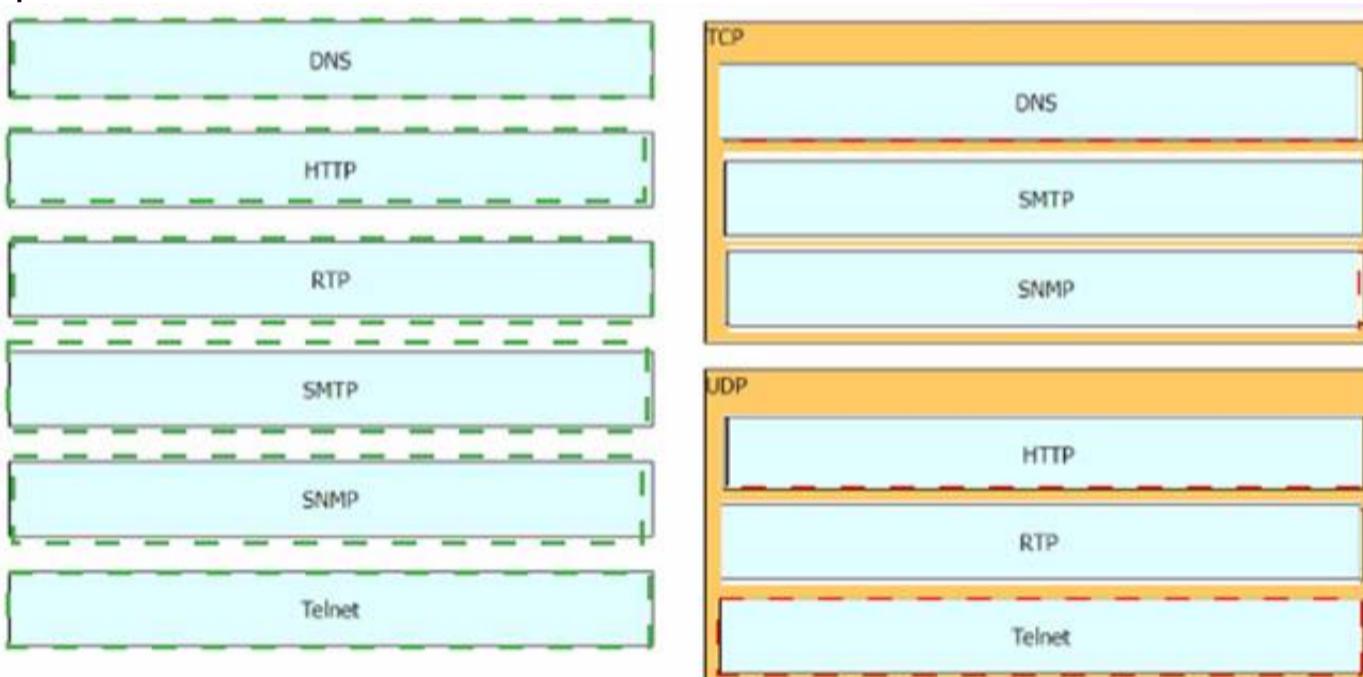
DNS	TCP
HTTP	
RTP	
SMTP	UDP
SNMP	
Telnet	

A. Mastered
B. Not Mastered

Answer: A

Explanation:

| DNS | TCP |
HTTP	DNS
RTP	SMTP
SMTP	SNMP
SNMP	UDP
Telnet	HTTP
	RTP
	Telnet

NEW QUESTION 626
- (Topic 4)
Which type of hypervisor operates without an underlying OS to host virtual machines?

A. Type 1
B. Type 2
C. Type 3
D. Type 12

Answer: A

NEW QUESTION 630
- (Topic 4)
Refer to the exhibit.

An architect is managing a wireless network with APs from several branch offices connecting to the WLC in the data center. There is a new requirement for a

single WLAN to process the client data traffic without sending it to the WLC. Which action must be taken to complete the request?

