



**Cisco**

**Exam Questions 200-301**

Cisco Certified Network Associate

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## NEW QUESTION 1

- (Topic 3)

Refer to the exhibit.

Switch#show ip dhcp snooping	Switch#show ip dhcp snooping statistics detail
Switch DHCP snooping is enabled	Packets Processed by DHCP Snooping = 34
Switch DHCP gleaning is disabled	Packets Dropped Because
DHCP snooping is configured on following VLANs:	IDB not known = 0
1	Queue full = 0
DHCP snooping is operational on following VLANs:	Interface is in errdisabled = 0
1	Rate limit exceeded = 0
DHCP snooping is configured on the following L3 Interfaces:	Received on untrusted ports = 32
Insertion of option 82 is disabled	Nonzero giaddr = 0
circuit-id default format: vlan-mod-port	Source mac not equal to chaddr = 0
remote-id: aabb.cc00.6500 (MAC)	No binding entry = 0
Option 82 on untrusted port is not allowed	Insertion of opt82 fail = 0
Verification of hwaddr field is enabled	Unknown packet = 0
Verification of giaddr field is enabled	Interface Down = 0
DHCP snooping trust/rate is configured on the following Interfaces:	Unknown output interface = 0
Interface Trusted Allow option Rate limit (pps)	Misdirected Packets = 0
	Packets with Invalid Size = 0
	Packets with Invalid Option = 0

The DHCP server and clients are connected to the same switch. What is the next step to complete the DHCP configuration to allow clients on VLAN 1 to receive addresses from the DHCP server?

- A. Configure the ip dhcp snooping trust command on the interlace that is connected to the DHCP client.
- B. Configure the ip dhcp relay information option command on the interface that is connected to the DHCP client.
- C. Configure the ip dhcp snooping trust command on the interface that is connected to the DHCP server.
- D. Configure the Ip dhcp relay information option command on the interface that is connected to the DHCP server.

Answer: C

## NEW QUESTION 2

- (Topic 3)

Refer to the exhibit.

```
Switch2# show lldp
Global LLDP Information
  Status: ACTIVE
  LLDP advertisements are sent every 30 seconds
  LLDP hold time advertised is 120 seconds
  LLDP interface reinitialization delay is 2 seconds
```

A network engineer must update the configuration on Switch2 so that it sends LLDP packets every minute and the information sent via LLDP is refreshed every 3 minutes Which configuration must the engineer apply?

A)

```
Switch2(config)#lldp timer 60
Switch2(config)#lldp holdtime 180
```

B)

```
Switch2(config)#lldp timer 60
Switch2(config)#lldp tlv-select 180
```

C)

```
Switch2(config)#lldp timer 1
Switch2(config)#lldp holdtime 3
```

D)

```
Switch2(config)#lldp timer 1
Switch2(config)#lldp tlv-select 3
```

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

Answer: A

### NEW QUESTION 3

- (Topic 3)

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

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

**Answer:** B

### NEW QUESTION 4

- (Topic 3)

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

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

**Answer:** C

### NEW QUESTION 5

- (Topic 3)

Which type of network attack overwhelms the target server by sending multiple packets to a port until the half-open TCP resources of the target are exhausted?

- A. SYIM flood
- B. reflection
- C. teardrop
- D. amplification

**Answer:** A

### NEW QUESTION 6

- (Topic 3)

Which protocol uses the SSL?

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

**Answer:** C

### NEW QUESTION 7

- (Topic 3)

Refer to the exhibit.

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

An engineer assumes a configuration task from a peer Router A must establish an OSPF neighbor relationship with neighbor 172.1.1.1. The output displays the status of the adjacency after 2 hours. What is the next step in the configuration process for the routers to establish an adjacency?

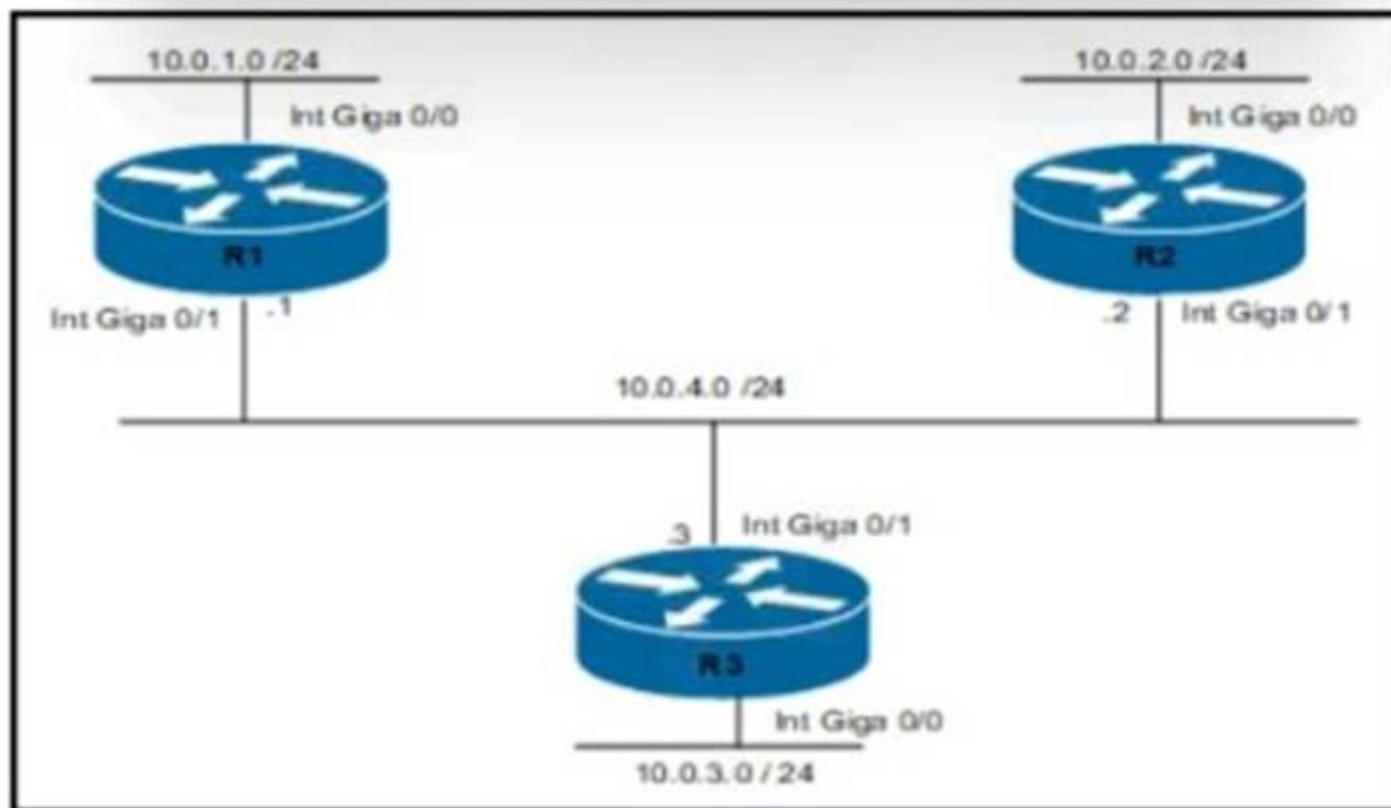
- A. Configure router A to use the same MTU size as router B.
- B. Set the router B OSPF ID to a nonhost address.
- C. Configure a point-to-point link between router A and router B.
- D. Set the router B OSPF ID to the same value as its IP address

**Answer:** B

### NEW QUESTION 8

- (Topic 3)

Refer to the exhibit.



Routers R1 and R3 have the default configuration The router R2 priority is set to 99 Which commands on R3 configure it as the DR in the 10.0 4.0/24 network?

- A. R3(config)#interface Gig0/1 R3(config-if)#ip ospf priority 100
- B. R3(config)#interface Gig0/0 R3(config-if)#ip ospf priority 100
- C. R3(config)#interface Gig0/0 R3(config-if)#ip ospf priority 1
- D. R3(config)#interface Gig0/1 R3(config-if)#ip ospf priority 0

**Answer: B**

#### NEW QUESTION 9

DRAG DROP - (Topic 3)

Drag and drop the threat-mitigation techniques from the left onto the types of threat or attack they mitigate on the right.

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

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

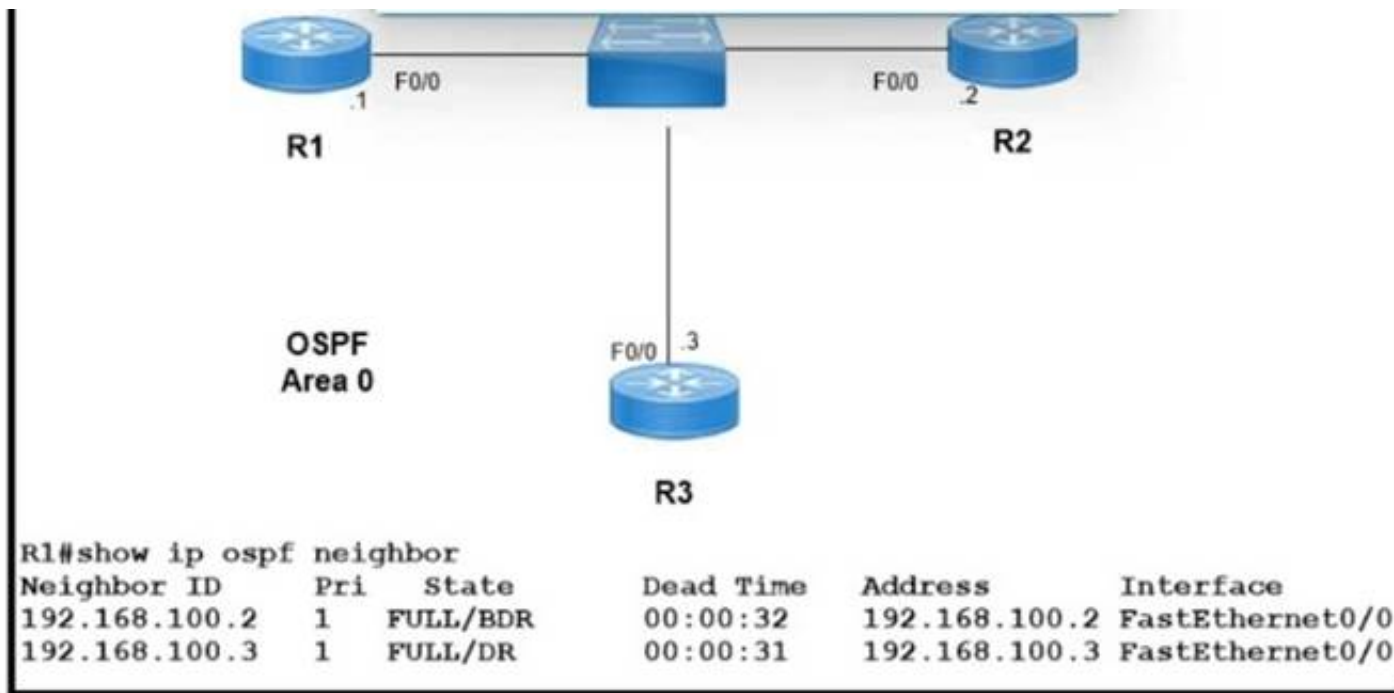
configure the BPDU guard feature	configure a VLAN access control list
configure the dynamic ARP inspection feature	configure the dynamic ARP inspection feature
configure the root guard feature	configure the root guard feature
configure a VLAN access control list	configure the BPDU guard feature

#### NEW QUESTION 10

- (Topic 3)

Refer to the exhibit.





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 10

- (Topic 3)

Refer to the exhibit.

```
Hardware is ISR4331-3x1GE, address is 5486.bc25.1f70 (bia 5486.bc25.1f70)
Description: << WAN Link >>
Internet address is 192.0.2.2/30
MTU 1500 bytes, BW 1000000 Kbit/sec, DLY 10 usec,
    reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive not supported
Full Duplex, 1000Mbps, link type is auto, media type is RJ45
output flow-control is off, input flow-control is off
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:00, output 00:00:11, output hang never
Last clearing of "show interface" counters never
Input queue: 0/375/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue: 0/40 (size/max)
5 minute input rate 7000 bits/sec, 4 packets/sec
5 minute output rate 4000 bits/sec, 4 packets/sec
  22579370 packets input, 8825545968 bytes, 0 no buffer
    Received 67 broadcasts (0 IP multicasts)
      0 runts, 0 giants, 0 throttles
    3612699 input errors, 3612699 CRC, 0 frame, 0 overrun, 0 ignored
      0 watchdog, 10747057 multicast, 0 pause input
    12072167 packets output, 1697953637 bytes, 0 underruns
      0 output errors, 0 collisions, 1 interface resets
        6 unknown protocol drops
        0 babbles, 0 late collision, 0 deferred
        5 lost carrier, 0 no carrier, 0 pause output
        0 output buffer failures, 0 output buffers swapped out
```

What is a reason for poor performance on the network interface?

- A. The interface is receiving excessive broadcast traffic.
- B. The cable connection between the two devices is faulty.
- C. The interface is operating at a different speed than the connected device.
- D. The bandwidth setting of the interface is misconfigured

**Answer:** A

#### NEW QUESTION 14

- (Topic 3)

Refer to the exhibit.

EIGRP	10.10.10.0/24[90/1441]	via	F0/10
EIGRP	10.10.10.0/24[90/144]	via	F0/11
EIGRP	10.10.10.0/24[90/1441]	via	F0/12
OSPF	10.10.10.0/24[110/20]	via	F0/13
OSPF	10.10.10.0/24[110/30]	via	F0/14

Packets received by the router from BGP enter via a serial interface at 209.165.201.10. Each route is present within the routing table. Which interface is used to forward traffic with a destination IP of 10.10.10.24?

- A. F0/10
- B. F0/11
- C. F0/12
- D. F0/13

**Answer:** B

#### NEW QUESTION 18

FILL IN THE BLANK - (Topic 3)

Refer to the exhibit.

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

Drag and drop the prefix lengths from the left onto the corresponding prefixes on the right Not all prefixes are used

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Diagram Description automatically generated with low confidence

**NEW QUESTION 20**

- (Topic 3)

A network engineer must implement an IPv6 configuration on the vlan 2000 interface to create a routable locally-unique unicast address that is blocked from being advertised to the internet. Which configuration must the engineer apply?

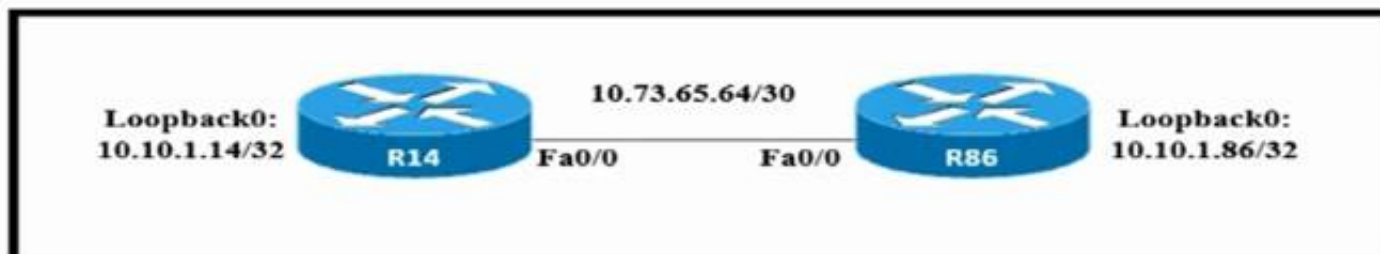
- A. interface vlan 2000ipv6 address ffc0:0000:aaaa::1234:2343/64
- B. interface vlan 2000ipv6 address fc00:0000:aaaa:a15d:1234:2343:8aca/64
- C. interface vlan 2000ipv6 address fe80:0000:aaaa::1234:2343/64
- D. interface vlan 2000ipv6 address fd00::1234:2343/64

**Answer:** B

**NEW QUESTION 25**

- (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 28

- (Topic 3)

What is a requirement for nonoverlapping Wi-Fi channels?

- A. different security settings
- B. discontinuous frequency ranges
- C. different transmission speeds
- D. unique SSIDs

**Answer: B**

### NEW QUESTION 33

DRAG DROP - (Topic 3)

Drag and drop the facts about wireless architectures from the left onto the types of access point on the right. Not all options are used.

supports automatic deployment	Autonomous Access Point
managed from a web-based dashboard	
accessible for management via Telnet, SSH, or a web GUI	
configured and managed by a WLC	Cloud-Based Access Point
requires a management IP address	

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

supports automatic deployment	Autonomous Access Point
managed from a web-based dashboard	accessible for management via Telnet, SSH, or a web GUI
accessible for management via Telnet, SSH, or a web GUI	configured and managed by a WLC
configured and managed by a WLC	Cloud-Based Access Point
requires a management IP address	requires a management IP address
	supports automatic deployment

### NEW QUESTION 35

- (Topic 3)

Refer to the exhibit.

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

R1#show crypto key mypubkey rsa

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

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

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

E. transport input ssh

**Answer:** DE

#### NEW QUESTION 39

- (Topic 2)

The service password-encryption command is entered on a router. What is the effect of this configuration?

- A. restricts unauthorized users from viewing clear-text passwords in the running configuration
- B. encrypts the password exchange when a VPN tunnel is established
- C. prevents network administrators from configuring clear-text passwords
- D. protects the VLAN database from unauthorized PC connections on the switch

**Answer:** A

#### NEW QUESTION 43

- (Topic 2)

Which type of IPv6 address is publicly routable in the same way as IPv4 public address?

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

**Answer:** A

#### NEW QUESTION 46

- (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 47

- (Topic 2)

Refer to the exhibit.

```
R1#show ip route
#output suppressed

Gateway of last resort is 192.168.14.4 to network 0.0.0.0

C    172.16.1.128/25 is directly connected, GigabitEthernet1/1/0
C    192.168.12.0/24 is directly connected, FastEthernet0/0
C    192.168.13.0/24 is directly connected, FastEthernet0/1
C    192.168.14.0/24 is directly connected, FastEthernet1/0
C    172.16.16.1 is directly connected, Loopback1
     192.168.10.0/24 is variably subnetted, 3 subnets, 3 masks
O    192.168.10.0.24 [110/2] via 192.168.14.4, 00:02:01, FastEthernet1/0
O    192.168.10.32/27 [110/11] via 192.168.13.3, 00:00:52, FastEthernet0/1
O    192.168.0.0/16 [110/2] via 192.168.15.5, 00:05:01, FastEthernet1/1
D    192.168.10.1/32 [90/52778] via 192.168.12.2, 00:03:44, FastEthernet0/0
O*E2  0.0.0.0/0 [110/1] via 192.168.14.4, 00:00:10, FastEthernet1/0
```

If R1 receives a packet destined to 172.161.1, to which IP address does it send the packet?

- A. 192.168.12.2
- B. 192.168.13.3
- C. 192.168.14.4
- D. 192.168.15.5

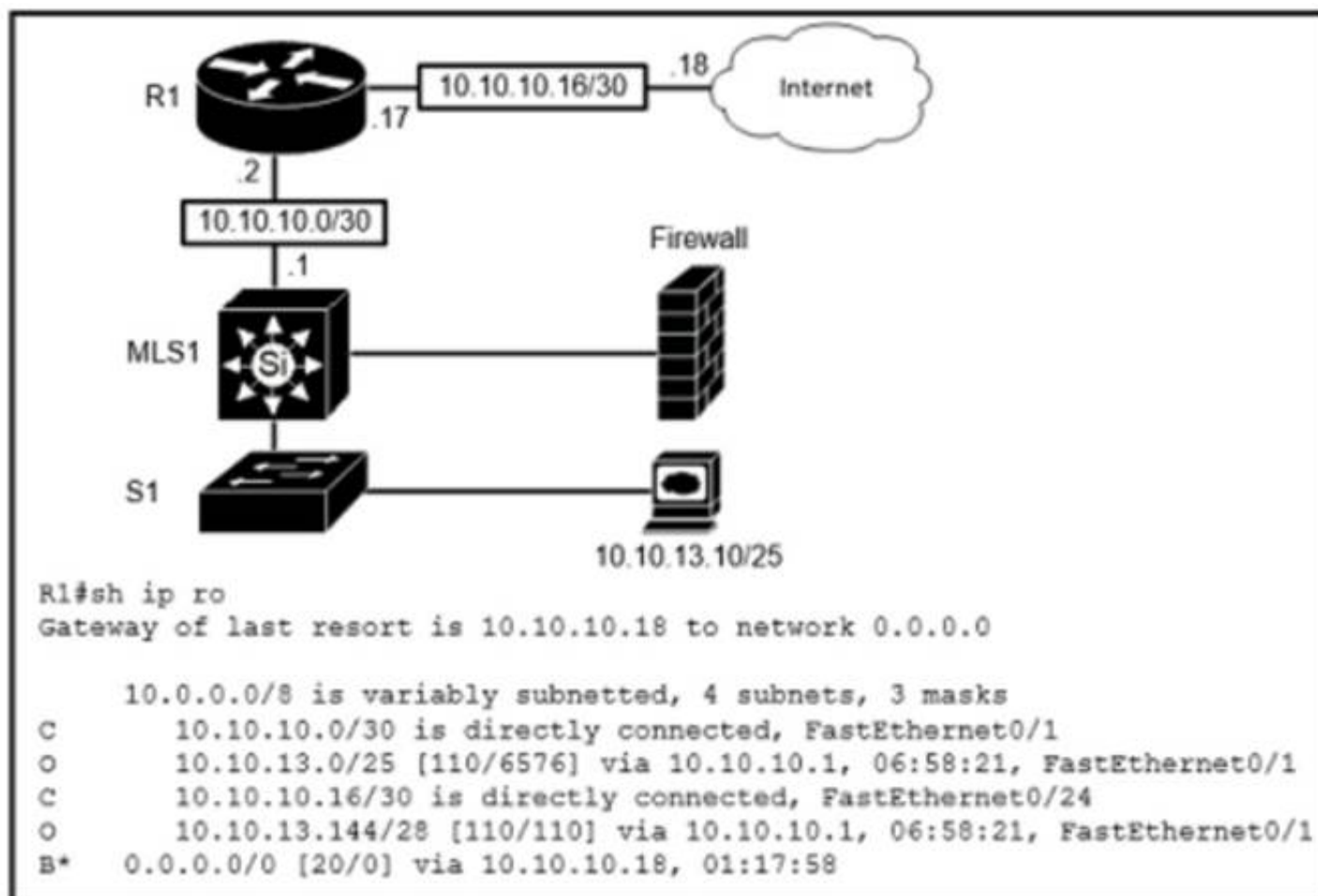
**Answer:** C

#### NEW QUESTION 49

- (Topic 2)

Refer to the exhibit.