A. Enable local HTTP profiling.
B. Enable Disassociation Imminent.
C. Enable FlexConnect Local Switching.
D. Enable local DHCP Profiling.

Answer: C

NEW QUESTION 634
- (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 637
- (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 640
- (Topic 4)
How does MAC learning function on a switch?

A. broadcasts frames to all ports without queueing
B. adds unknown source MAC addresses to the address table
C. sends a retransmission request when a new frame is received
D. sends frames with unknown destinations to a multicast group

Answer: B

NEW QUESTION 644
- (Topic 4)
What is the role of nonoverlapping channels in a wireless environment?

A. to reduce interference
B. to allow for channel bonding
C. to stabilize the RF environment
D. to increase bandwidth

Answer: A

NEW QUESTION 647
- (Topic 4)
Which syslog severity level is considered the most severe and results in the system being considered unusable?

A. Alert
B. Error
C. Emergency
D. Critical

Answer: C

NEW QUESTION 651
- (Topic 4)
Refer to the exhibit.

```
R1#sho ip route
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, 1 - LISP
       + - replicated route, % - next hop override

Gateway of last resort is 10.56.0.1 to network 0.0.0.0

S*      0.0.0.0/0 [1/0] via 10.56.0.1
        10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C          10.56.0.0/17 is directly connected, Vlan56
L          10.56.0.19/32 is directly connected, Vlan56
C          10.56.128.0/18 is directly connected, Vlan57
L          10.56.128.19/32 is directly connected, Vlan57
```

When router R1 is sending traffic to IP address 10.56.192 1, which interface or next hop address does it use to route the packet?

A. 0.0.0.0.0/0
B. 10.56.0.1
C. 10.56.128.19
D. Vlan57

Answer: B

NEW QUESTION 652
- (Topic 4)
What does a switch do when it receives a frame whose destination MAC address is missing from the MAC address table?

A. It floods the frame unchanged across all remaining ports in the incoming VLAN.
B. It appends the table with a static entry for the MAC and shuts down the port.
C. It updates the CAM table with the destination MAC address of the frame.
D. It changes the checksum of the frame to a value that indicates an invalid frame.

Answer: A

NEW QUESTION 657
- (Topic 4)
Refer to the exhibit.

```
{
    "SW1" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
    "SW2" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
    "SW3" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
    "SW4" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"]

}
```

How many JSON objects are presented?

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

Answer: D

NEW QUESTION 658
- (Topic 4)
When should an engineer implement a collapsed-core architecture?

A. for small networks with minimal need for growth
B. the access and distribution layers must be on the same device
C. for large networks that are connected to multiple remote sites
D. only when using VSS technology

Answer: C

NEW QUESTION 660
- (Topic 4)
An engineer is installing a new wireless printer with a static IP address on the Wi-Fi network. Which feature must be enabled and configured to prevent connection issues with the printer?

A. client exclusion
B. passive client
C. DHCP address assignment
D. static IP tunneling

Answer: C

NEW QUESTION 661
- (Topic 4)

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

Answer: C

NEW QUESTION 664
- (Topic 4)
What does WPA3 provide in wireless networking?

A. safeguards against brute force attacks with SAE
B. optional Protected Management Frame negotiation
C. backward compatibility with WPAand WPA2
D. increased security and requirement of a complex configuration

Answer: A

Explanation:
 https://www.swascan.com/wi-fi-security/

NEW QUESTION 665
- (Topic 4)
What must a network administrator consider when deciding whether to configure a new wireless network with APs in autonomous mode or APs running in cloud-based mode?

A. Autonomous mode APs are less dependent on an underlay but more complex to maintain than APs in cloud-based mode.
B. Cloud-based mode APs relay on underlays and are more complex to maintain than APs in autonomous mode.
C. Cloud-based mode APs are easy to deploy but harder to automate than APs in autonomous mode.
D. Autonomous mode APs are easy to deploy and automate than APs in cloud-based mode.