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

- (Topic 2)

Which two protocols must be disabled to increase security for management connections to a Wireless LAN Controller? (Choose two )

- A. Telnet
- B. SSH
- C. HTTP
- D. HTTPS
- E. TFTP

**Answer: AC**

#### NEW QUESTION 51

- (Topic 2)

Router A learns the same route from two different neighbors, one of the neighbor routers is an OSPF neighbor and the other is an EIGRP neighbor. What is the administrative distance of the route that will be installed in the routing table?

- A. 20
- B. 90
- C. 110
- D. 115

**Answer: B**

#### Explanation:

The Administrative distance (AD) of EIGRP is 90 while the AD of OSPF is 110 so EIGRP route will be chosen to install into the routing table.

#### NEW QUESTION 53

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.

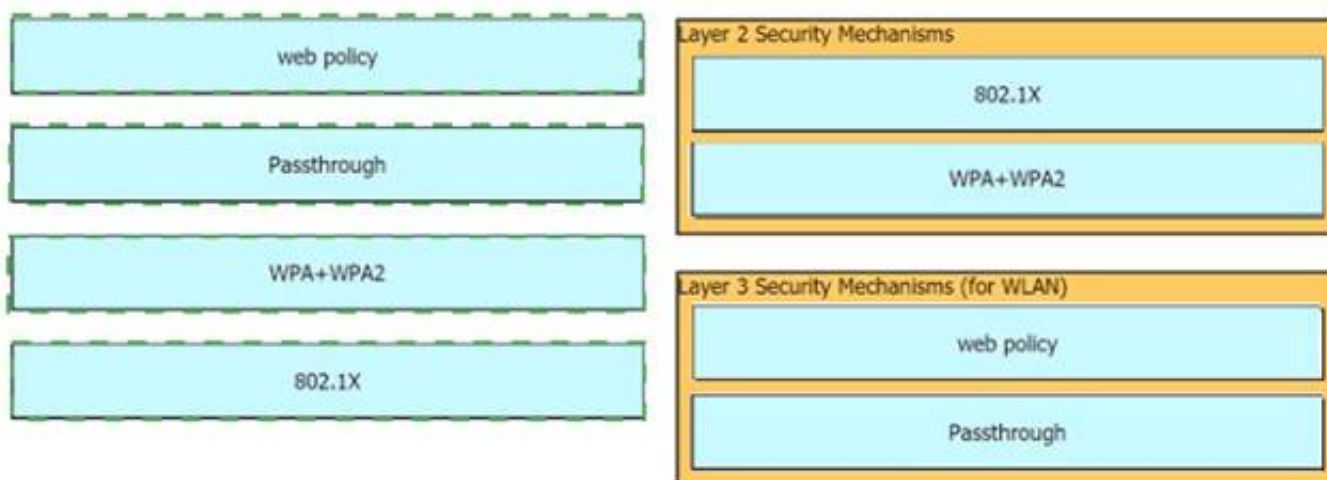




- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**



#### NEW QUESTION 55

- (Topic 2)

What is a similarity between 1000BASE-LX and 1000BASE-T standards?

- A. Both use the same data-link header and trailer formats
- B. Both cable types support LP connectors
- C. Both cable types support RJ-45 connectors
- D. Both support up to 550 meters between nodes

**Answer:** A

**Explanation:**

“In computer networking, Gigabit Ethernet (GbE or 1 GigE) is the term applied to transmitting Ethernet frames at a rate of a gigabit per second.” Both standards use Ethernet framing (same headers and trailers)

#### NEW QUESTION 56

- (Topic 2)

Which plane is centralized by an SDN controller?

- A. management-plane
- B. control-plane
- C. data-plane
- D. services-plane

**Answer:** B

#### NEW QUESTION 57

- (Topic 2)

What is a characteristic of spine-and-leaf architecture?

- A. Each device is separated by the same number of hops
- B. It provides variable latency
- C. It provides greater predictability on STP blocked ports.
- D. Each link between leaf switches allows for higher bandwidth.

**Answer:** A

#### 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 59

- (Topic 2)

Which communication interaction takes place when a southbound API is used?

- A. between the SDN controller and PCs on the network
- B. between the SON controller and switches and routers on the network
- C. between the SON controller and services and applications on the network
- D. between network applications and switches and routers on the network

**Answer:** B

#### NEW QUESTION 63

- (Topic 2)

Which action does the router take as it forwards a packet through the network?

- A. The router replaces the source and destination labels with the sending router interface label as a source and the next hop router label as a destination
- B. The router encapsulates the source and destination IP addresses with the sending router IP 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 65

- (Topic 2)

A corporate office uses four floors in a building

- Floor 1 has 24 users
- Floor 2 has 29 users
- Floor 3 has 28 users
- Floor 4 has 22 users

Which subnet summarizes and gives the most efficient distribution of IP addresses for the router configuration?

- A. 192.168.0.0/26 as summary and 192.168.0.0/29 for each floor
- B. 192.168.0.0/24 as summary and 192.168.0.0/28 for each floor
- C. 192.168.0.0/23 as summary and 192.168.0.0/25 for each floor
- D. 192.168.0.0/25 as summary and 192.168.0.0/27 for each floor

**Answer:** D

#### NEW QUESTION 68

- (Topic 2)

What is a role of access points in an enterprise network?

- A. connect wireless devices to a wired network
- B. support secure user logins to devices on the network
- C. integrate with SNMP in preventing DDoS attacks
- D. serve as a first line of defense in an enterprise network

**Answer:** A

#### NEW QUESTION 73

- (Topic 2)

Refer to the exhibit.

```
interface GigabitEthernet3/1/4
  switchport voice vlan 50
!
```

An administrator is tasked with configuring a voice VLAN. What is the expected outcome when a Cisco phone is connected to the GigabitEthernet3/1/4 port on a switch?

- A. The phone and a workstation that is connected to the phone do not have VLAN connectivity
- B. The phone and a workstation that is connected to the phone send and receive data in VLAN 50.
- C. The phone sends and receives data in VLAN 50, but a workstation connected to the phone has no VLAN connectivity
- D. The phone sends and receives data in VLAN 50, but a workstation connected to the phone sends and receives data in VLAN 1

**Answer:** D

#### NEW QUESTION 77

- (Topic 2)

An engineer must configure an OSPF neighbor relationship between router R1 and R3. The authentication configuration has been configured and the connecting interfaces are in the same 192.168.1.0/30 subnet. What are the next two steps to complete the configuration? (Choose two.)

- A. configure the hello and dead timers to match on both sides
- B. configure the same process ID for the router OSPF process
- C. configure the same router ID on both routing processes
- D. Configure the interfaces as OSPF active on both sides.
- E. configure both interfaces with the same area ID

**Answer:** AE

#### NEW QUESTION 78

- (Topic 2)

Refer to the exhibit.

```
Router1#show ip route
Gateway of last resort is not set
  209.165.200.0/27 is subnetted, 1 subnets
B       209.165.200.224 [20/0] via 10.10.12.2, 00:09:57
  10.0.0.0/8 is variably subnetted, 4 subnets, 3 masks
C       10.10.10.0/28 is directly connected, GigabitEthernet0/0
C       10.10.11.0/30 is directly connected, FastEthernet2/0
O       10.10.13.0/24 [110/2] via 10.10.10.1, 00:08:34, GigabitEthernet0/0
C       10.10.12.0/30 is directly connected, GigabitEthernet0/1
```

Which action is taken by the router when a packet is sourced from 10.10.10.2 and destined for 10.10.10.16?

- A. It uses a route that is similar to the destination address
- B. It discards the packets.
- C. It floods packets to all learned next hops.
- D. It Queues the packets waiting for the route to be learned.

**Answer:** A

#### NEW QUESTION 83

- (Topic 2)

When a WLAN with WPA2 PSK is configured in the Wireless LAN Controller GUI which format is supported?

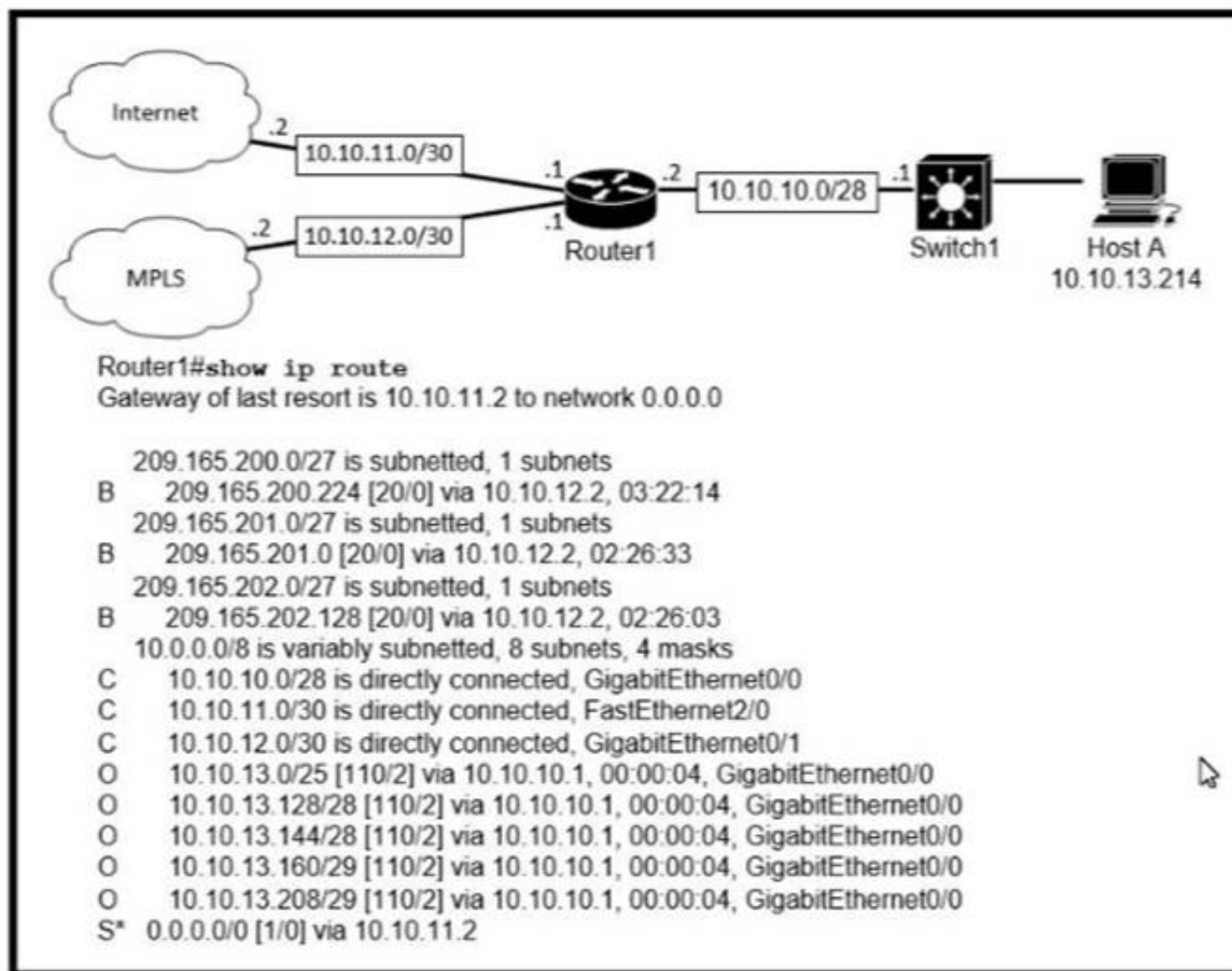
- A. Unicode
- B. base64
- C. decimal
- D. ASCII

**Answer:** D

#### NEW QUESTION 88

- (Topic 2)

Refer to the exhibit.



Which prefix does Router 1 use for traffic to Host A?

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

**Answer:** D

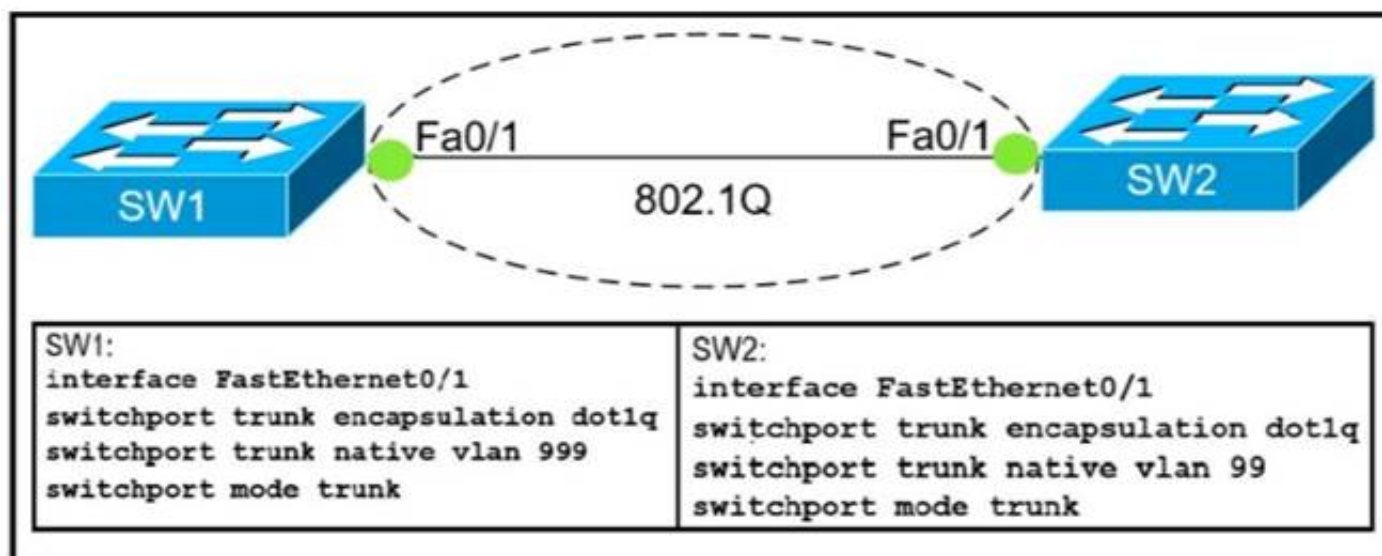
**Explanation:**

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

**NEW QUESTION 92**

- (Topic 2)

Refer to Exhibit.



Which action do the switches take on the trunk link?

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

**Answer:** B

**Explanation:**

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

**NEW QUESTION 96**



- (Topic 2)  
Refer to the exhibit.

```
Switch1#show etherchannel summary
Flags:  D - down          P - in port-channel
        I - stand-alone  s - suspended
        H - Hot-standby (LACP only)
        R - Layer3       S - Layer2
        U - in use       f - failed to allocate aggregator
        u - unsuitable for bundling
        w - waiting to be aggregated
        d - default port

Number of channel-groups in use: 1
Number of aggregators:           1
Group  Port-channel  Protocol    Ports
-----+-----+-----+-----
1      Po1 (SD)          LACP        Fa0/2 (I) Fa0/1 (I)

Switch1#show run
Building configuration...
interface Port-channel1
!
interface FastEthernet0/1
channel-group 1 mode passive
!
interface FastEthernet0/2
channel-group 1 mode passive

Switch2#show run
Building configuration...
interface Port-channel1
!
interface FastEthernet0/1
channel-group 1 mode passive
!
interface FastEthernet0/2
channel-group 1 mode passive
```

Which change to the configuration on Switch?  
allows the two switches to establish an EtherChannel?

- A. Change the protocol to EtherChannel mode on.
- B. Change the LACP mode to active
- C. Change the LACP mode to desirable
- D. Change the protocol to PAgP and use auto mode

**Answer: B**

#### NEW QUESTION 97

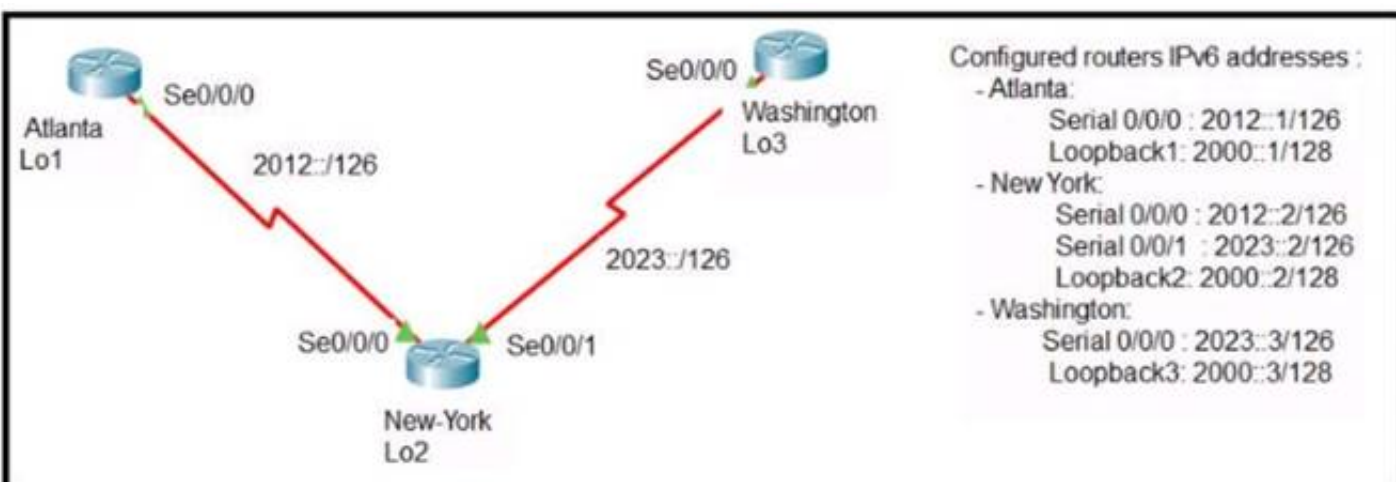
- (Topic 2)  
An engineer must establish a trunk link between two switches. The neighboring switch is set to trunk or desirable mode. What action should be taken?

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

**Answer: C**

#### NEW QUESTION 98

- (Topic 2)  
Refer to the exhibit.



The New York router is configured with static routes pointing to the Atlanta and Washington sites. Which two tasks must be performed so that the Serial0/0/0 interfaces on the Atlanta and Washington routers can reach one another?  
(Choose two.)

- A. Configure the ipv6 route 2012::/126 2023::1 command on the Washington router.
- B. Configure the ipv6 route 2023::/126 2012::1 command on the Atlanta router.
- C. Configure the ipv6 route 2012::/126 s0/0/0 command on the Atlanta router.
- D. Configure the ipv6 route 2023::/126 2012::2 command on the Atlanta router.
- E. Configure the ipv6 route 2012::/126 2023::2 command on the Washington router.

**Answer: DE**

**Explanation:**

The short syntax of static IPv6 route is:ipv6 route <destination-IPv6-address>  
{next-hop-IPv6-address | exit-interface}

#### 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
1 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. 192.168.16.0/26
- 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 105

- (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 109

- (Topic 2)

Refer to the exhibit.

```
R2#show ip route
```

```
C    192.168.1.0/26 is directly connected, FastEthernet0/1
```

Which two prefixes are included in this routing table entry? (Choose two.)

- A. 192.168.1.17
- B. 192.168.1.61
- C. 192.168.1.64
- D. 192.168.1.127
- E. 192.168.1.254

**Answer:** BC

#### NEW QUESTION 111

- (Topic 2)

R1 has learned route 192.168.12.0/24 via IS-IS, OSPF, RIP, and Internal EIGRP Under normal operating conditions, which routing protocol is installed in the routing table?

- A. IS-IS
- B. RIP
- C. Internal EIGRP
- D. OSPF

**Answer:** C

#### Explanation:

With the same route (prefix), the router will choose the routing protocol with lowest Administrative Distance (AD) to install into the routing table. The AD of Internal EIGRP (90) is lowest so it would be chosen. The table below lists the ADs of popular routing protocols.

Route Source	Administrative Distance
Directly Connected	0
Static	1
EIGRP	90
EIGRP Summary route	5
OSPF	110
RIP	120

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Note: The AD of IS-IS is 115. The "EIGRP" in the table above is "Internal EIGRP". The AD of "External EIGRP" is 170. An EIGRP external route is a route that was redistributed into EIGRP.

### NEW QUESTION 113

- (Topic 2)

What are two benefits of network automation? (Choose two)

- A. reduced operational costs
- B. reduced hardware footprint
- C. faster changes with more reliable results
- D. fewer network failures
- E. increased network security

**Answer:** AC

### NEW QUESTION 115

- (Topic 2)

Refer to the exhibit.

```
ip arp inspection vlan 5-10
interface fastethernet 0/1
switchport mode access
switchport access vlan 5
```

What is the effect of this configuration?

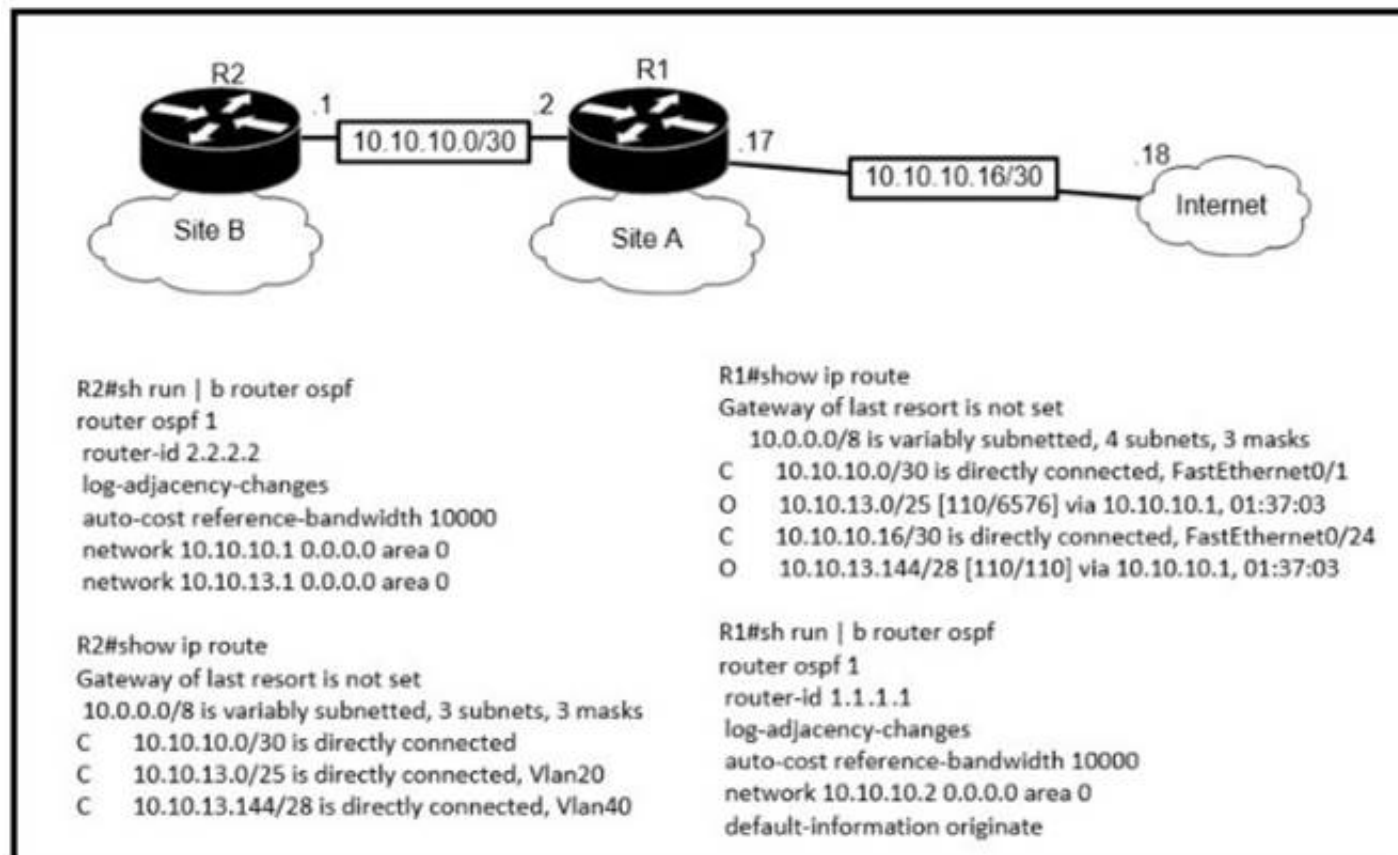
- A. All ARP packets are dropped by the switch
- B. Egress traffic is passed only if the destination is a DHCP server.
- C. All ingress and egress traffic is dropped because the interface is untrusted
- D. The switch discard all ingress ARP traffic with invalid MAC-to-IP address bindings.