Answer: A

NEW QUESTION 667
- (Topic 4)
Refer to the exhibit. Local access for R4 must be established and these requirements must be met:
• Only Telnet access is allowed.
• The enable password must be stored securely.
• The enable password must be applied in plain text.
• Full access to R4 must be permitted upon successful login. Which configuration script meets the requirements?
A)

```
!
conf t
!
username test1 password testpass1
enable secret level 15 0 Test123
!
line vty 0 15
 login local
 transport input telnet
```

B)

```
!
config t
!
username test1 password testpass1
enable password level 15 0 Test123
!
line vty 0 15
 password Test123
 transport input all
```

C)

```
!
config t
!
username test1 password testpass1
enable password level 1 7 Test123
!
line vty 0 15
 accounting exec default
 transport input all
```

D)
```
!
config t
!
username test1 password testpass1
enable password level 1 7 Test123
!
line vty 0 15
 accounting exec default
 transport input all
```

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

Answer: D

NEW QUESTION 672
- (Topic 4)
Which components are contained within a virtual machine?

A. physical resources, including the NIC, RAM, disk, and CPU
B. configuration files backed by physical resources from the Hypervisor
C. applications running on the Hypervisor
D. processes running on the Hypervisor and a guest OS

Answer: B
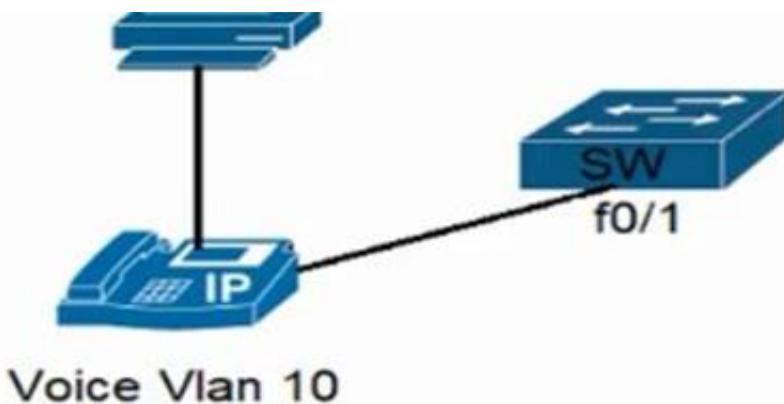
Explanation:
 A virtual machine is a software-based computer that runs on a physical host computer or a remote server. It has its own operating system, applications, and virtual hardware devices that are configured by the user. The virtual hardware devices are backed by the physical resources of the Hypervisor, which is a software layer that manages the virtual machines and allocates the CPU, memory, network, and storage resources to them. The configuration files of a virtual machine contain information such as the name, UUID, BIOS settings, hardware settings, and resource settings of the virtual machine. These files are stored on a datastore, which is a logical container for files and virtual disks12. References:
? 1: VMware vSphere 7.0 Documentation - Virtual Machine Configuration Files
? 2: Cisco CCNA Certification Guide - Chapter 10: Virtualization Fundamentals

NEW QUESTION 674
- (Topic 3)
Refer to the exhibit.

```
SW#show run
Building configuration...
!
interface FastEthernet0/1
  switchport access vlan 15
!
end
```

All VLANs are present in the VLAN database. Which command sequence must be applied to complete the configuration?
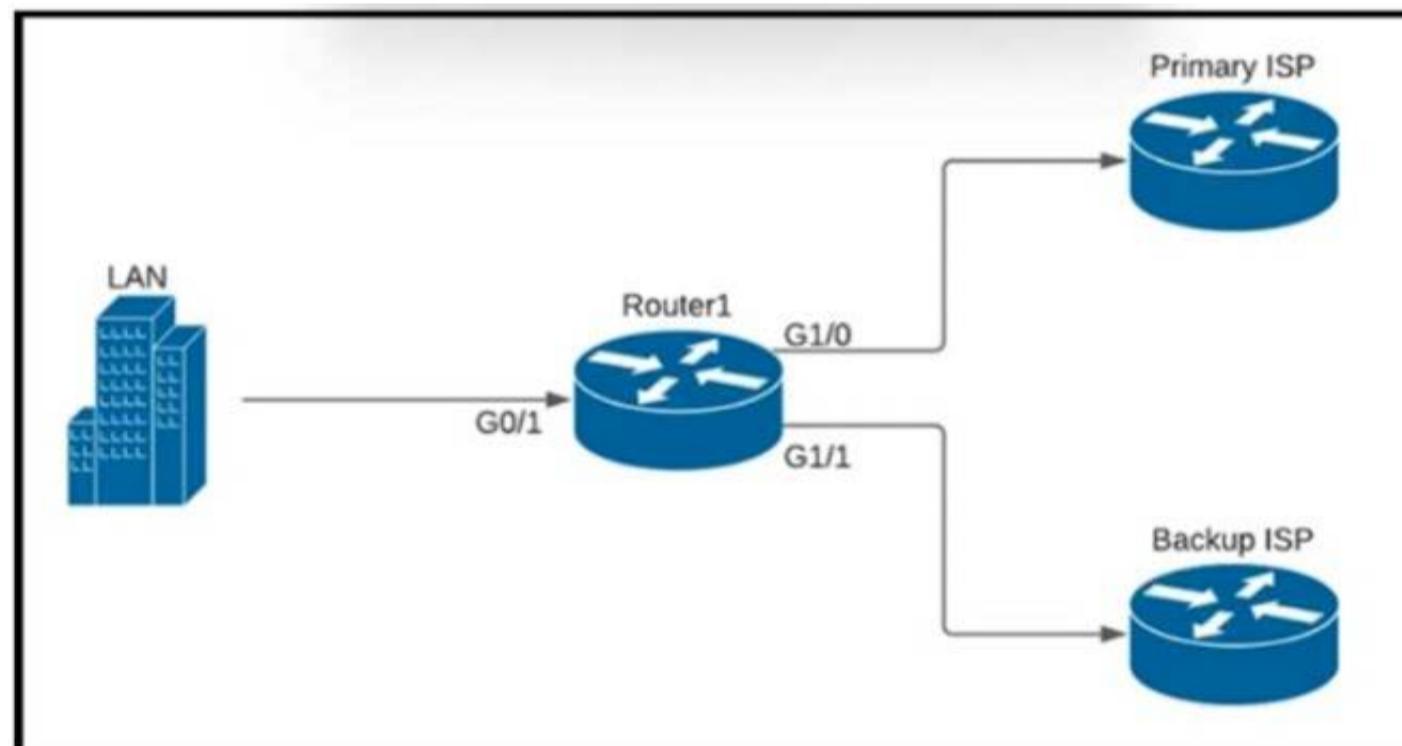
A. Interface FastEthernet0/1 switchport trunk native vlan 10 switchport trunk allowed vlan 10,15
B. Interface FastEthernet0/1 switchport mode trunk switchport trunk allowed vlan 10,15
C. interface FastEthernet0/1 switchport mode access switchport voice vlan 10
D. Interface FastEthernet0/1 switchport trunk allowed vlan add 10 vlan 10 private-vlan isolated

Answer: C

NEW QUESTION 678
- (Topic 3)
Refer to the exhibit.

A company is configuring a failover plan and must implement the default routes in such a way that a floating static route will assume traffic forwarding when the primary link goes down. Which primary route configuration must be used?

A. ip route 0.0.0.0 0.0.0.0 192.168.0.2 GigabitEthernetl/0
B. ip route 0.0.0.0 0.0.0.0 192.168.0.2 tracked
C. ip route 0.0.0.0 0.0.0.0 192.168.0.2 floating
D. ip route 0.0.0.0 0.0.0.0 192.168.0.2

Answer: B

NEW QUESTION 681
- (Topic 3)
What provides centralized control of authentication and roaming In an enterprise network?