**Answer:** D

### NEW QUESTION 117

- (Topic 2)

Refer to the exhibit.





The default-information originate command is configured under the R1 OSPF configuration After testing workstations on VLAN 20 at Site B cannot reach a DNS server on the Internet Which action corrects the configuration issue?

- A. Add the default-information originate command on R2
- B. Configure the ip route 0.0.0.0 0.0.0.0 10.10.10.18 command on R1
- C. Configure the ip route 0.0.0.0 0.0.0.0 10.10.10.2 command on R2
- D. Add the always keyword to the default-information originate command on R1

**Answer:** B

#### NEW QUESTION 122

- (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 126

- (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 130

- (Topic 2)

Refer to the exhibit.

```
R1#config t
R1(config)# interface gil/1
R1(config-if)# ip address 192.168.0.1 255.255.255.0

R1(config)# router bgp 65000
R1(config-router)# neighbor 192.168.0.2 remote-as 65001
R1(config-router)# network 10.1.1.0 mask 255.255.255.0

R1(config)# router ospf 1
R1(config)# router-id 1.1.1.1
R1(config)# network 192.168.0.1 0.0.0.0 area 0
R1(config)# network 10.1.1.0 0.0.0.255 area 0

R1(config)# router eigrp 1
R1(config)# eigrp router-id 1.1.1.1
R1(config)# network 10.1.1.0 0.0.0.255
R1(config)# network 192.168.0.1 0.0.0.0

R2#config t
R2(config)# interface gil/1
R2(config-if)# ip address 192.168.0.2 255.255.255.0

R2#config t
R2(config)# router bgp 65001
R2(config-router)# neighbor 192.168.0.1 remote-as 65000

R2(config)# router ospf 1
R2(config)# router-id 2.2.2.2
R2(config)# network 192.168.1.2 0.0.0.0 area 0

R2(config)# router eigrp 1
R2(config)# eigrp router-id 1.1.1.1
R2(config)# network 192.168.0.1 0.0.0.0

R2(config)# ip route 10.1.1.0 255.255.255.0 192.168.0.1
```

Router R2 is configured with multiple routes to reach network 10.1.1.0/24 from router R1. What protocol is chosen by router R2 to reach the destination network 10.1.1.0/24?



- A. eBGP
- B. static
- C. OSPF
- D. EIGRP

**Answer:** B

#### NEW QUESTION 135

- (Topic 2)

What are two reasons that cause late collisions to increment on an Ethernet interface? (Choose two)

- A. when the sending device waits 15 seconds before sending the frame again
- B. when the cable length limits are exceeded
- C. when one side of the connection is configured for half-duplex
- D. when Carrier Sense Multiple Access/Collision Detection is used
- E. when a collision occurs after the 32nd byte of a frame has been transmitted

**Answer:** BC

#### Explanation:

The usual possible causes are full-duplex/half-duplex mismatch, exceeded Ethernet cable length limits, or defective hardware such as incorrect cabling, non-compliant number of hubs in the network, or a bad NIC.

#### NEW QUESTION 139

- (Topic 2)

A network administrator must to configure SSH for remote access to router R1 The requirement is to use a public and private key pair to encrypt management traffic to and from the connecting client.

Which configuration, when applied, meets the requirements?

```
R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate ec keysize 2048
```

```
R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate rsa modulus 1024
```

```
R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate ec keysize 1024
```

```
R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key encrypt rsa name myKey
```

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

**Answer:** C

#### NEW QUESTION 142

- (Topic 2)

What Is a syslog facility?

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

**Answer:** C

#### Explanation:

Cisco Community – Difference between logging level and logging facility Post by ahmednaas

“The logging facility command basically tells the syslog server where to put the log message. You configure the syslog server with something like:

local7.debug /var/adm/local7.log

Now, when you use the “logging facility local7” on your device, all messages with severity “debug” or greater should be saved in /var/adm/local7.log.”

Example: on a switch, any process (CDP, SNMP, etc.) can generate a log message. On a syslog server, the logging facility is the place where all received messages with the same priority level are stored.

#### NEW QUESTION 147

- (Topic 2)

A Cisco IP phone receive untagged data traffic from an attached PC. Which action is taken by the phone?

- A. It allows the traffic to pass through unchanged
- B. It drops the traffic
- C. It tags the traffic with the default VLAN
- D. It tags the traffic with the native VLAN

**Answer:** A

#### Explanation:

[https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960x/software/15-0\\_2\\_EX/vlan/configuration\\_guide/b\\_vlan\\_152ex\\_2960-x\\_cg/b\\_vlan\\_152ex\\_2960-x\\_cg\\_chapter\\_0110.pdf](https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960x/software/15-0_2_EX/vlan/configuration_guide/b_vlan_152ex_2960-x_cg/b_vlan_152ex_2960-x_cg_chapter_0110.pdf)

Untagged traffic from the device attached to the Cisco IP Phone passes through the phone unchanged, regardless of the trust state of the access port on the phone.

#### NEW QUESTION 149

- (Topic 2)

which IPv6 address block forwards packets to a multicast address rather than a unicast address?

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

**Answer:** D

#### NEW QUESTION 153

- (Topic 2)

A network engineer must create a diagram of a multivendor network. Which command must be configured on the Cisco devices so that the topology of the network can be mapped?

- A. Device(Config)#lldp run
- B. Device(Config)#cdp run
- C. Device(Config-if)#cdp enable
- D. Device(Config)#flow-sampler-map topology

**Answer:** A

#### NEW QUESTION 158

- (Topic 2)

When a client and server are not on the same physical network, which device is used to forward requests and replies between client and server for DHCP?

- A. DHCP relay agent
- B. DHCP server
- C. DHCPDISCOVER
- D. DHCPOFFER

**Answer:** A

#### NEW QUESTION 163

- (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 164

- (Topic 2)

An engineer configures interface Gi1/0 on the company PE router to connect to an ISP Neighbor discovery is disabled

```
interface Gi1/0
description HQ_DC3978-87297
duplex full
speed 100
negotiation auto
lldp transmit
lldp receive
```

Which action is necessary to complete the configuration if the ISP uses third-party network devices?

- A. Enable LLDP globally
- B. Disable autonegotiation
- C. Disable Cisco Discovery Protocol on the interface
- D. Enable LLDP-MED on the ISP device

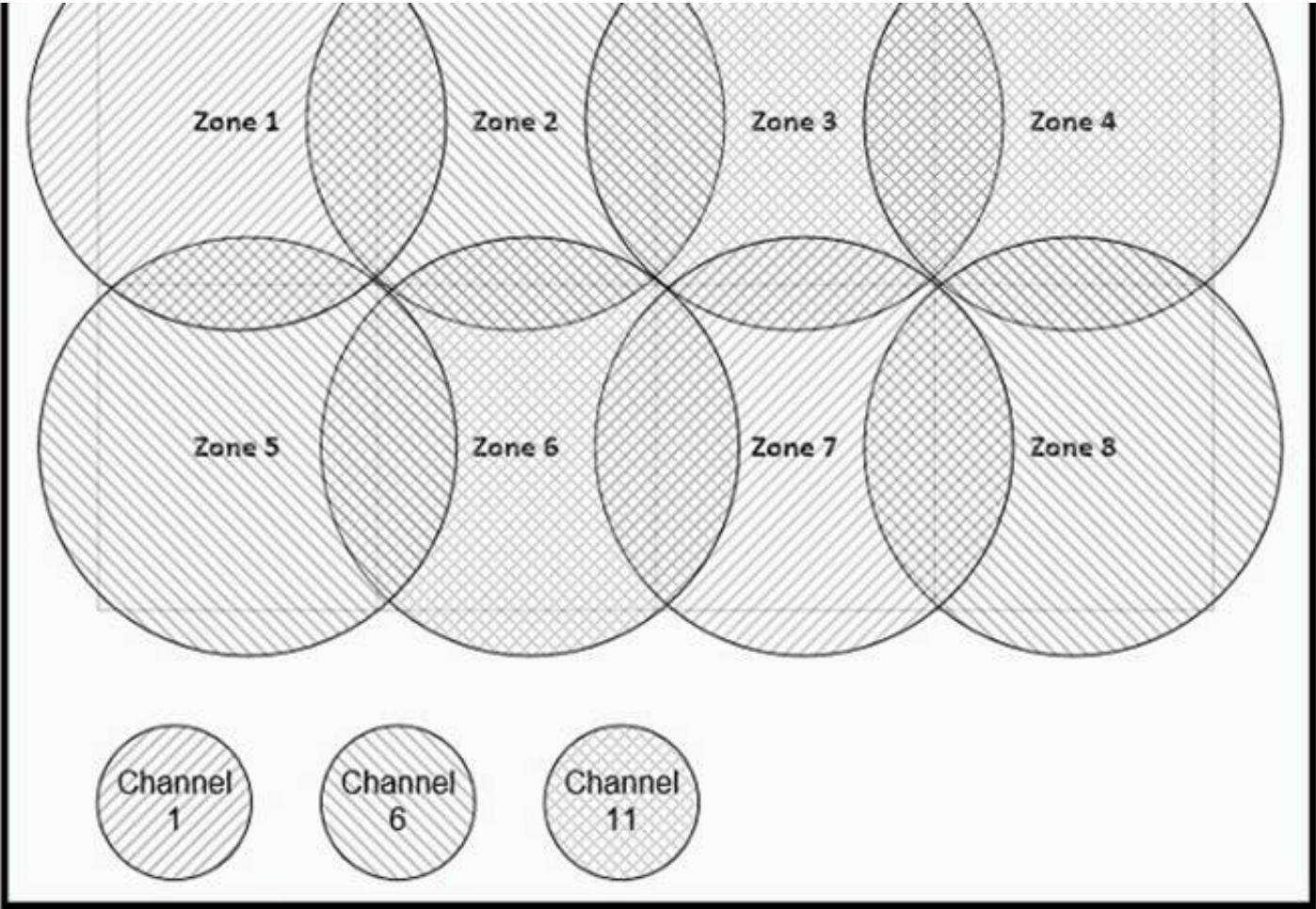
**Answer:** D

#### NEW QUESTION 167

- (Topic 2)

Refer to the exhibit.





Between which zones do wireless users expect to experience intermittent connectivity?

- A. between zones 1 and 2
- B. between zones 2 and 5
- C. between zones 3 and 4
- D. between zones 3 and 6

Answer: D

NEW QUESTION 170

- (Topic 2)

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 were used to create port channel 10? (Choose two )

- ☐ int range g0/0-1  
channel-group 10 mode active
- ☐ int range g0/0-1  
channel-group 10 mode desirable
- ☐ int range g0/0-1  
channel-group 10 mode passive
- ☐ int range g0/0-1  
channel-group 10 mode auto
- ☐ int range g0/0-1  
channel-group 10 mode on

- A. Option A
- B. Option B
- C. Option C
- D. Option D
- E. Option E



**Answer:** AC

#### NEW QUESTION 171

- (Topic 2)

What Is the path for traffic sent from one user workstation to another workstation on a separate switch In a lthree-lter architecture model?

- A. access - core - distribution - access
- B. access - distribution - distribution - access
- C. access - core - access
- D. access -distribution - core - distribution - access

**Answer:** D

#### NEW QUESTION 173

- (Topic 2)

Refer to the exhibit.

```
Gateway of last resort is 10.12.0.1 to network 0.0.0.0

O*E2   0.0.0.0/0 [110/1] via 10.12.0.1, 00:00:01, GigabitEthernet0/0
        10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.0.0.0/24 is directly connected, GigabitEthernet0/0
L       10.0.0.2/32 is directly connected, GigabitEthernet0/0
C       10.13.0.0/24 is directly connected, GigabitEthernet0/1
L       10.13.0.2/32 is directly connected, GigabitEthernet0/1
```

If configuring a static default route on the router with the ip route 0.0.0.0 0.0.0.0 10.13.0.1 120 command how does the router respond?

- A. It ignores the new static route until the existing OSPF default route is removed
- B. It immediately replaces the existing OSPF route in the routing table with the newly configured static route
- C. It starts load-balancing traffic between the two default routes
- D. It starts sending traffic without a specific matching entry in the routing table to GigabitEthernet0/1

**Answer:** A

#### Explanation:

Our new static default route has the Administrative Distance (AD) of 120, which is bigger than the AD of OSPF External route (O\*E2) so it will not be pushed into the routing table until the current OSPF External route is removed. For your information, if you don't type the AD of 120 (using the command "ip route 0.0.0.0 0.0.0.0 10.13.0.1") then the new static default route would replace the OSPF default route as the default AD of static route is 1. You will see such line in the routing table: S\* 0.0.0.0/0 [1/0] via 10.13.0.1

#### NEW QUESTION 175

- (Topic 2)

A device detects two stations transmitting frames at the same time. This condition occurs after the first 64 bytes of the frame is received interface counter increments?

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

**Answer:** D

#### Explanation:

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

#### NEW QUESTION 176

- (Topic 2)

Refer to the exhibit.

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

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

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

**Answer:** D

#### NEW QUESTION 178

- (Topic 2)

What is the function of a server?

- A. It transmits packets between hosts in the same broadcast domain.
- B. It provides shared applications to end users.
- C. It routes traffic between Layer 3 devices.
- D. It Creates security zones between trusted and untrusted networks

**Answer: B**

#### NEW QUESTION 181

- (Topic 2)

Which technology can prevent client devices from arbitrarily connecting to the network without state remediation?

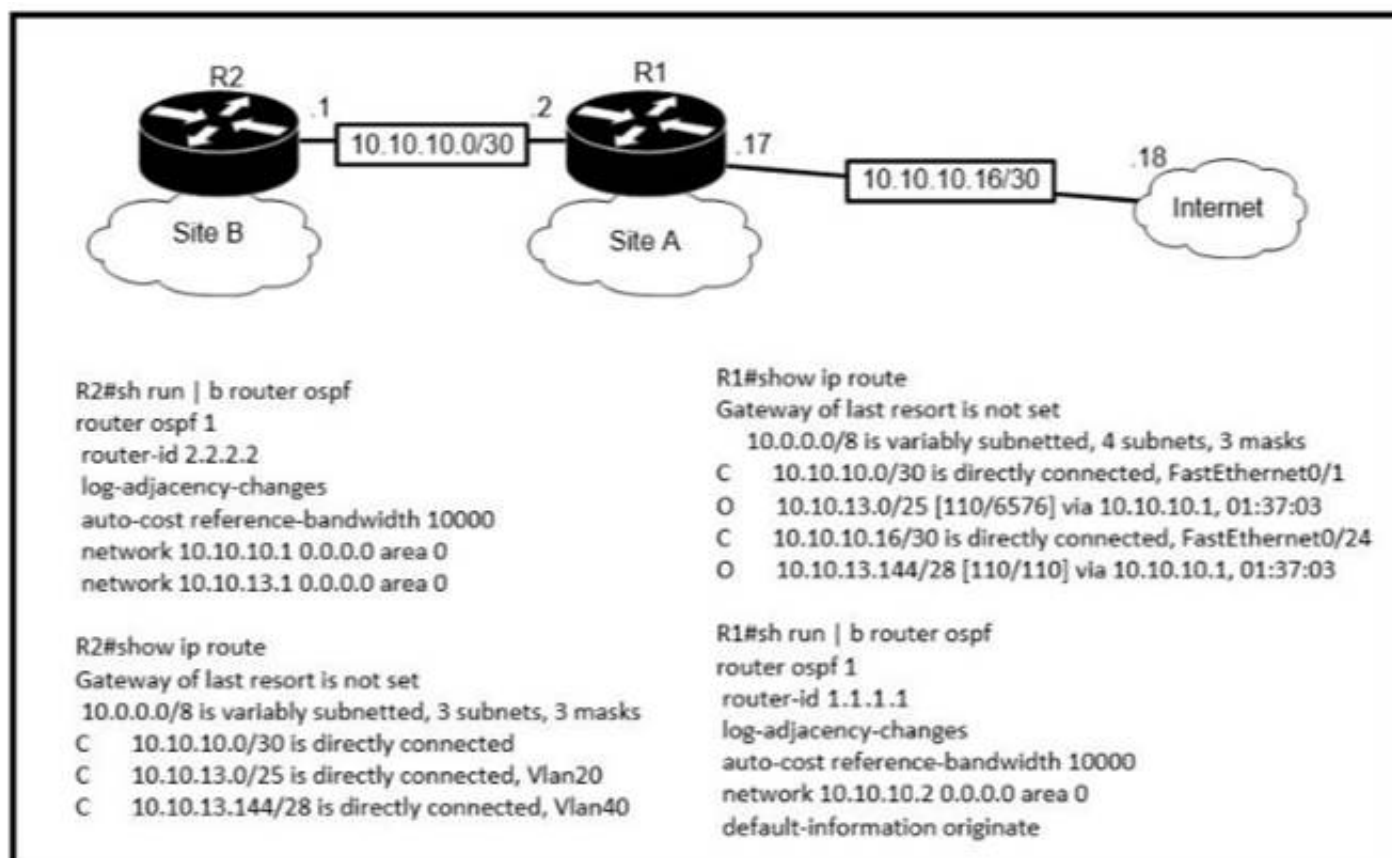
- A. 802.1x
- B. IP Source Guard
- C. MAC Authentication Bypass
- D. 802.11n

**Answer: A**

#### NEW QUESTION 184

- (Topic 2)

Refer to the exhibit.



An engineer is bringing up a new circuit to the MPLS provider on the Gi0/1 interface of Router1. The new circuit uses eBGP and teams the route to VLAN25 from the BGP path. What is the expected behavior for the traffic flow for route 10.10.13.0/25?

- A. Traffic to 10.10.13.0/25 is load balanced out of multiple interfaces
- B. Route 10.10.13.0/25 is updated in the routing table as being learned from interface Gi0/1.
- C. Traffic to 10.10.13.0/25 is asymmetrical
- D. Route 10.10.13.0/25 learned via the Gi0/0 interface remains in the routing table

**Answer: D**

#### NEW QUESTION 189

- (Topic 2)

How do traditional campus device management and Cisco DNA Center device management differ in regards to deployment?

- A. Cisco DNA Center device management can deploy a network more quickly than traditional campus device management
- B. Traditional campus device management allows a network to scale more quickly than with Cisco DNA Center device management
- C. Cisco DNA Center device management can be implemented at a lower cost than most traditional campus device management options
- D. Traditional campus device management schemes can typically deploy patches and updates more quickly than Cisco DNA Center device management

**Answer: A**

#### NEW QUESTION 191

- (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 193**

- (Topic 1)

Refer to the exhibit.

```
import ncclient

with ncclient.manager.connect(host='192.168.1.1', port=830, username='root',
                             password='teset123!', allow_agent=False) as m:
    print(m.get_config('running').data_xml)
```

After running the code in the exhibit, which step reduces the amount of data that the NETCONF server returns to the NETCONF client, to only the interface's configuration?

- A. Use the lxml library to parse the data returned by the NETCONF server for the interface's configuration.
- B. Create an XML filter as a string and pass it to get\_config() method as an argument.
- C. Create a JSON filter as a string and pass it to the get\_config() method as an argument.
- D. Use the JSON library to parse the data returned by the NETCONF server for the interface's configuration.

**Answer:** D

**NEW QUESTION 194**

- (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 195**

- (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 199**

- (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 204**

- (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 207**

- (Topic 1)

Which WAN access technology is preferred for a small office / home office architecture?