A. a lightweight access point
B. a firewall
C. a wireless LAN controller
D. a LAN switch

Answer: C

NEW QUESTION 683
- (Topic 3)
Refer to the exhibit.

```
Router#show run
Building configuration...

Current configuration : 1530 bytes
!
! Last configuration change at 11:32:53 UTC Sat Oct 10 2020
upgrade fpd auto
version 15.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Router
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
no ip icmp rate-limit unreachable
!
!
!
!
--More--
```

Which minimum configuration items are needed to enable Secure Shell version 2 access to R15?
A)

```
Router(config)#hostname R15
R15(config)#crypto key generate rsa general-keys modulus 1024
R15(config-line)#line vty 0 15
R15(config-line)# transport input ssh
R15(config)#ip ssh source-interface Fa0/0
R15(config)#ip ssh stricthostkeycheck
```

B)

```
Router(config)#crypto key generate rsa general-keys modulus 1024
Router(config)#ip ssh version 2
Router(config-line)#line vty 0 15
Router(config-line)# transport input ssh
Router(config)#ip ssh logging events
R15(config)#ip ssh stricthostkeycheck
```

C)

```
Router(config)#ip domain-name cisco.com
Router(config)#crypto key generate rsa general-keys modulus 1024
Router(config)#ip ssh version 2
Router(config-line)#line vty 0 15
Router(config-line)# transport input all
Router(config)#ip ssh logging events
```

D)

```
Router(config)#hostname R15
R15(config)#ip domain-name cisco.com
R15(config)#crypto key generate rsa general-keys modulus 1024
R15(config)#ip ssh version 2
R15(config-line)#line vty 0 15
R15(config-line)# transport input ssh
```
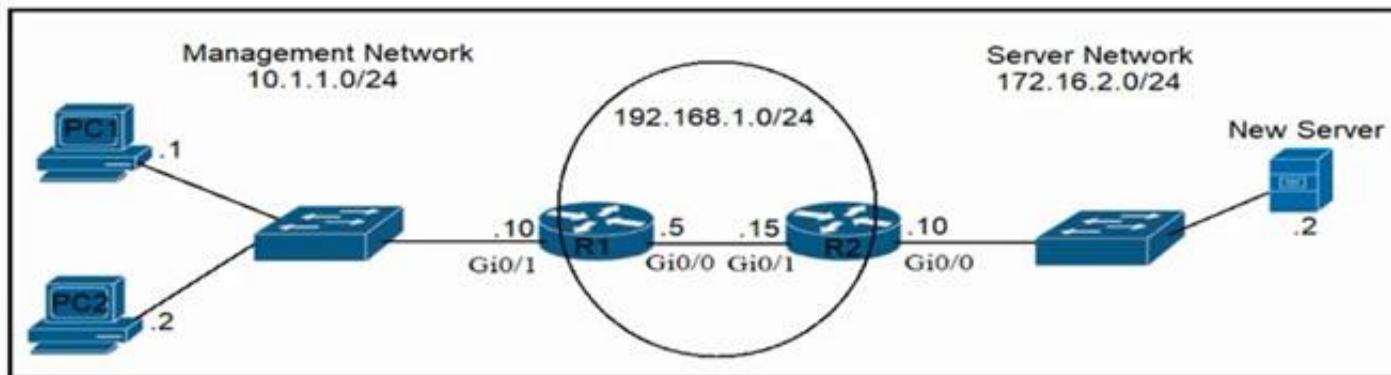
A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 684
- (Topic 3)

Refer to the exhibit.

An engineer is updating the R1 configuration to connect a new server to the management network. The PCs on the management network must be blocked from pinging the default gateway of the new server. Which command must be configured on R1 to complete the task?

A. R1(config)#lp route 172.16.2.2 255.255.255.248 gi0/1
B. R1(config)#jp route 172.16.2.2 255.255.255.255 gi0/0
C. R1(config>#ip route 172.16.2.0 255.255.255.0 192.168.1.15
D. R1(conflg)#ip route 172.16.2.0 255.255.255.0 192.168.1.5

Answer: C

NEW QUESTION 687
......