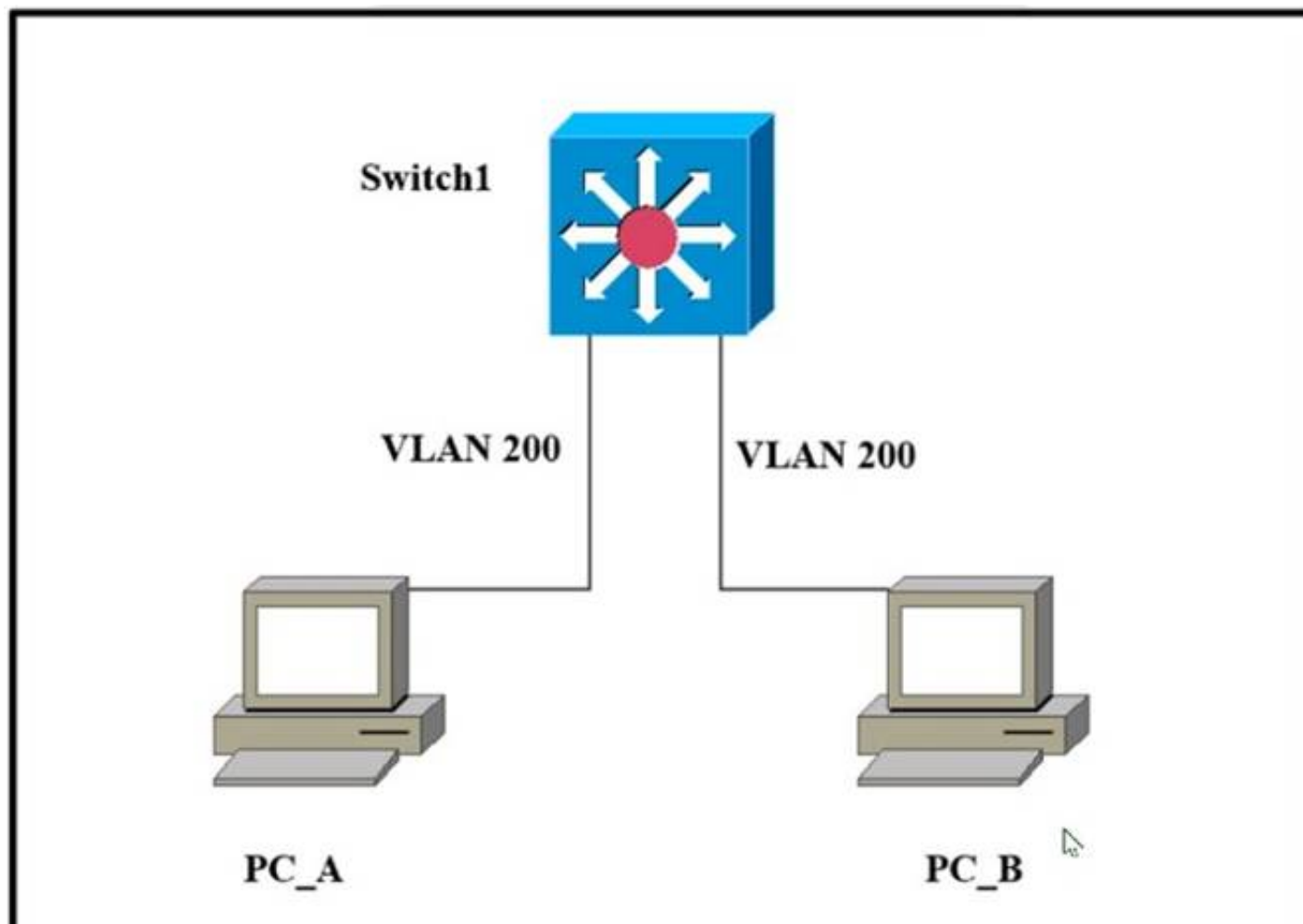
- A. broadband cable access
- B. frame-relay packet switching
- C. dedicated point-to-point leased line
- D. Integrated Services Digital Network switching.

**Answer:** A

#### NEW QUESTION 209

- (Topic 1)

Refer to the exhibit.



Which outcome is expected when PC\_A sends data to PC\_B?

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

**Answer:** C

#### NEW QUESTION 213

- (Topic 1)

Which state does the switch port move to when PortFast is enabled?

- A. forwarding
- B. listening
- C. blocking
- D. learning

**Answer:** A

#### NEW QUESTION 215

- (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 219

- (Topic 1)

In QoS, which prioritization method is appropriate for interactive voice and video?

- A. expedited forwarding
- B. traffic policing
- C. round-robin scheduling



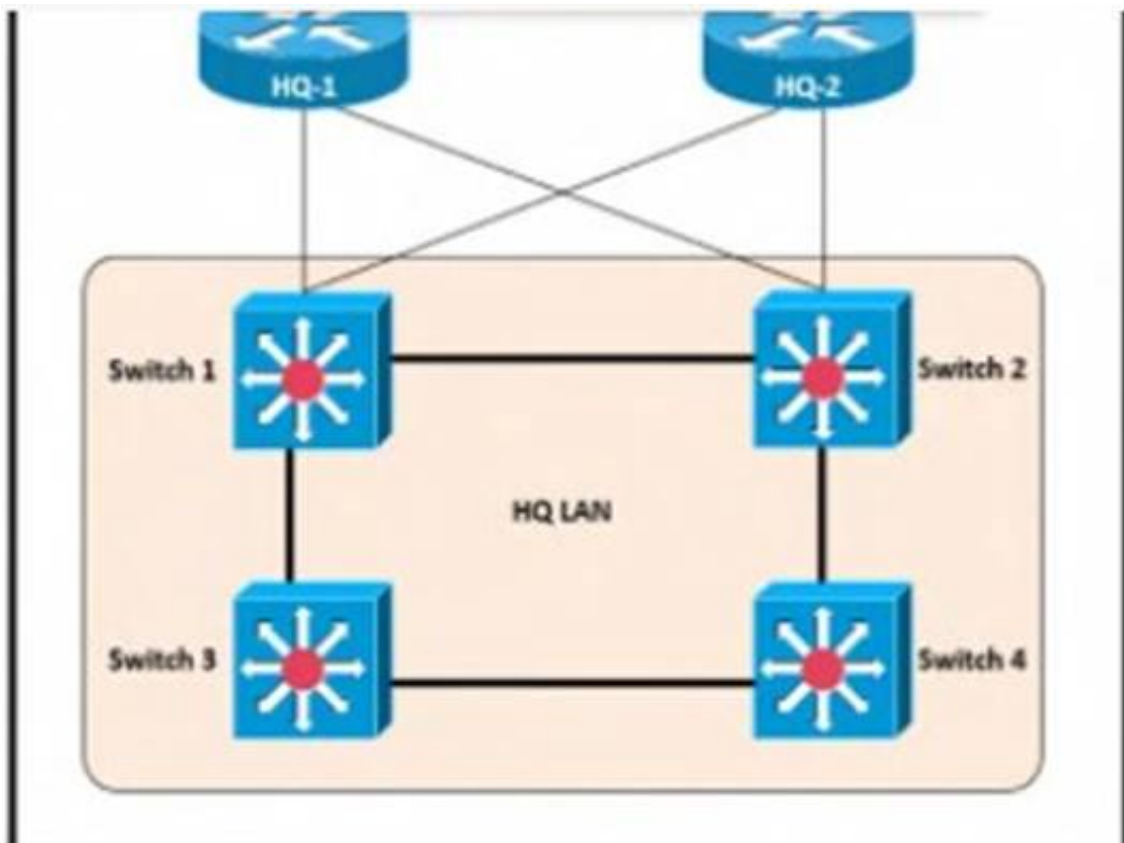
D. low-latency queuing

**Answer:** D

#### NEW QUESTION 221

- (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 available, the MAC address is used to determine the root bridge. Because S3 has the lowest MAC address, S3 becomes the root bridge.

#### NEW QUESTION 224

- (Topic 1)

What occurs when overlapping Wi-Fi channels are implemented?

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

**Answer:** C

#### NEW QUESTION 225

- (Topic 1)

What are two functions of a Layer 2 switch? (Choose two)

- A. acts as a central point for association and authentication servers
- B. selects the best route between networks on a WAN
- C. moves packets within a VLAN
- D. moves packets between different VLANs
- E. makes forwarding decisions based on the MAC address of a packet

**Answer:** AE

#### NEW QUESTION 226

- (Topic 1)

Which command on a port enters the forwarding state immediately when a PC is connected to it?

- A. switch(config)#spanning-tree portfast default
- B. switch(config)#spanning-tree portfast bpduguard default
- C. switch(config-if)#spanning-tree portfast trunk
- D. switch(config-if)#no spanning-tree portfast

**Answer: C**

#### NEW QUESTION 227

- (Topic 1)

What is a characteristic of cloud-based network topology?

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

**Answer: A**

#### NEW QUESTION 228

- (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 231

- (Topic 1)

What is an advantage of Cisco DNA Center versus traditional campus device management?

- A. It supports numerous extensibility options including cross-domain adapters and third- party SDKs.
- B. It supports high availability for management functions when operating in cluster mode.
- C. It enables easy autodiscovery of network elements in a brownfield deployment.
- D. It is designed primarily to provide network assurance.

**Answer: A**

#### NEW QUESTION 236

- (Topic 1)

What occurs to frames during the process of frame flooding?

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

**Answer: A**

#### NEW QUESTION 238

- (Topic 1)

Refer to the exhibit.

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

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

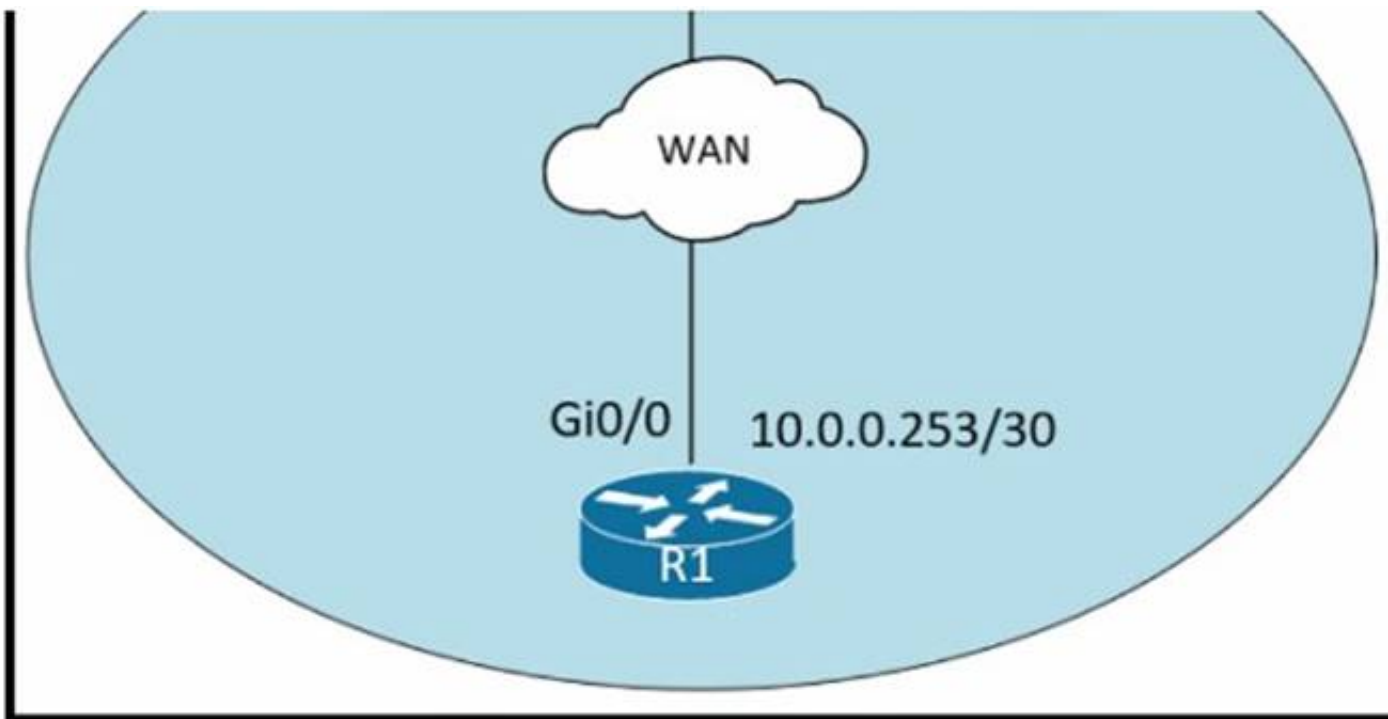
- A. DHCP client
- B. access point
- C. router
- D. PC

**Answer: C**

#### NEW QUESTION 242

- (Topic 1)

Refer to the exhibit.



An administrator must turn off the Cisco Discovery Protocol on the port configured with address last usable address in the 10.0.0.0/30 subnet. Which command set meets the requirement?

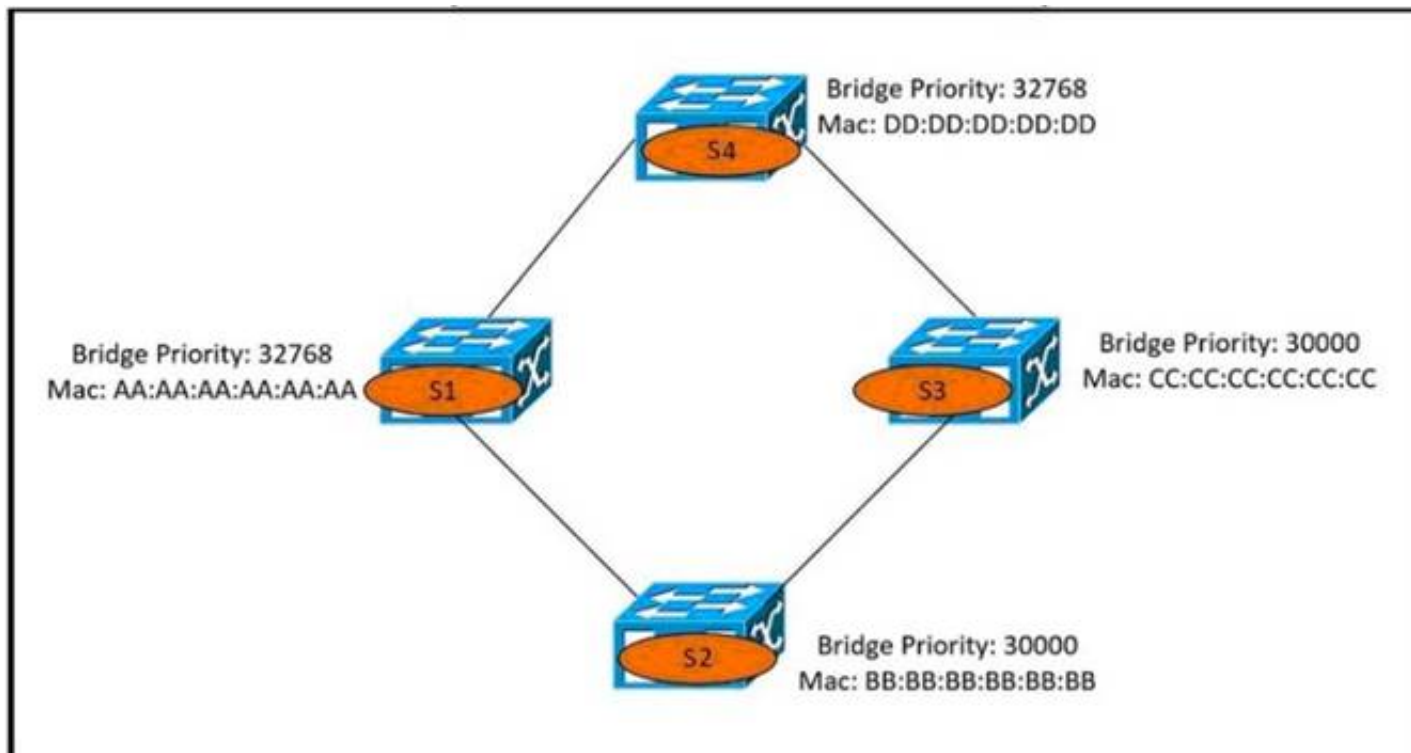
- A. interface gi0/1 no cdp enable
- B. interface gi0/1 clear cdp table
- C. interface gi0/0 no cdp advertise-v2
- D. interface gi0/0 no cdp run

**Answer: D**

#### NEW QUESTION 243

- (Topic 1)

Refer to the exhibit.



Which switch becomes the root bridge?

- A. S1
- B. S2
- C. S3
- D. S4

**Answer: B**

#### NEW QUESTION 245

- (Topic 1)

Which action does the router take as it forwards a packet through the network?

- A. 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
- B. The router encapsulates the original packet and then includes a tag that identifies the source router MAC address and transmits it transparently to the destination
- C. The router encapsulates the source and destination IP addresses with the sending router IP address as the source and the neighbor IP address as the destination
- D. The router replaces the source and destination labels with the sending router interface label as a source and the next hop router label as a destination

**Answer: A**

#### NEW QUESTION 248

- (Topic 1)

An engineer needs to add an old switch back into a network. To prevent the switch from corrupting the VLAN database which action must be taken?

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

**Answer:** A

#### NEW QUESTION 252

- (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 254

- (Topic 1)

What is a difference between local AP mode and FlexConnect 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 257

- (Topic 1)

In which situation is private IPv4 addressing appropriate for a new subnet on the network of an organization?

- A. There is limited unique address space, and traffic on the new subnet will stay local within the organization.
- B. The network has multiple endpoint listeners, and it is desired to limit the number of broadcasts.
- C. Traffic on the subnet must traverse a site-to-site VPN to an outside organization.
- D. The ISP requires the new subnet to be advertised to the internet for web services.

**Answer:** A

#### NEW QUESTION 259

- (Topic 1)

What does a switch use to build its MAC address table?

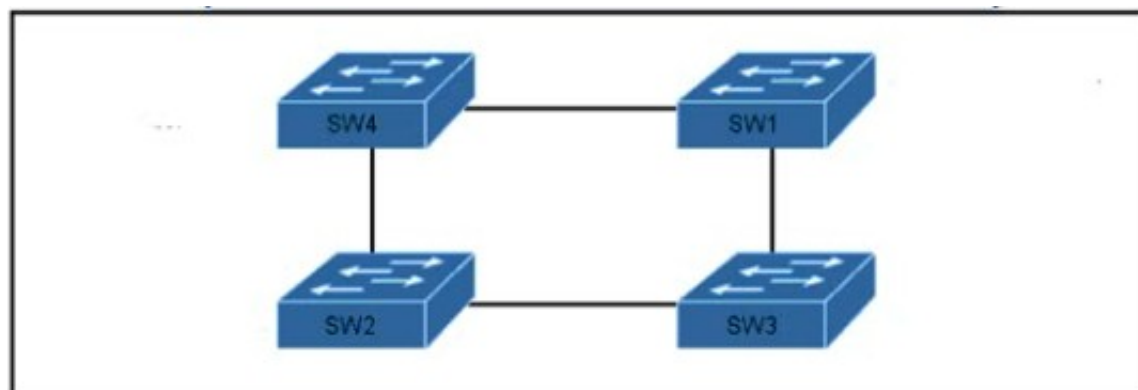
- A. VTP
- B. DTP
- C. egress traffic
- D. ingress traffic

**Answer:** D

#### NEW QUESTION 261

- (Topic 1)

Refer to the exhibit.



Which switch in this configuration will be elected as the root bridge?

SW1: 0C:E0:38:00:94:04  
 SW2: 0C:0E:15:22:05:97  
 SW3: 0C:0E:15:1A:3C:9D  
 SW4: 0C:E0:18:A1:B3:19



- A. SW1
- B. SW2
- C. SW3
- D. SW4

Answer: C

NEW QUESTION 265

- (Topic 1)  
An engineer must configure the IPv6 address 2001:0db8:0000:0000:0700:0003:400F:572B on the serial0/0 interface of the HQ router and wants to compress it for easier configuration. Which command must be issued on the router interface?

- A. ipv6 address 2001:db8::700:3:400F:572B
- B. ipv6 address 2001:db8:0::700:3:4F:572B
- C. ipv6 address 2001:Odb8::7:3:4F:572B
- D. ipv6 address 2001::db8:0000::700:3:400F:572B

Answer: A

NEW QUESTION 267

- (Topic 1)  
Which global command encrypt all passwords in the running configuration?

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

Answer: B

NEW QUESTION 269

DRAG DROP - (Topic 1)  
Drag and drop the network protocols from the left onto the correct transport services on the right.

SMTP

SNMP

TFTP

VoIP

SSH

FTP

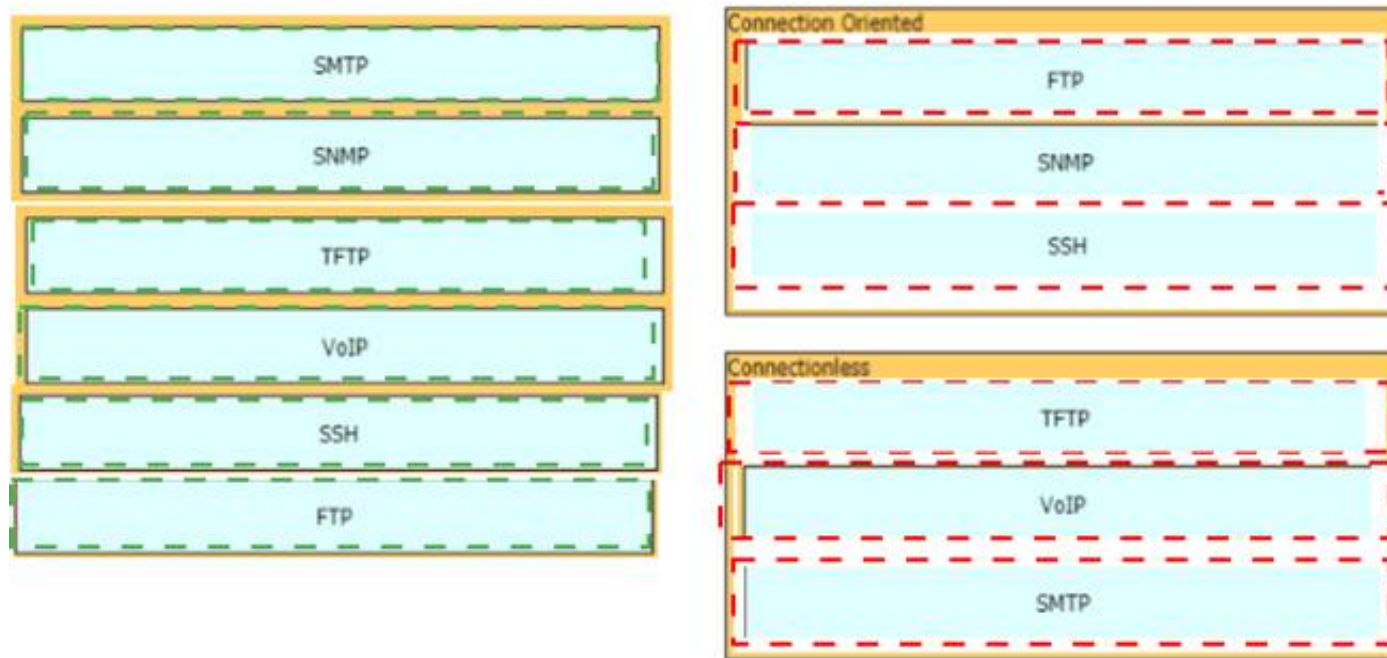
Connection Oriented

Connectionless

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



#### NEW QUESTION 273

- (Topic 1)

Which command enables a router to become a DHCP client?

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

**Answer:** A

#### Explanation:

Reference: [https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr\\_dhcp/configuration/12-4/dhcp-12-4-book/config-dhcp-client.html](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_dhcp/configuration/12-4/dhcp-12-4-book/config-dhcp-client.html)

If we want to get an IP address from the DHCP server on a Cisco device, we can use the command “ip address dhcp”.

Note: The command “ip helper-address” enables a router to become a DHCP Relay Agent.

#### NEW QUESTION 277

- (Topic 1)

In which two ways does a password manager reduce the chance of a hacker stealing a users password? (Choose two.)

- A. It automatically provides a second authentication factor that is unknown to the original user.
- B. It uses an internal firewall to protect the password repository from unauthorized access.
- C. It protects against keystroke logging on a compromised device or web site.
- D. It stores the password repository on the local workstation with built-in antivirus and anti- malware functionality
- E. It encourages users to create stronger passwords.

**Answer:** CE

#### NEW QUESTION 279

- (Topic 1)

Which API is used in controller-based architectures to interact with edge devices?

- A. overlay
- B. northbound
- C. underlay
- D. southbound

**Answer:** D

#### NEW QUESTION 281

- (Topic 1)

How do servers connect to the network in a virtual environment?

- A. wireless to an access point that is physically connected to the network
- B. a cable connected to a physical switch on the network
- C. a virtual switch that links to an access point that is physically connected to the network
- D. a software switch on a hypervisor that is physically connected to the network

**Answer:** D

#### NEW QUESTION 284

- (Topic 1)

Which attribute does a router use to select the best path when two or more different routes to the same destination exist from two different routing protocols.

- A. dual algorithm

- B. metric
- C. administrative distance
- D. hop count

**Answer:** C

**Explanation:**

Administrative distance is the feature used by routers to select the best path when there are two or more different routes to the same destination from different routing protocols. Administrative distance defines the reliability of a routing protocol.

**NEW QUESTION 288**

- (Topic 1)

Which function does the range of private IPv4 addresses perform?

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

**Answer:** A

**NEW QUESTION 291**

- (Topic 1)

Which technology is used to improve web traffic performance by proxy caching?

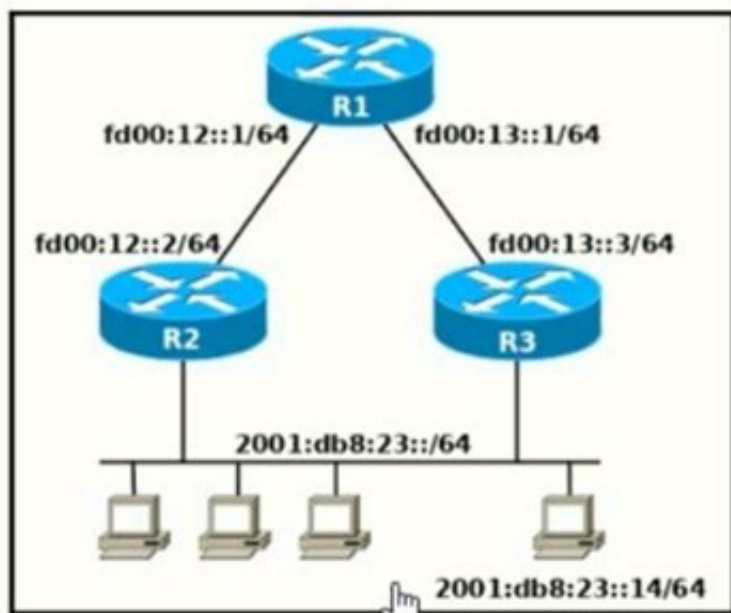
- A. WSA
- B. Firepower
- C. ASA
- D. FireSIGHT

**Answer:** A

**NEW QUESTION 294**

- (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:db8:23::/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 295**

- (Topic 1)

Where is the interface between the control plane and data plane within the software- defined architecture?

- A. control layer and the infrastructure layer
- B. application layer and the infrastructure layer
- C. control layer and the application layer
- D. application layer and the management layer

**Answer:** A

**NEW QUESTION 300**

- (Topic 1)  
When a site-to-site VPN is configured, which IPsec mode provides encapsulation and encryption of the entire original P packet?

- A. IPsec tunnel mode with AH
- B. IPsec transport mode with AH
- C. IPsec tunnel mode with ESP
- D. IPsec transport mode with ESP

Answer: C

**Explanation:**  
“Encapsulating Security Payload...Unlike Authentication Header (AH), ESP in transport mode does not provide integrity and authentication for the entire IP packet. However, in Tunnel Mode, where the entire original IP packet is encapsulated with a new packet header added, ESP protection is afforded to the whole inner IP packet (including the inner header) while the outer header (including any outer IPv4 options or IPv6 extension headers) remains unprotected.

NEW QUESTION 304

DRAG DROP - (Topic 1)  
Drag and drop the 802.11 wireless standards from the left onto the matching statements on the right

802.11a	Operates in the 2.4 GHz and 5 GHz bands.
802.11ac	Operates in the 2.4 GHz band only and supports a maximum data rate of 54 Mbps.
802.11b	Operates in the 5 GHz band only and supports a maximum data rate that can exceed 100 Mbps.
802.11g	Supports a maximum data rate of 11 Mbps.
802.11n	Operates in the 5 GHz band only and supports a maximum data rate of 54 Mbps.

- A. Mastered
- B. Not Mastered

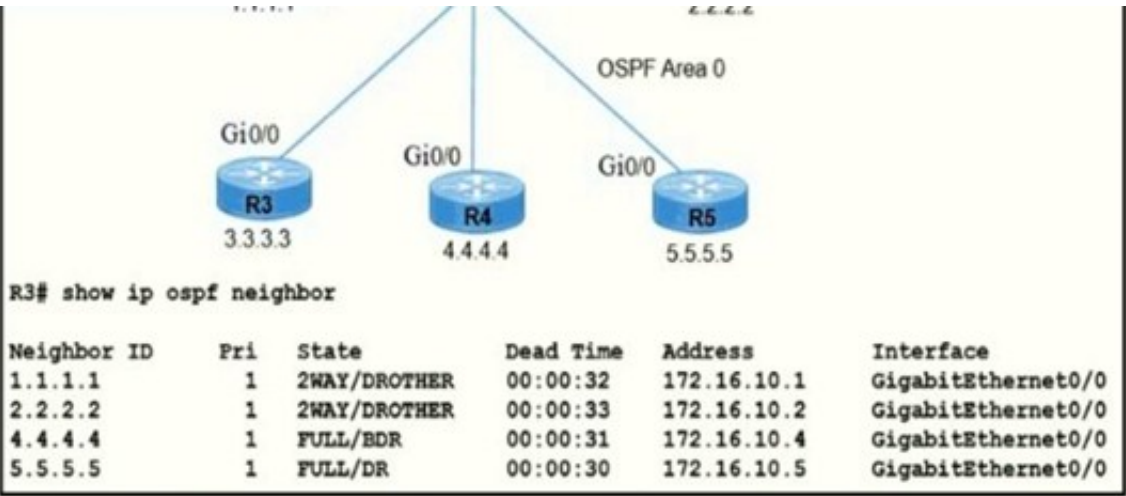
Answer: A

**Explanation:**

802.11a	802.11n
802.11ac	802.11g
802.11b	802.11ac
802.11g	802.11b
802.11n	802.11a

NEW QUESTION 309

- (Topic 1)  
Refer to the exhibit.





R5 is the current DR on the network, and R4 is the BDR. Their interfaces are flapping, so a network engineer wants the OSPF network to elect a different DR and BDR. Which set of configurations must the engineer implement?

A)

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

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

B)

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

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

C)

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

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

D)

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

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

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

**Answer:** D

#### NEW QUESTION 311

- (Topic 1)

An engineer must configure a /30 subnet between two routers. Which usable IP address and subnet mask combination meets this criteria?

```
interface e0/0
description to HQ-A371:19452
ip address 209.165.201.2 255.255.255.252
```

```
interface e0/0
description to HQ-A371:19452
ip address 10.2.1.3 255.255.255.252
```

```
interface e0/0
description to HQ-A371:19452
ip address 172.16.1.4 255.255.255.248
```

```
interface e0/0
description to HQ-A371:19452
ip address 192.168.1.1 255.255.255.248
```

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

**Answer:** A

#### NEW QUESTION 313

- (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 usefully 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 318**

- (Topic 1)

What are two functions of an SDN controller? (Choose two)

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

**Answer:** BD

**NEW QUESTION 320**

- (Topic 1)

A manager asks a network engineer to advise which cloud service models are used so employees do not have to waste their time installing, managing, and updating software which is only used occasionally Which cloud service model does the engineer recommend?

- A. infrastructure-as-a-service
- B. platform-as-a-service
- C. business process as service to support different types of service
- D. software-as-a-service

**Answer:** D

**NEW QUESTION 322**

- (Topic 1)

Refer to the exhibit.

```
R2#show ip nat translations
Pro Inside global      Inside local    Outside local   Outside global
tcp 172.23.104.3:43268  10.4.4.4:43268  172.23.103.10:23 172.23.103.10:23
tcp 172.23.104.4:45507  10.4.4.5:45507  172.23.103.10:80 172.23.103.10:80
```

An engineer configured NAT translations and has verified that the configuration is correct. Which IP address is the source IP?

- A. 10.4.4.4
- B. 10.4.4.5
- C. 172.23.103.10
- D. 172.23.104.4

**Answer:** D

**Explanation:**

NAT is used to send a packet to the outside network, using a public IP address to make it routable. The NAT logic is "inside-to-outside" FIRST and "outside-to-inside" THEN. This way, configuring NAT means "choosing a public IP address" for any outbound packet" IN THE FIRST PLACE, where "public IP address" translates to "inside global address". Among the given answers, the only inside global address is 172.123.104.4.

**NEW QUESTION 325**

- (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 328

- (Topic 1)

Which type of address is the public IP address of a NAT device?

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

**Answer: C**

#### Explanation:

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

#### NEW QUESTION 331

- (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 334

- (Topic 1)

What is a similarity between OM3 and OM4 fiber optic cable?

- A. Both have a 50 micron core diameter
- B. Both have a 9 micron core diameter
- C. Both have a 62.5 micron core diameter
- D. Both have a 100 micron core diameter

**Answer: A**

#### NEW QUESTION 338

- (Topic 1)

Router R1 must send all traffic without a matching routing-table entry to 192.168.1.1. Which configuration accomplishes this task?

- ☐ R1#Config t  
R1(config)#ip routing  
R1(config)#ip route default-route 192.168.1.1
- ☐ R1#Config t  
R1(config)#ip routing  
R1(config)#ip route 192.168.1.1 0.0.0.0 0.0.0.0
- ☐ R1#Config t  
R1(config)#ip routing  
R1(config)#ip route 0.0.0.0 0.0.0.0 192.168.1.1
- ☐ R1#Config t  
R1(config)#ip routing  
R1(config)#ip default-gateway 192.168.1.1

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

**Answer: C**

#### NEW QUESTION 342

- (Topic 1)

Which spanning-tree enhancement avoids the learning and listening states and immediately places ports in the forwarding state?

- A. BPDUfilter
- B. PortFast
- C. Backbonefast
- D. BPDUguard

**Answer:** B

#### Explanation:

PortFast

Spanning Tree Portfast causes layer 2 switch interfaces to enter forwarding state immediately, bypassing the listening and learning states. It should be used on ports connected directly to end hosts like servers or workstations. Note: If portfast isn't enabled, DHCP timeouts can occur while STP converges, causing more problems.

<https://skminhaj.wordpress.com/2015/03/04/spanning-tree-stp-rstp-mst-enhancements/>

#### NEW QUESTION 346

- (Topic 1)

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

- A. latency
- B. port security violation
- C. shutdown command issued on the port
- D. nothing plugged into the port

**Answer:** B

#### Explanation:

This mode is the default violation mode; when in this mode, the switch will automatically force the switchport into an error disabled (err-disable) state when a violation occurs. While in this state, the switchport forwards no traffic. The switchport can be brought out of this error disabled state by issuing the errdisable recovery cause CLI command or by disabling and reenabling the switchport.

#### NEW QUESTION 350

- (Topic 1)

What protocol allows an engineer to back up 20 network router configurations globally while using the copy function?

- A. SMTP
- B. SNMP
- C. TCP
- D. FTP

**Answer:** B

#### NEW QUESTION 354

- (Topic 1)

Which command entered on a switch configured with Rapid PVST\* listens and learns for a specific time period?

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

**Answer:** D

#### Explanation:

Forward time : Determines how long each of the listening and learning states last before the port begins forwarding.

Switch(config)# [ no ] spanning-tree vlan vlan\_ID forward-time forward\_time Configures the forward time of a VLAN. The forward\_time value can be from 4 to 30 seconds. <https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst4500/12-2/15-02SG/configuration/guide/config/spantree.html#56177>

#### NEW QUESTION 359

- (Topic 1)

Which technology is appropriate for communication between an SDN controller and applications running over the network?

- A. OpenFlow
- B. REST API
- C. NETCONF
- D. Southbound API

**Answer:** B

#### NEW QUESTION 364

- (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](https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Campus/campover.html#wp708_831)

**NEW QUESTION 368**

- (Topic 1)

Which technology allows for multiple operating systems to be run on a single host computer?

- A. virtual routing and forwarding
- B. network port ID visualization
- C. virtual device contexts
- D. server visualization

**Answer:** D

**NEW QUESTION 373**

- (Topic 1)

Refer to the exhibit.

```
interface GigabitEthernet0/1
ip address 192.168.1.2 255.255.255.0
ip access-group 2699 in
!
access-list 2699 deny icmp any 10.10.1.0 0.0.0.255 echo
access-list 2699 deny ip any 10.20.1.0 0.0.0.255
access-list 2699 permit ip any 10.10.1.0 0.0.0.255
access-list 2699 permit tcp any 10.20.1.0 0.0.0.127 eq 22
```

A network administrator must permit SSH access to remotely manage routers in a network. The operations team resides on the 10.20.1.0/25 network. Which command will accomplish this task?

- A. access-list 2699 permit udp 10.20.1.0 0.0.0.255
- B. no access-list 2699 deny tcp any 10.20.1.0 0.0.0.127 eq 22
- C. access-list 2699 permit tcp any 10.20.1.0 0.0.0.255 eq 22
- D. no access-list 2699 deny ip any 10.20.1.0 0.0.0.255

**Answer:** D

**Explanation:**

Note : Already a statement is there in last to allow SSH Traffic for network 10.20.1.0 0.0.0.127, but Second statement says deny ip any 10.20.1.0 0.0.0.255, so how it will work once it is denied. So the right answer is remove the --- no access-list 2699 deny ip any 10.20.1.0 0.0.0.255.

**NEW QUESTION 377**

- (Topic 1)

Which 802.11 management frame type is sent when a client roams between access points on the same SSID?

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

**Answer:** A

**NEW QUESTION 382**

- (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 387**

- (Topic 1)

Which IPv6 address block sends packets to a group address rather than a single address?

- A. 2000::/3
- B. FC00::/7

C. FE80::/10  
D. FF00::/8

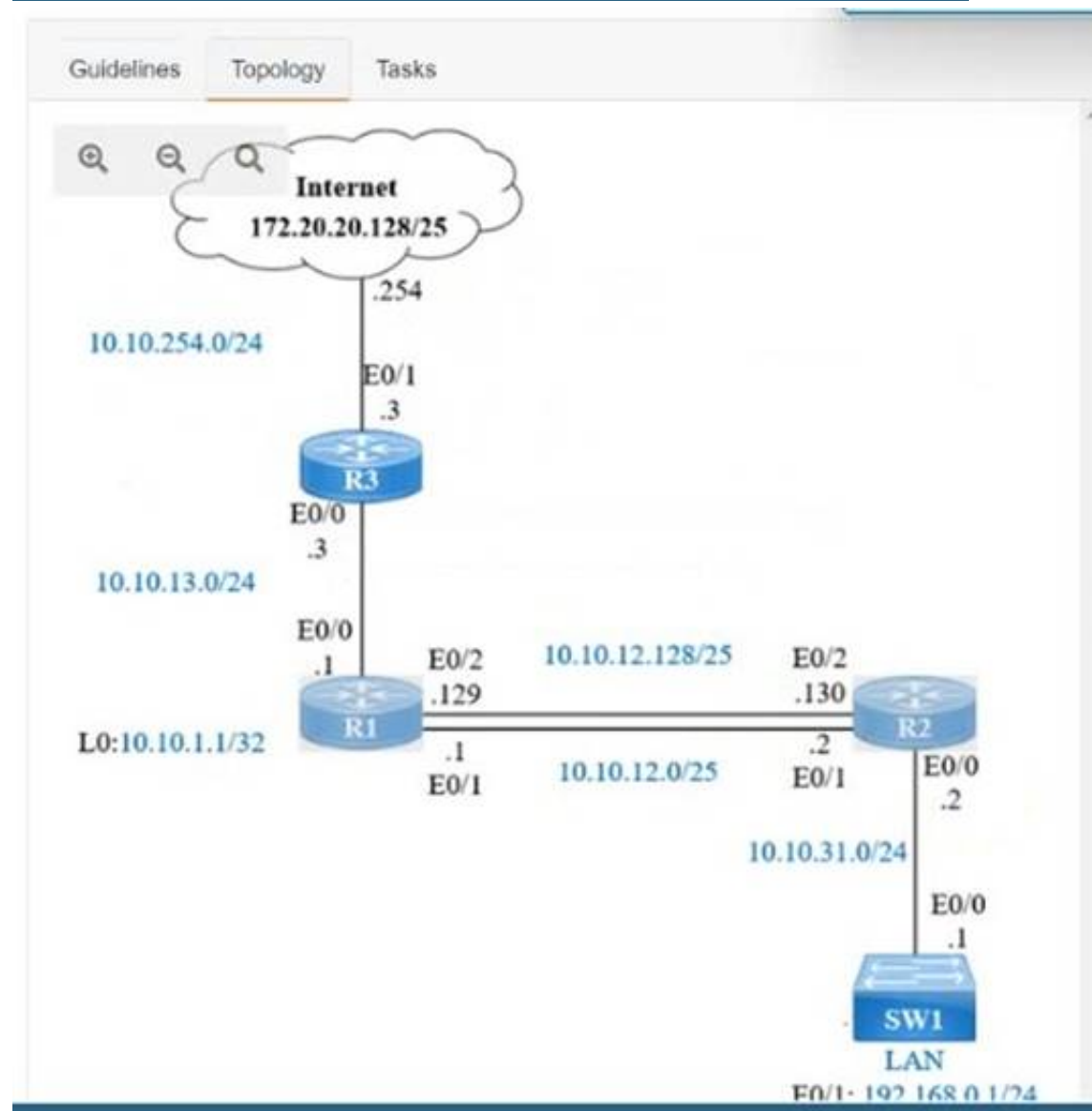
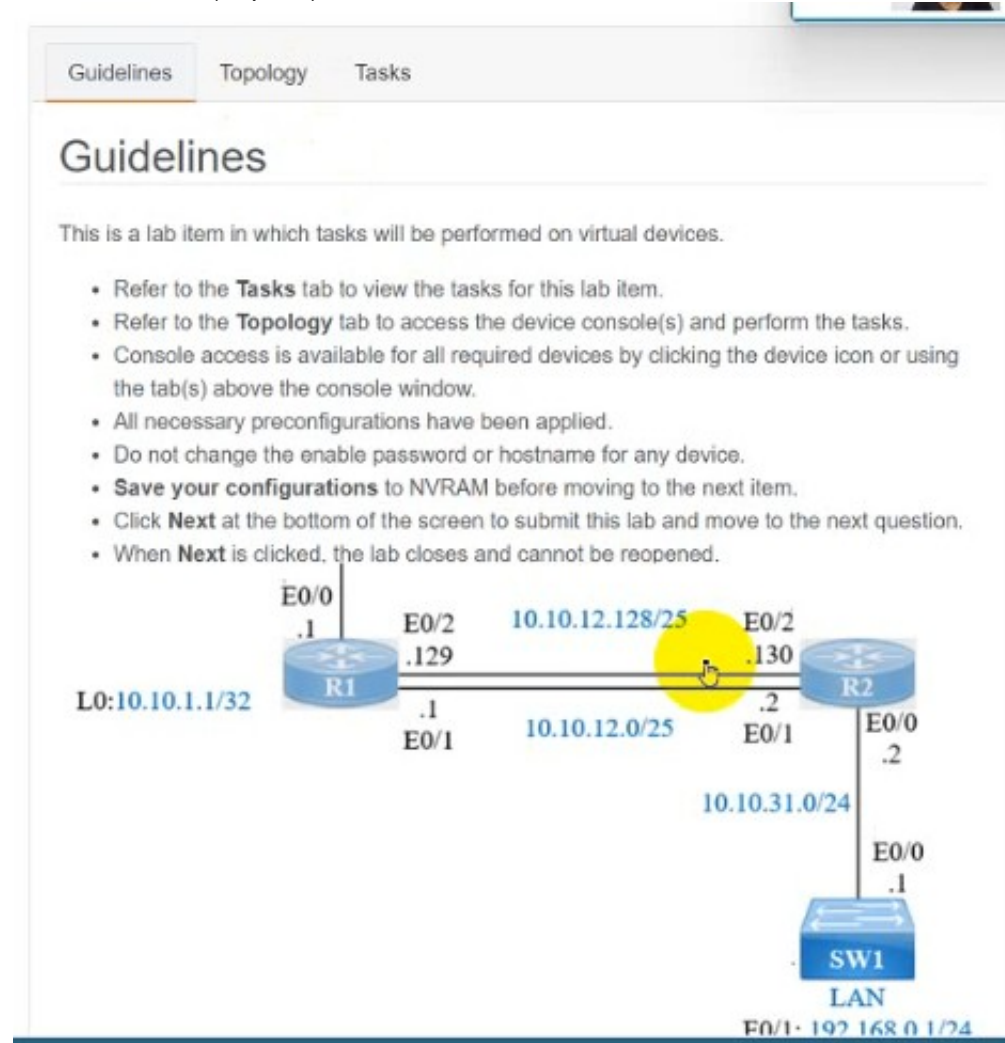
**Answer: D**

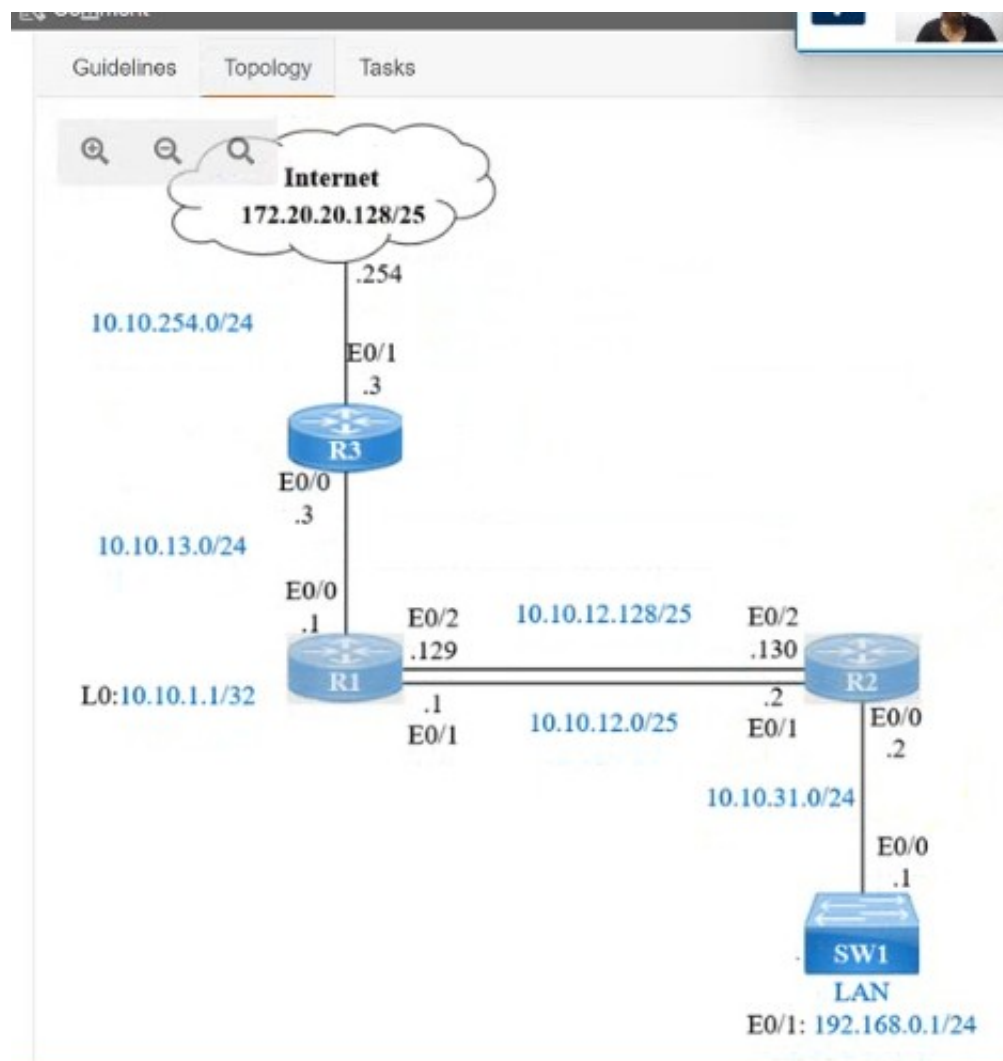
#### Explanation:

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

#### NEW QUESTION 389

SIMULATION - (Topic 5)





IP connectivity and OSPF are preconfigured on all devices where necessary. Do not make any changes to the IP addressing or OSPF. The company policy uses connected interfaces and next hops when configuring static routes except for load balancing or redundancy without floating static. Connectivity must be established between subnet 172.20.20.128/25 on the Internet and the LAN at 192.168.0.0/24 connected to SW1:

- \* 1. Configure reachability to the switch SW1 LAN subnet in router R2.
- \* 2. Configure default reachability to the Internet subnet in router R1.
- \* 3. Configure a single static route in router R2 to reach to the Internet subnet considering both redundant links between routers R1 and R2. A default route is NOT allowed in router R2.
- \* 4. Configure a static route in router R1 toward the switch SW1 LAN subnet where the primary link must be through Ethernet0/1. and the backup link must be through Ethernet0/2 using a floating route. Use the minimal administrative distance value when required.

- A. Mastered
- B. Not Mastered

**Answer:** A

#### Explanation:

Answer as below configuration:

On R2:

Enable Conf t

Ip route 192.168.1.0 255.255.255.0 10.10.31.1

On R1:

Enable Conf t

Ip route 0.0.0.0 0.0.0.0 10.10.13.3

On R2

Ip route 172.20.20.128 255.255.255.128 e0/2

Ip route 172.20.20.128 255.255.255.128 e0/1

On R1

Ip route 192.168.0.0 255.255.255.0 e0/1

Ip route 192.168.0.0 255.255.255.0 10.10.12.2 3

Save all configurations after every router from anyone of these command Do wr

Or

Copy run start

#### NEW QUESTION 390

- (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 394

- (Topic 4)

What is a function of the core and distribution layers in a collapsed-core architecture?

- A. The router must use IPv4 and IPv6 addresses at Layer 3.

- B. The core and distribution layers are deployed on two different devices to enable failover.
- C. The router can support HSRP for Layer 2 redundancy in an IPv6 network.
- D. The router operates on a single device or a redundant pair.

**Answer:** D

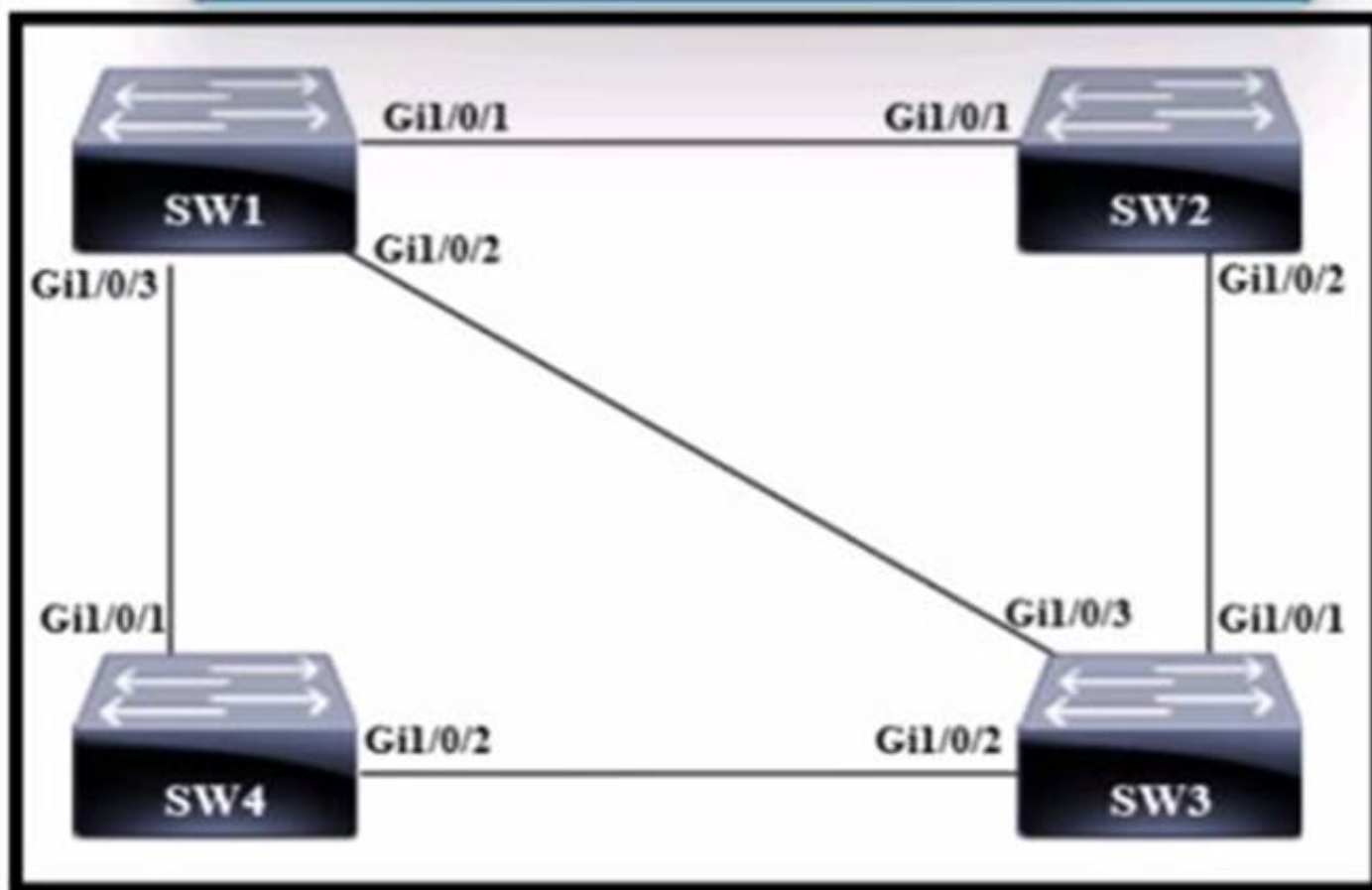
**Explanation:**

The core and distribution layers are collapsed into one layer in a collapsed- core architecture, and this layer operates on a single device or a redundant pair. This layer is responsible for the routing between the access layer and the WAN, as well as providing redundancy.

**NEW QUESTION 398**

- (Topic 4)

Refer to the exhibit.



Which switch becomes the root bridge?

A)

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

B)

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

C)

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

D)

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

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

**Answer:** B

**NEW QUESTION 400**

- (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 405

- (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 408

- (Topic 4)  
What is the definition of backdoor malware?

- A. malicious code that is installed onto a computer to allow access by an unauthorized user
- B. malicious code with the main purpose of downloading other malicious code
- C. malicious program that is used to launch other malicious programs
- D. malicious code that infects a user machine and then uses that machine to send spam

Answer: A

NEW QUESTION 410

DRAG DROP - (Topic 4)  
Drag and drop the characteristics of transport layer protocols from the left onto the corresponding protocols on the right.

guarantees packet delivery

uses a 32-bit sequence number

ideal for voice traffic

provides support for retransmission of lost packets

offers minimal overhead within a packet

requires less computer resources

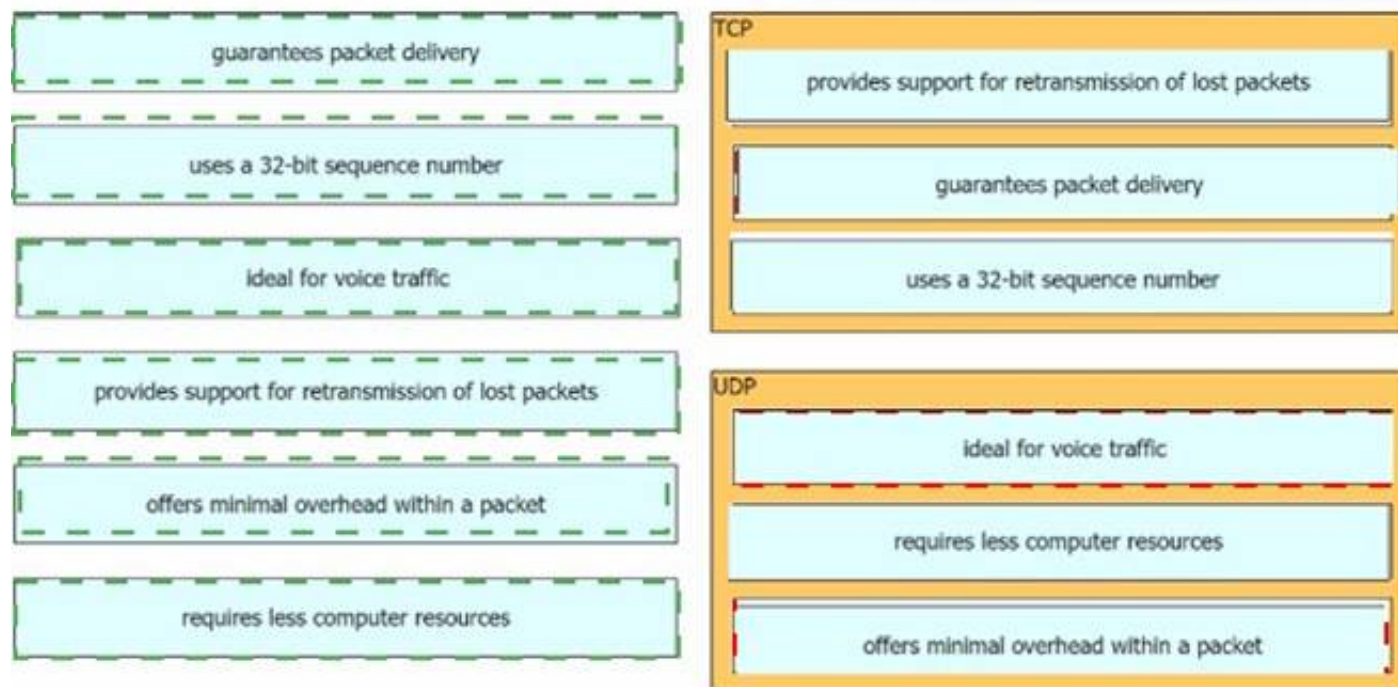
TCP

UDP

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



#### NEW QUESTION 414

- (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 419

- (Topic 4)

By default, how long will the switch continue to know a workstation MAC address after the workstation stops sending traffic?

- A. 200 seconds
- B. 300 seconds
- C. 600 seconds
- D. 900 seconds

**Answer: B**

#### NEW QUESTION 421

- (Topic 4)

What is the collapsed layer in collapsed core architectures?

- A. core and WAN
- B. access and WAN
- C. distribution and access
- D. core and distribution

**Answer: D**

#### NEW QUESTION 424

- (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 428

- (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 429

- (Topic 4)

What is a benefit for external users who consume public cloud resources?

- A. implemented over a dedicated WAN
- B. located in the same data center as the users
- C. all hosted on physical servers
- D. accessed over the Internet

Answer: D

#### NEW QUESTION 433

- (Topic 4)

Refer to the exhibit.

Current Neighbor Relationship					
Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.1.1	1	FULL/DR	00:00:33	192.168.1.1	GigabitEthernet0/0
Desired Neighbor Relationship					
Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.1.1	0	FULL/ -	00:00:31	192.168.1.1	GigabitEthernet0/0

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

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

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

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

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

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

Answer: A



NEW QUESTION 434

DRAG DROP - (Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

enables aggregation of routing prefixes

provides for one-to-one communication

provides one-to-many communications

sends packets to a group address rather than a single address

Global Unicast Address

Multicast

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

enables aggregation of routing prefixes

provides for one-to-one communication

provides one-to-many communications

sends packets to a group address rather than a single address

Global Unicast Address

enables aggregation of routing prefixes

provides for one-to-one communication

Multicast

provides one-to-many communications

sends packets to a group address rather than a single address

NEW QUESTION 439

- (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 442

- (Topic 4)

An engineer is configuring SSH version 2 exclusively on the R1 router. What is the minimum configuration required to permit remote management using the cryptographic protocol?



☐ hostname R1

ip domain name cisco

crypto key generate rsa general-keys modulus 1024

username cisco privilege 15 password 0 cisco123

ip ssh version 2

line vty 0 15

transport input ssh

login local

☐ hostname R1

crypto key generate rsa general-keys modulus 1024

username cisco privilege 15 password 0 cisco123

ip ssh version 2

line vty 0 15

transport input all

login local

☐ hostname R1

service password-encryption

crypto key generate rsa general-keys modulus 1024

username cisco privilege 15 password 0 cisco123

ip ssh version 2

line vty 0 15

transport input ssh

login local

☐ hostname R1

ip domain name cisco

crypto key generate rsa general-keys modulus 1024

username cisco privilege 15 password 0 cisco123

ip ssh version 2

line vty 0 15

transport input all

login local

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

**Answer:** C

#### NEW QUESTION 443

- (Topic 4)

Which two capabilities of Cisco DNA Center make it more extensible as compared to traditional campus device management? (Choose two.)

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

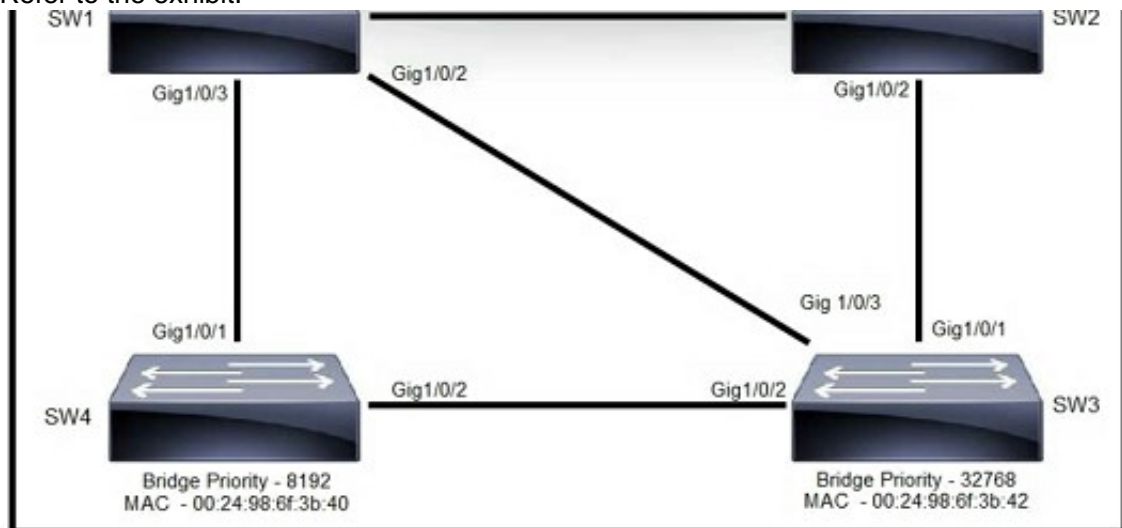
E. modular design that is upgradable as needed

**Answer:** AC

#### NEW QUESTION 447

- (Topic 4)

Refer to the exhibit.



Rapid PVST+ mode is on the same VLAN on each switch. Which switch becomes the root bridge and why?

- A. SW2, because its MAC address is the highest
- B. SW3, because its priority is the highest
- C. SW4, because its priority is highest and its MAC address is lower
- D. SW1, because its priority is the lowest and its MAC address is higher

**Answer:** B

#### NEW QUESTION 448

- (Topic 4)

When an access point is seeking to join wireless LAN controller, which message is sent to the AP- Manager interface?

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

**Answer:** D

#### NEW QUESTION 451

- (Topic 4)

What determines the sequence in which materials are planned during the material requirements planning (MRP) run?

- A. The control parameters of the MRP run
- B. The creation date of the materials
- C. The low-level code of the materials
- D. The replenishment lead time of the materials

**Answer:** C

#### NEW QUESTION 455

DRAG DROP - (Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

is used exclusively by a non-host device	Multicast
sends packets to a group address rather than a single address	
has a unicast source sent to a group	Anycast
is routed to the nearest interface that has the address	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

is used exclusively by a non-host device

sends packets to a group address rather than a single address

has a unicast source sent to a group

is routed to the nearest interface that has the address

Multicast

has a unicast source sent to a group

is routed to the nearest interface that has the address

Anycast

is used exclusively by a non-host device

sends packets to a group address rather than a single address

NEW QUESTION 458

- (Topic 4)  
What is a function of an endpoint?

- A. It is used directly by an individual user to access network services
- B. It passes unicast communication between hosts in a network
- C. It transmits broadcast traffic between devices in the same VLAN
- D. It provides security between trusted and untrusted sections of the network.

Answer: A

NEW QUESTION 460

DRAG DROP - (Topic 4)  
Drag and drop the IPv6 address details from the left onto the corresponding types on the right.

identifies an interface on an IPv6 device

includes link-local and loopback addresses

provides one-to-many communications

used exclusively by a non-host device

assigned to more than one interface

derived from the FF00::/8 address range

Anycast

Multicast

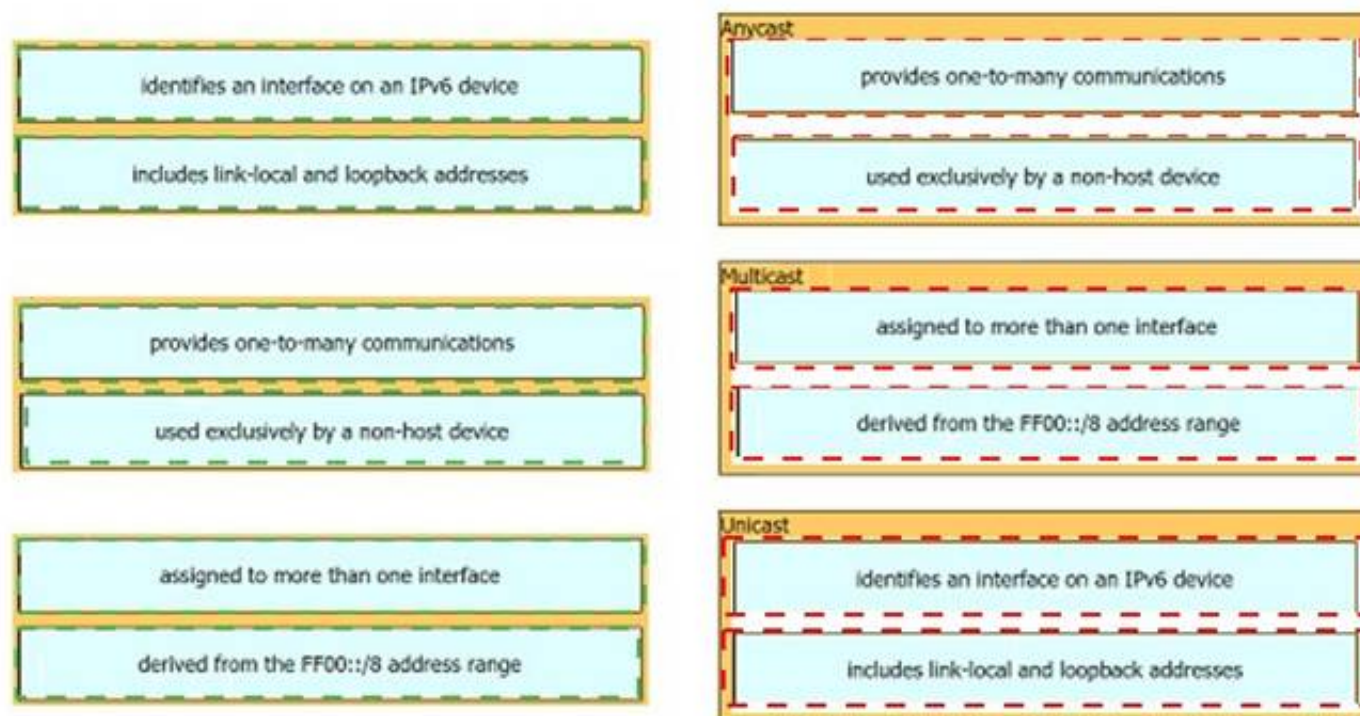
Unicast

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:





#### NEW QUESTION 464

- (Topic 4)

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

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

**Answer:** A

#### NEW QUESTION 469

- (Topic 4)

Which set of 2.4 GHz nonoverlapping wireless channels is standard in the United States?

- A. channels 2, 7, 9, and 11
- B. channels 1, 6, 11, and 14
- C. channels 2, 7, and 11
- D. channels 1, 6, and 11

**Answer:** D

#### Explanation:

In the United States, while channels 1-13 can be used for 2.4 GHz WiFi, only three channels are considered non-overlapping (channels 12 and 13 are allowed under low powered conditions, but for most cases are not used). For best results, it is highly recommended to keep the 2.4 GHz channels to 1, 6, and 11, as these channel settings will allow for virtually no overlap in the WiFi signal. Shown below is a channel graph from WiFi Scanner showing three access points configured for channels 1, 6, and 11. As you can see, the center of each signal is at 1, 6, and 11 with the actual signal extending over several channels to the left and right.

#### NEW QUESTION 473

- (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 474

- (Topic 4)

Refer to the exhibit. A multivendor network exists and the company is implementing VoIP over the network for the first time.

A)

```
SW1(config)#no cdp enable
SW1(config)#interface gigabitethernet1/0/1
SW1(config-if)#cdp run
```

B)



```
SW1(config)#lldp enable
SW1(config)#interface gigabitethernet1/0/1
SW1(config-if)#lldp run
```

C)

```
SW1(config)#lldp run
SW1(config)#interface gigabitethernet1/0/1
SW1(config-if)#lldp enable
```

D)

```
SW1(config)#no cdp run
SW1(config)#interface gigabitethernet1/0/1
SW1(config-if)#lldp transmit
SW1(config-if)#lldp receive
```

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

Answer: B

NEW QUESTION 475

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

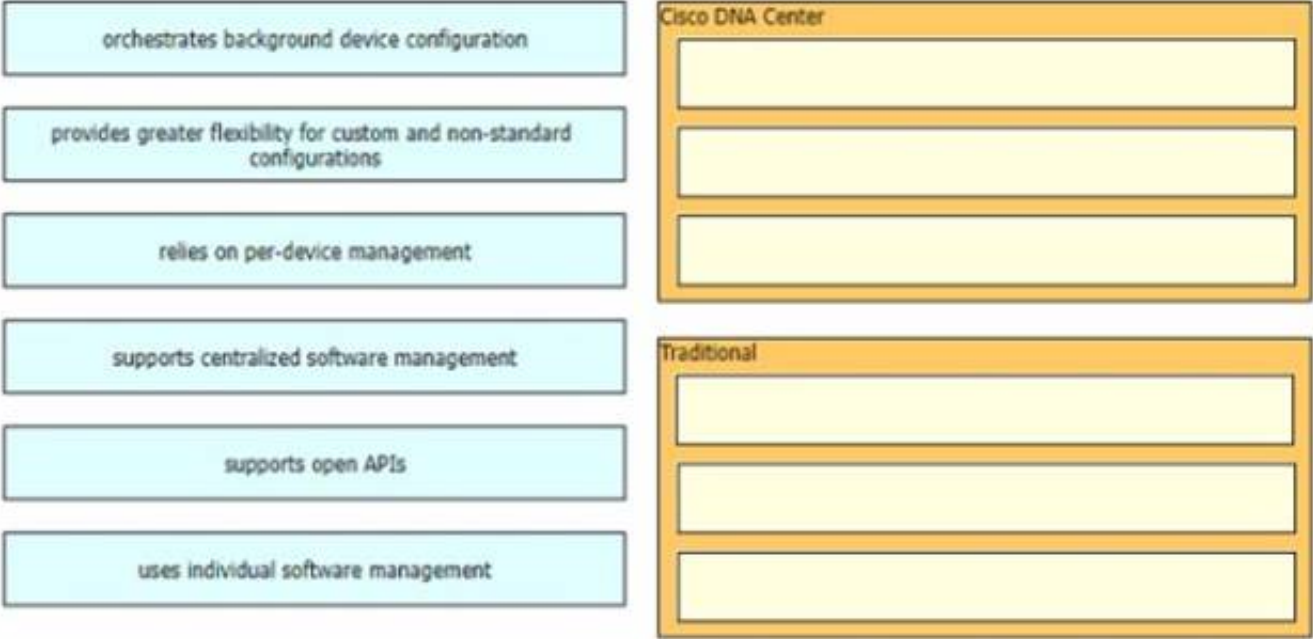
Explanation:

1&6 authentication 2&4 authorization

NEW QUESTION 477

DRAG DROP - (Topic 4)

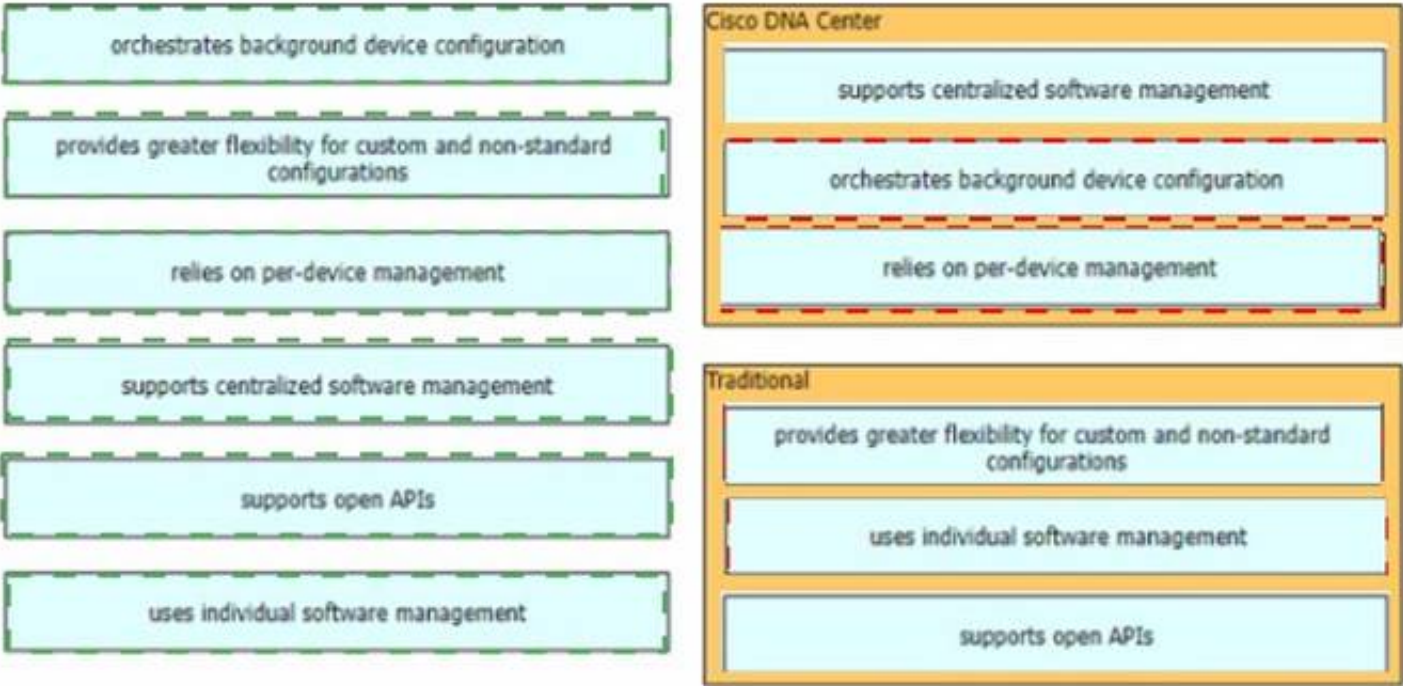
Drag and drop the characteristics of device-management technologies from the left onto the corresponding deployment types on the right.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 482

- (Topic 4)  
Which enhancement is implemented in WPA3?

- A. applies 802.1x authentication
- B. usesTKIP
- C. employs PKI to identify access points
- D. protects against brute force attacks

Answer: D

NEW QUESTION 483

- (Topic 4)  
What is a zero-day exploit?

- A. It is when a new network vulnerability is discovered before a fix is available
- B. It is when the perpetrator inserts itself in a conversation between two parties and captures or alters data.
- C. It is when the network is saturated with malicious traffic that overloads resources and bandwidth
- D. It is when an attacker inserts malicious code into a SOL server.

Answer: A

Explanation:

<https://www.kaspersky.com/resource-center/definitions/zero-day-exploit>

NEW QUESTION 486

- (Topic 4)  
Refer to the exhibit.

```
Known via "connected", distance 0, metric 0 (connected, via interface)
Routing Descriptor Blocks:
* directly connected, via Ethernet0/1
  Route metric is 0, traffic share count is 1

CPE# ping 203.0.113.1
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 203.0.113.1, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms

CPE# show ip route
Gateway of last resort is 198.51.100.1 to network 0.0.0.0
B* 0.0.0.0/0 [20/0] via 198.51.100.1, 00:02:07
    198.51.100.0/24 is variably subnetted, 2 subnets, 2 masks
C    198.51.100.0/30 is directly connected, Ethernet0/0
L    198.51.100.2/32 is directly connected, Ethernet0/0
    203.0.113.0/24 is variably subnetted, 2 subnets, 2 masks
C    203.0.113.0/30 is directly connected, Ethernet0/1
L    203.0.113.2/32 is directly connected, Ethernet0/1
```

After configuring a new static route on the CPE, the engineer entered this series of commands to verify that the new configuration is operating normally. When is the static default route installed into the routing table?

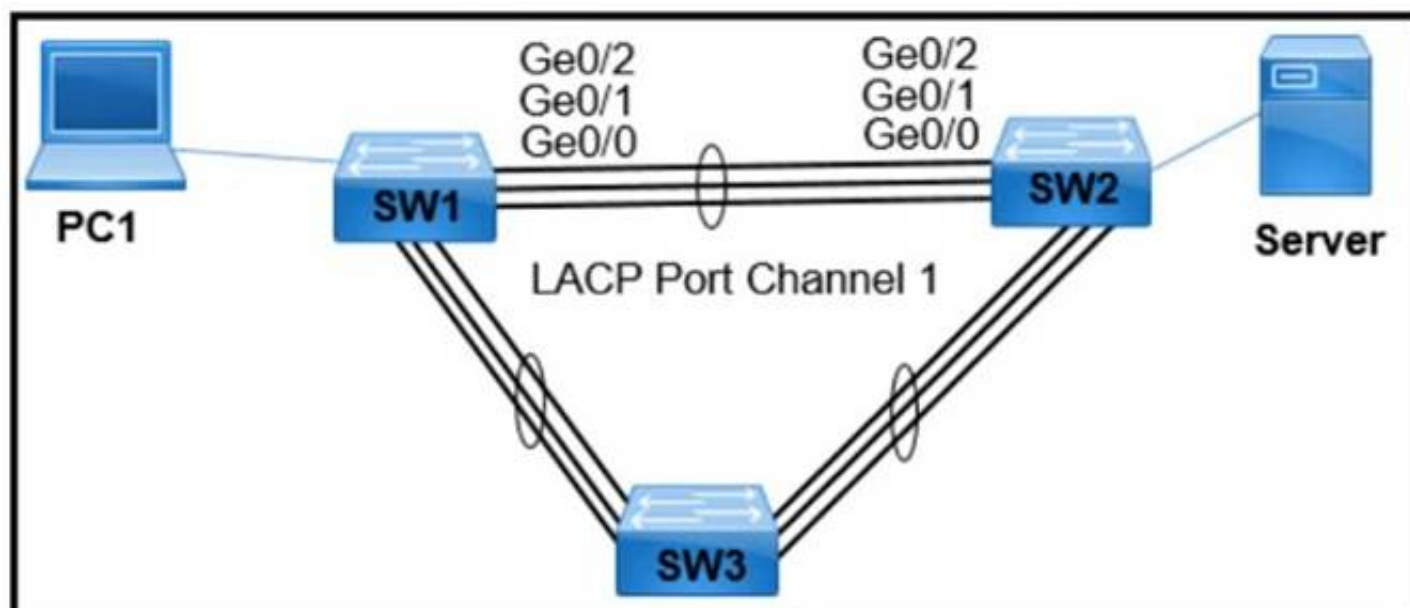
- A. when 203.0.113.1 is no longer reachable as a next hop
- B. when the default route learned over external BGP becomes invalid
- C. when a route to 203.0.113.1 is learned via BGP
- D. when the default route over external BGP changes its next hop

**Answer: A**

#### NEW QUESTION 488

- (Topic 4)

Refer to the exhibit.



PC1 regularly sends 1800 Mbps of traffic to the server. A network engineer needs to configure the EtherChannel to disable Port Channel 1 between SW1 and SW2 when the Ge0/0 and Ge0/1 ports on SW2 go down. Which configuration must the engineer apply to the switch?

A)

```
SW2# configure terminal
SW2(config)# interface port-channel 1
SW2(config-if)# lacp port-priority 32000
```

B)

```
SW2# configure terminal
SW2(config)# interface port-channel 1
SW2(config-if)# lacp max-bundle 2
```

C)

```
SW2# configure terminal
SW2(config)# lacp system-priority 32000
```

D)



```
SW2# configure terminal
SW2(config)# interface port-channel 1
SW2(config-if)# port-channel min-links 2
```

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

Answer: D

NEW QUESTION 490

DRAG DROP - (Topic 4)

Drag and drop the statement about AAA services from the left to the corresponding AAA services on the right.

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

It restricts the CLI commands that a user is able to perform.

It performs user validation via TACACS+.

It records the duration of each connection.

It supports User Access Reporting.

It verifies "who you are".

Accounting

Authorization

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

It restricts the CLI commands that a user is able to perform.

It performs user validation via TACACS+.

It records the duration of each connection.

It supports User Access Reporting.

It verifies "who you are".

Accounting

It supports User Access Reporting.

It restricts the CLI commands that a user is able to perform.

Authorization

It performs user validation via TACACS+.

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

NEW QUESTION 493

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 495

- (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 497

- (Topic 4)  
What is the functionality of the Cisco DNA Center?

- A. data center network pokey con  
B. console server that permits secure access to all network devices  
C. IP address cool distribution scheduler  
D. software-defined controller for automaton of devices and services

Answer: D

NEW QUESTION 499

DRAG DROP - (Topic 4)

Drag and drop the SNMP components from the left onto the description on the right.

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

- A. Mastered
- B. Not Mastered

Answer: A

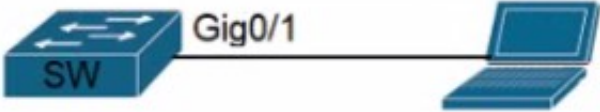
Explanation:

agent	MIB
managed device	agent
MIB	managed device
NMS	NMS

NEW QUESTION 503

- (Topic 4)

Refer to ltie exhibit



```
SW# conf t
SW(config)#interface gigabitEthernet0/1
SW(config-if)#switchport mode access
SW(config-if)#switchport port-security
SW(config-if)#
```

A network engineer started to configure port security on a new switch. These requirements must be met:

- \* MAC addresses must be learned dynamically
- \* Log messages must be generated without disabling the interface when unwanted traffic is seen

Which two commands must be configured to complete this task"? (Choose two)

- A. SW(ccnfig-if)=switchport port-security mac-address sticky
- B. SW(confKj-if)=switchport port-security violation restrict
- C. SW(config.if)sswitchport port-security mac-address 0010.7B84.45E6
- D. SW(config-if)aswitchport port-security maximum 2
- E. SW(ccnfig-if)=switchport port-security violation shutdown

Answer: C

NEW QUESTION 505

- (Topic 4)

Refer to the exhibit.

Output from R1

```
GigabitEthernet0/0/1 is up, line protocol is down
Hardware is SPA-10X1GE-V2, address is 0023.33ee.7c00 (bia 0023.33ee.7c00)
MTU 1500 bytes, BW 1000000 Kbit/sec, DLY 10 usec,
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA, loopback not set
Keepalive not supported
Half Duplex, 1000Mbps, link type is auto, media type is LX
output flow-control is off, input flow-control is off
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:01, output 00:02:31, output hang never

10 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
0 watchdog, 314 multicast, 0 pause input
1 packets output, 77 bytes, 0 underruns
0 output errors, 50 collisions, 6 interface resets
17 unknown protocol drops
0 babbles, 0 late collision, 0 deferred
```

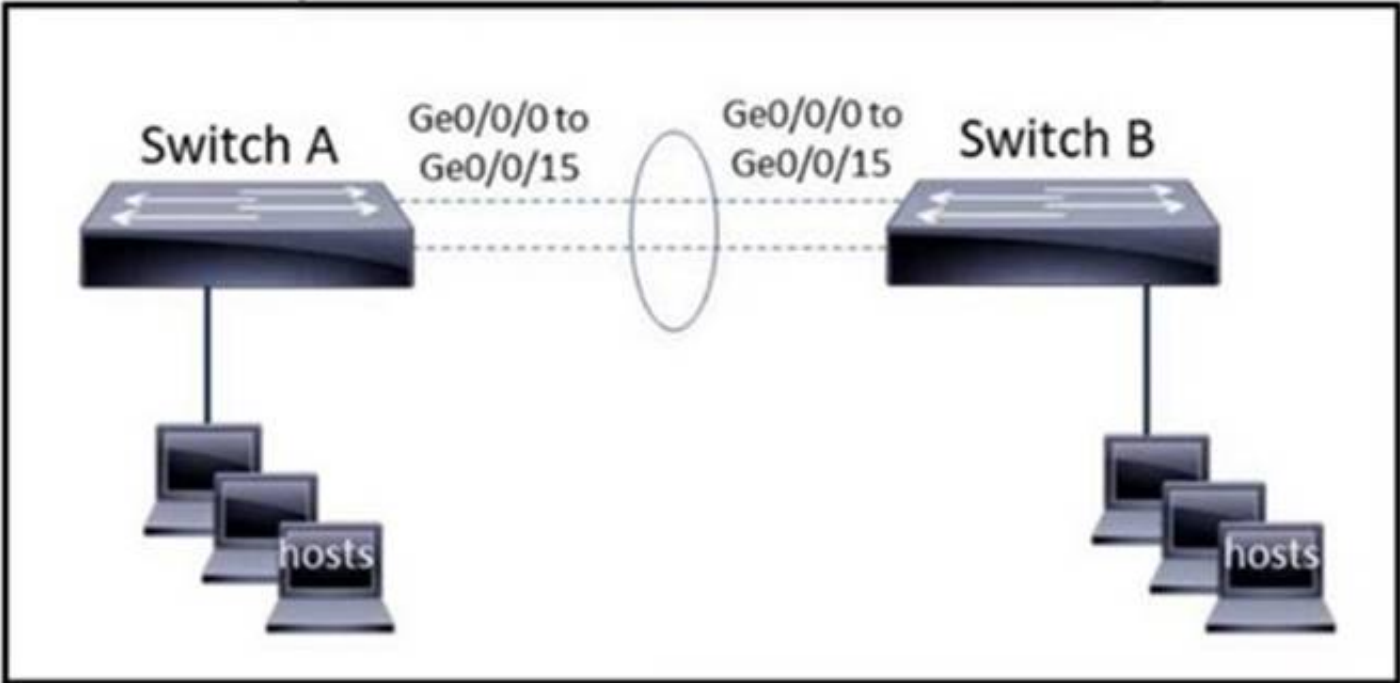
What is the issue with the interface GigabitEthernet0/0/1?

- A. Port security
- B. High throughput
- C. Cable disconnect
- D. duplex mismatch

Answer: C

NEW QUESTION 508

- (Topic 4)  
Refer to the exhibit.



The EtherChannel is configured with a speed of 1000 and duplex as full on both ends of channel group 1. What is the next step to configure the channel on switch A to respond to but not initiate LACP communication?

- A. interface range gigabitethernet0/0/0-15 channel-group 1 mode on
- B. interface range gigabitethernet0/0/0-15 channel-group 1 mode desirable
- C. interface port-channel 1 channel-group 1 mode auto
- D. interface port-channel 1 channel-group 1 mode passive

Answer: D

NEW QUESTION 512

DRAG DROP - (Topic 4)  
Drag and drop the Cisco IOS attack mitigation features from the left onto the types of network attack they mitigate on the right.

DHCP snooping	rogue server that spoofs IP configuration
Dynamic ARP Inspection	cache poisoning
IP Source Guard	flood attacks
storm control	rogue clients on the network

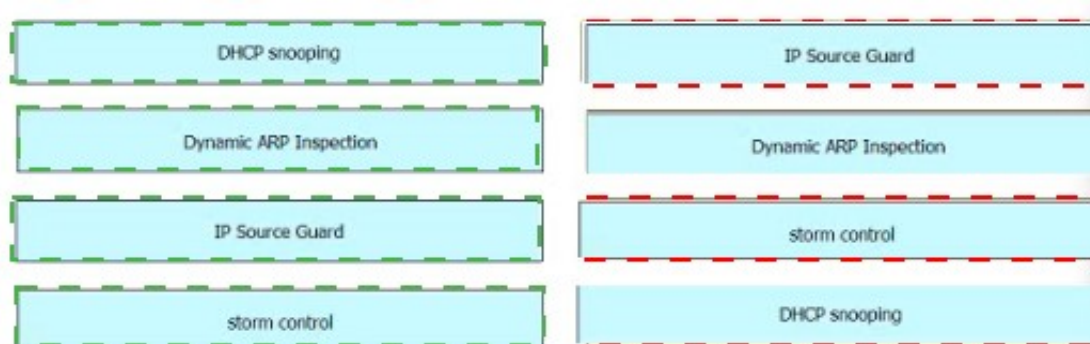
A. Mastered



B. Not Mastered

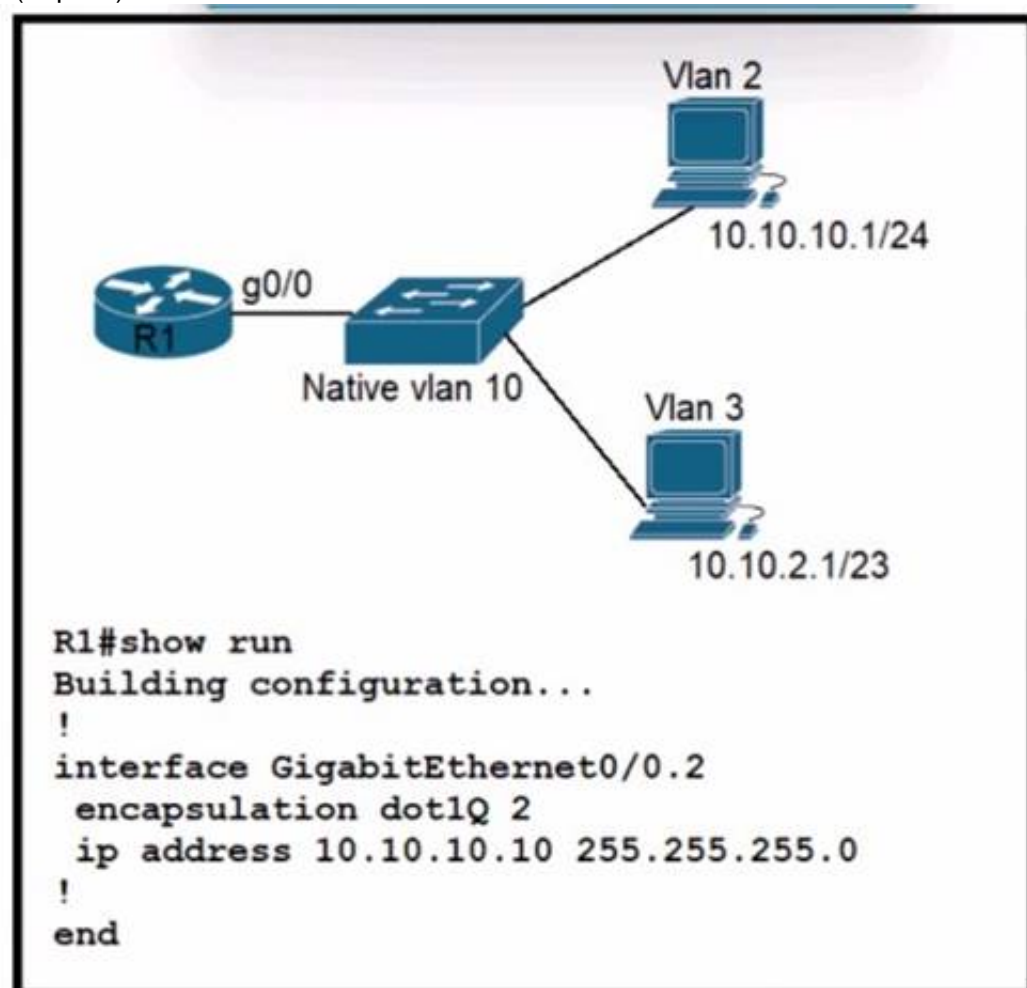
**Answer:** A

**Explanation:**



### NEW QUESTION 513

- (Topic 4)



A)

```
interface GigabitEthernet0/0
 ip address 10.10.2.10 255.255.252.0
```

B)

```
interface GigabitEthernet0/0.3
 encapsulation dot1Q 10
 ip address 10.10.2.10 255.255.255.252
```

C)

```
interface GigabitEthernet0/0.10
 encapsulation dot1Q 3
 ip address 10.10.2.10 255.255.254.0
```

D)

```
interface GigabitEthernet0/0.3
 encapsulation dot1Q 3 native
 ip address 10.10.2.10 255.255.252.0
```

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

**Answer:** C



**NEW QUESTION 516**

- (Topic 4)

In which circumstance would a network architect decide to implement a global unicast subnet instead of a unique local unicast subnet?

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

**Answer:** D

**NEW QUESTION 518**

DRAG DROP - (Topic 4)

Drag and drop the QoS terms from the left onto the descriptions on the right.

class-based weighted fair queueing	categorizes packets based on the value of a traffic descriptor
classification	guarantees minimum bandwidth to specific traffic classes when an interface is congested
congestion	prevents congestion by reducing the flow of outbound traffic
policing	outcome of overutilization
shaping	uses defined criteria to limit the transmission of one or more classes of traffic

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

class-based weighted fair queueing	classification
classification	shaping
congestion	policing
policing	congestion
shaping	class-based weighted fair queueing

**NEW QUESTION 522**

- (Topic 4)

Which type of IPv4 address must be assigned to a server to protect it from external access and allow only internal users access while restricting internet access?

- A. global unicast
- B. public
- C. private
- D. multicast

**Answer:** C

**NEW QUESTION 525**

DRAG DROP - (Topic 4)

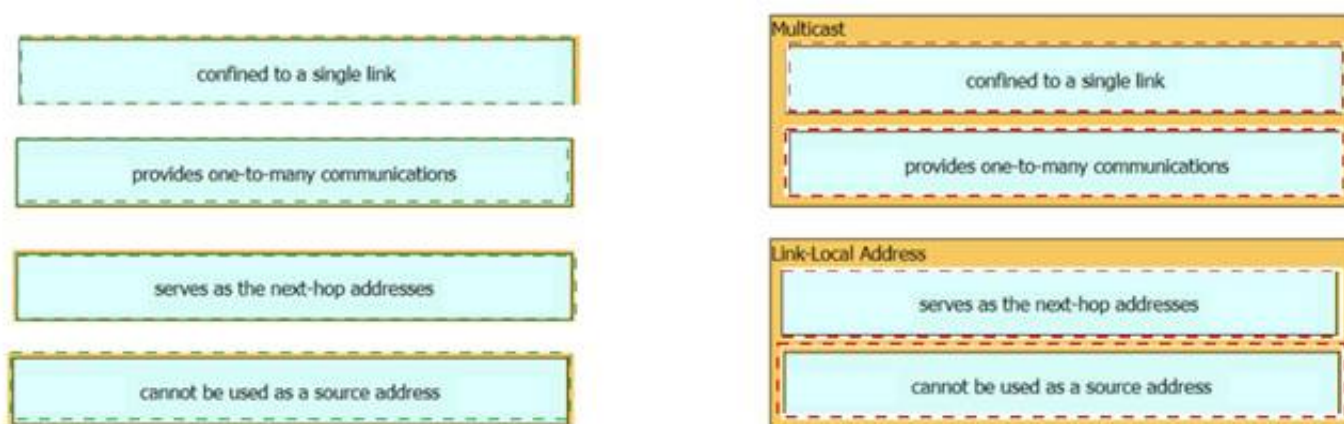
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

confined to a single link	Multicast
provides one-to-many communications	
serves as the next-hop addresses	Link-Local Address
cannot be used as a source address	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**



#### NEW QUESTION 530

- (Topic 4)

Which command implies the use of SNMPv3?

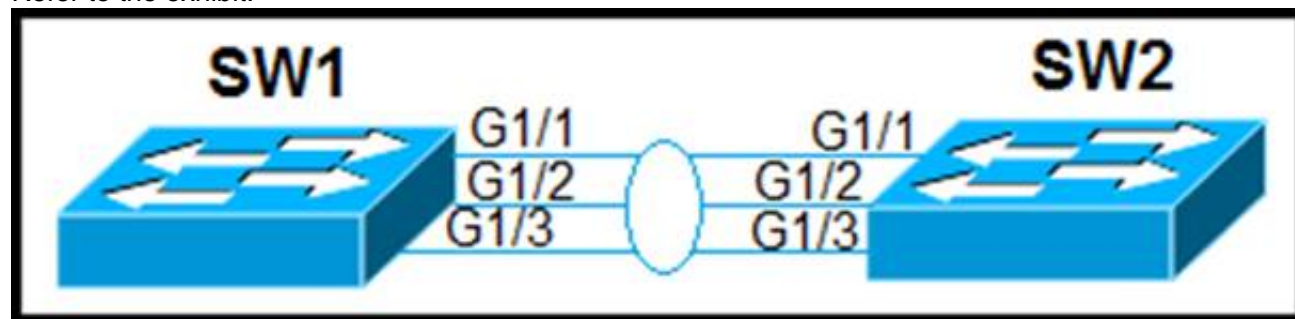
- A. snmp-server host
- B. snmp-server community
- C. snmp-server enable traps
- D. snmp-server user

**Answer:** B

#### NEW QUESTION 531

- (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 desirable no shutdown
- D. Interface range G1/1 – 1/3 switchport mode access channel-group 1 mode on no shutdown

**Answer:** A

#### NEW QUESTION 533

- (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 538

- (Topic 4)

Which command configures the Cisco WLC to prevent a serial session with the WLC CLI from being automatical toggged out?

- A. config sessions maxsessions 0
- B. config sessions timeout 0
- C. config serial timeout 0
- D. config serial timeout 9600

Answer: B

#### NEW QUESTION 543

DRAG DROP - (Topic 4)

Drag and drop the characteristic from the left onto the IPv6 address type on the right.

is unable to route on the internet	Global Unicast Address
is a counterpart of private IPv4 addresses	
enables aggregation of routing prefixes	Unique Local
is routable and reachable via the Internet	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

is unable to route on the internet	Global Unicast Address
is a counterpart of private IPv4 addresses	
enables aggregation of routing prefixes	Unique Local
is routable and reachable via the Internet	

#### NEW QUESTION 546

- (Topic 4)

Which two server types support dornas name to IP address resolution? (Choose two >

- A. ESX host
- B. resolver
- C. web
- D. file transfer
- E. authentication

Answer: AC

#### NEW QUESTION 547

- (Topic 4)

Why would a network administrator choose to implement automation in a network environment?

- A. To simplify the process of maintaining a consistent configuration state across all devices
  - B. To centralize device information storage
  - C. To implement centralized user account management
  - D. To deploy the management plane separately from the rest of the network
- Answer: A

Answer: A

#### NEW QUESTION 549



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 554**

- (Topic 4)

Which two protocols are used by an administrator for authentication and configuration on access points?

- A. Kerberos  
B. 802.1Q  
C. 802.1x  
D. TACACS+  
E. RADIUS

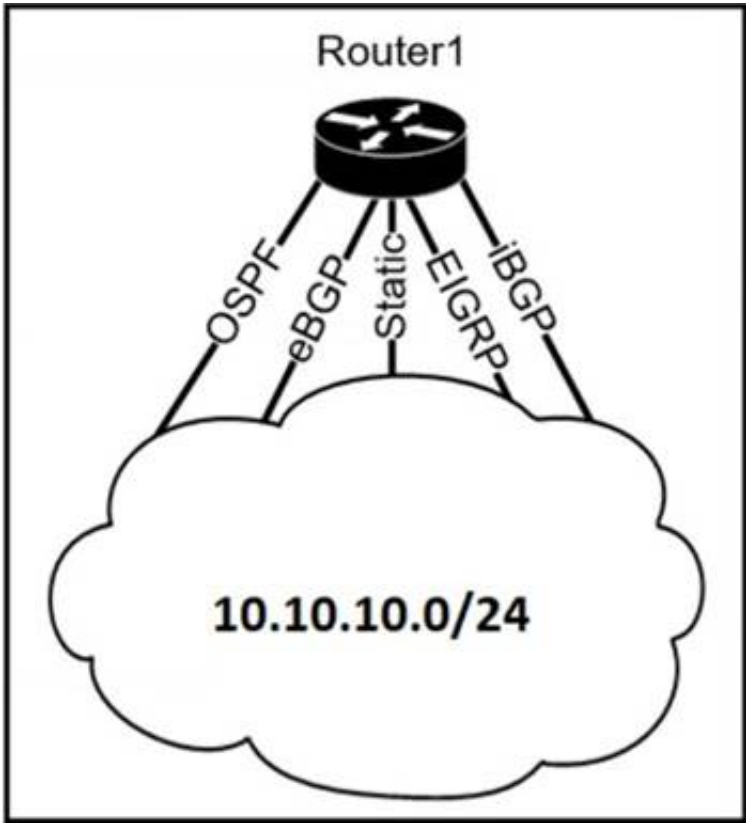
**Answer:** DE

**NEW QUESTION 558**

DRAG DROP - (Topic 4)

Refer to the exhibit.





The Router1 routing table has multiple methods to reach 10.10.10.0/24 as shown. The default Administrative Distance is used. Drag and drop the network conditions from the left onto the routing methods that Router1 uses on the right.

All protocols are up.

OSPF and eBGP are down.

The static route and eBGP are down.

The static route and EIGRP are down.

The static route and OSPF are down.

eBGP

EIGRP

Static

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

All protocols are up.

OSPF and eBGP are down.

The static route and eBGP are down.

The static route and EIGRP are down.

The static route and OSPF are down.

eBGP

All protocols are up.

OSPF and eBGP are down.

EIGRP

The static route and EIGRP are down.

Static

The static route and OSPF are down.

The static route and eBGP are down.

NEW QUESTION 560

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 562

- (Topic 4)  
Which interface enables communication between a program on the controller and a program on the networking devices?

- A. northbound interface
- B. software virtual interface
- C. southbound interface
- D. tunnel Interface

Answer: B

NEW QUESTION 565

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

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

Answer: B

NEW QUESTION 570

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

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

Answer: D

NEW QUESTION 575

- (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 577

- (Topic 4)

What are two purposes of HSRP? (Choose two.)

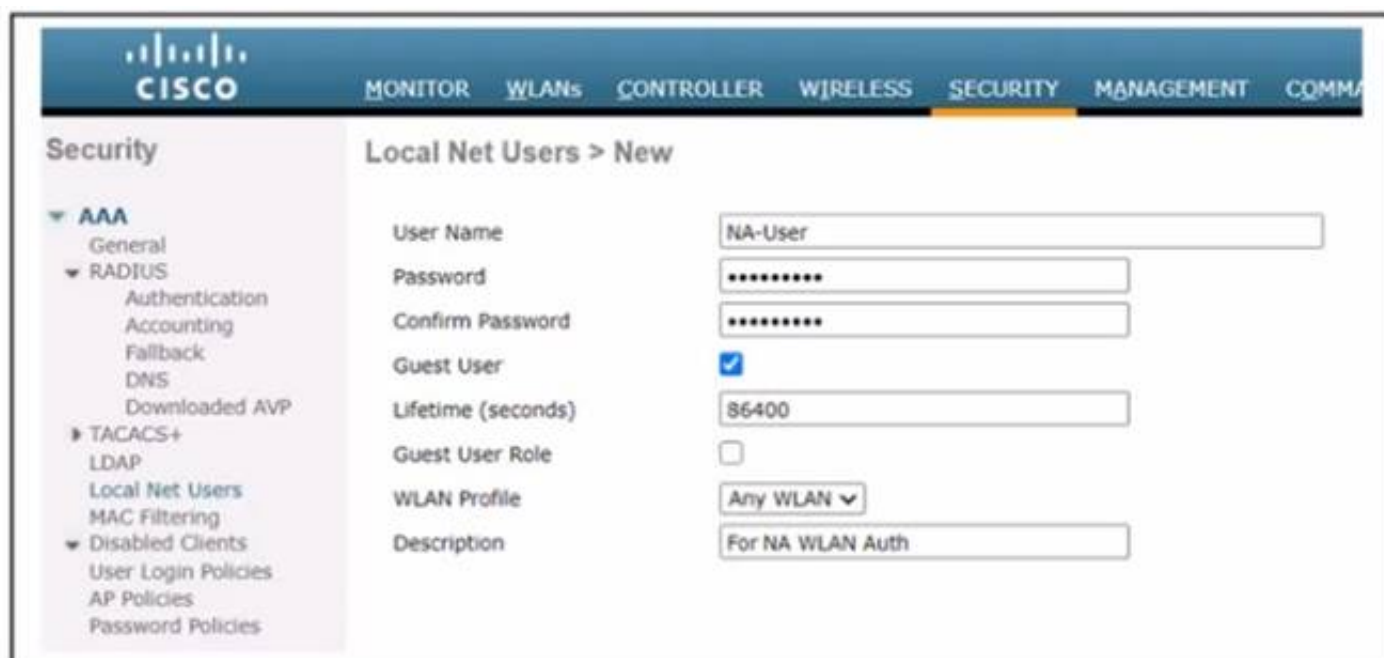
- A. It groups two or more routers to operate as one virtual router.
- B. It improves network availability by providing redundant gateways.
- C. It passes configuration information to hosts in a TCP/IP network.
- D. It helps hosts on the network to reach remote subnets without a default gateway.
- E. It provides a mechanism for diskless clients to autoconfigure their IP parameters during boot.

**Answer: AB**

#### NEW QUESTION 580

- (Topic 4)

Refer to the exhibit.



Wireless LAN access must be set up to force all clients from the NA WLAN to authenticate against the local database. The WLAN is configured for local EAP authentication. The time that users access the network must not be limited. Which action completes this configuration?

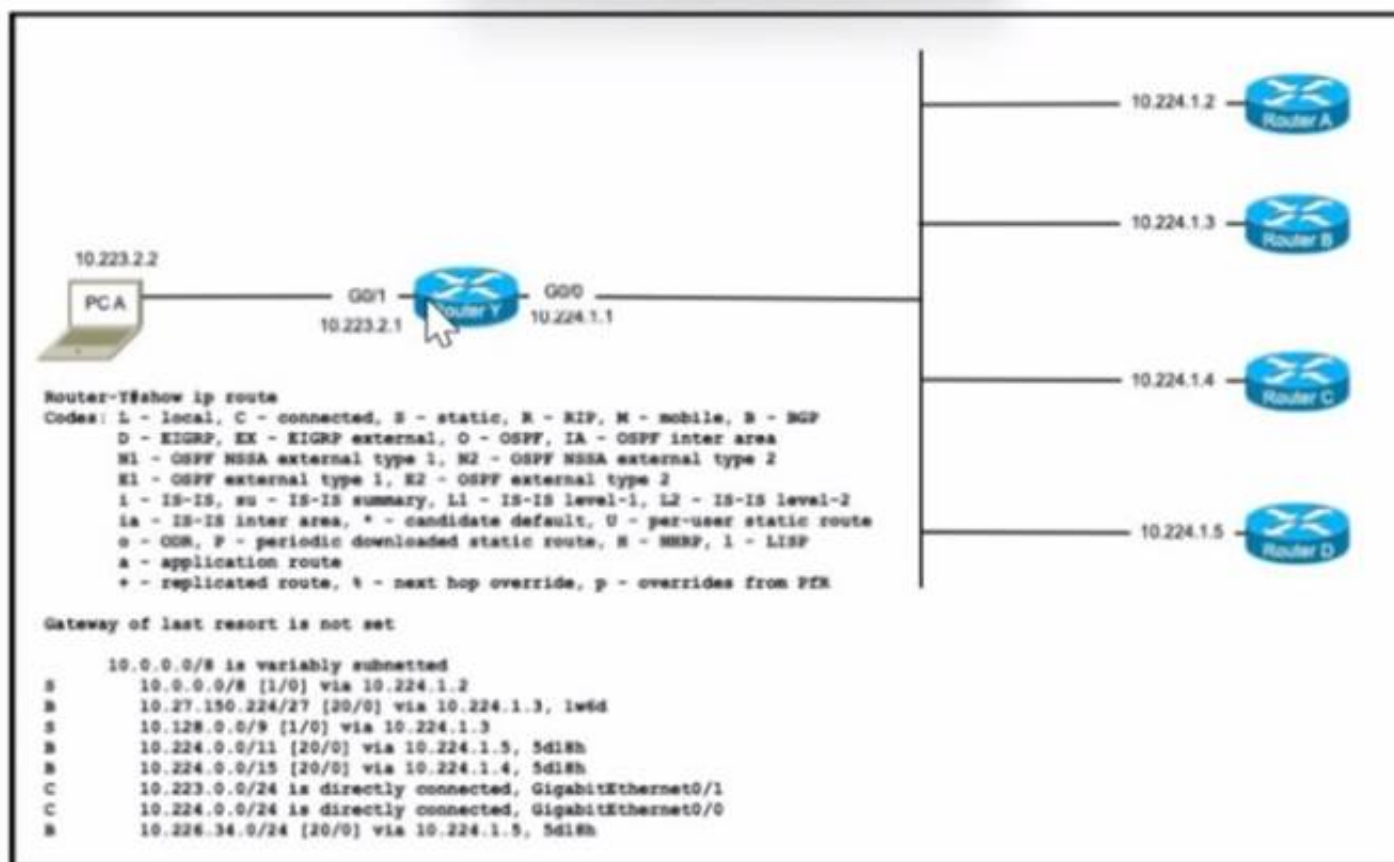
- A. Uncheck the Guest User check box
- B. Check the Guest User Role check box
- C. Set the Lifetime (seconds) value to 0
- D. Clear the Lifetime (seconds) value

**Answer: C**

#### NEW QUESTION 585



- (Topic 4)  
Refer to the exhibit.



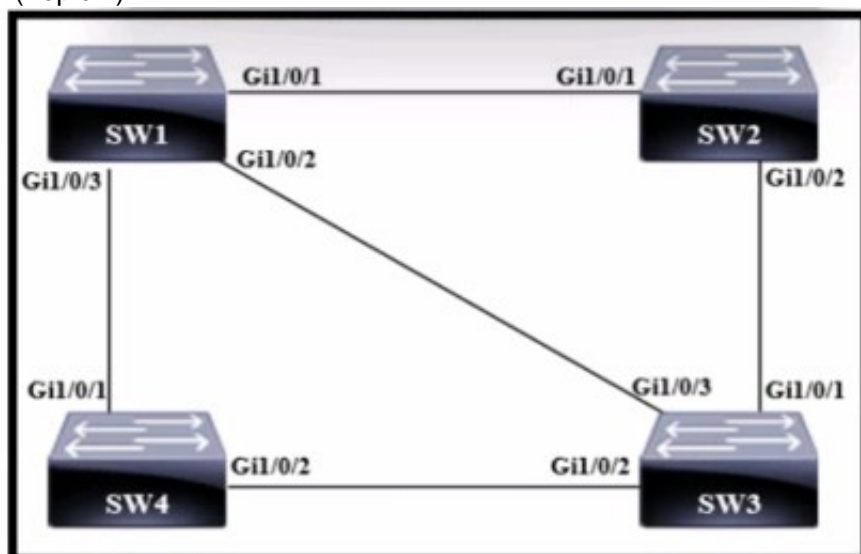
PC A is communicating with another device at IP address 10.227.225.255. Through which router does router Y route the traffic?

- A. router A
- B. router B
- C. router C
- D. router D

Answer: C

#### NEW QUESTION 588

- (Topic 4)



A)

SW 4  
Bridge Priority - 40960  
mac-address 07:24:86:84:82:18

B)

SW 3  
Bridge Priority - 40960  
mac-address 08:71:50:67:61:38

C)

SW 2  
Bridge Priority - 32768  
mac-address 08:fd:b1:d7:78:39

D)

SW 1  
Bridge Priority - 32768  
mac-address 05:48:19:51:3e:49



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

**Answer:** D

#### NEW QUESTION 590

- (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 594

- (Topic 4)

Which two practices are recommended for an acceptable security posture in a network? (Choose two)

- A. Backup device configurations to encrypted USB drives for secure retrieval
- B. maintain network equipment in a secure location
- C. Use a cryptographic keychain to authenticate to network devices
- D. Place internal email and file servers in a designated DMZ
- E. Disable unused or unnecessary ports, interfaces and services

**Answer:** CE

#### NEW QUESTION 596

- (Topic 4)

What should a network administrator consider when deciding to implement automation?

- A. Automated systems may have difficulty expanding network changes at scale.
- B. Network automation typically is limited to the configuration and management of virtual devices within a network.
- C. Network automation typically increases enterprise management operating costs.
- D. Manual changes frequently lead to configuration errors and inconsistencies.

**Answer:** D

#### Explanation:

When deciding to implement automation, a network administrator should consider the benefits and challenges associated with automation. Option D highlights one of the key reasons for implementing automation—manual changes often result in configuration errors and inconsistencies. Automating repetitive and error-prone tasks can help improve the accuracy and reliability of network configurations.

#### NEW QUESTION 601

- (Topic 4)

What are two functions of DHCP servers? (Choose two.)

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

**Answer:** BC

#### NEW QUESTION 605

- (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 606

DRAG DROP - (Topic 4)

Drag and drop the statements about networking from the left onto the corresponding networking types on the right

This type implements changes individually at each device.

This type leverages controllers to handle network management.

Maintenance costs are higher than with other networking options.

This type provides a centralized view of the network.

Traditional Networking

Controller-Based Networking

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

This type implements changes individually at each device.

This type leverages controllers to handle network management.

Maintenance costs are higher than with other networking options.

This type provides a centralized view of the network.

Traditional Networking

This type implements changes individually at each device.

Maintenance costs are higher than with other networking options.

Controller-Based Networking

This type leverages controllers to handle network management.

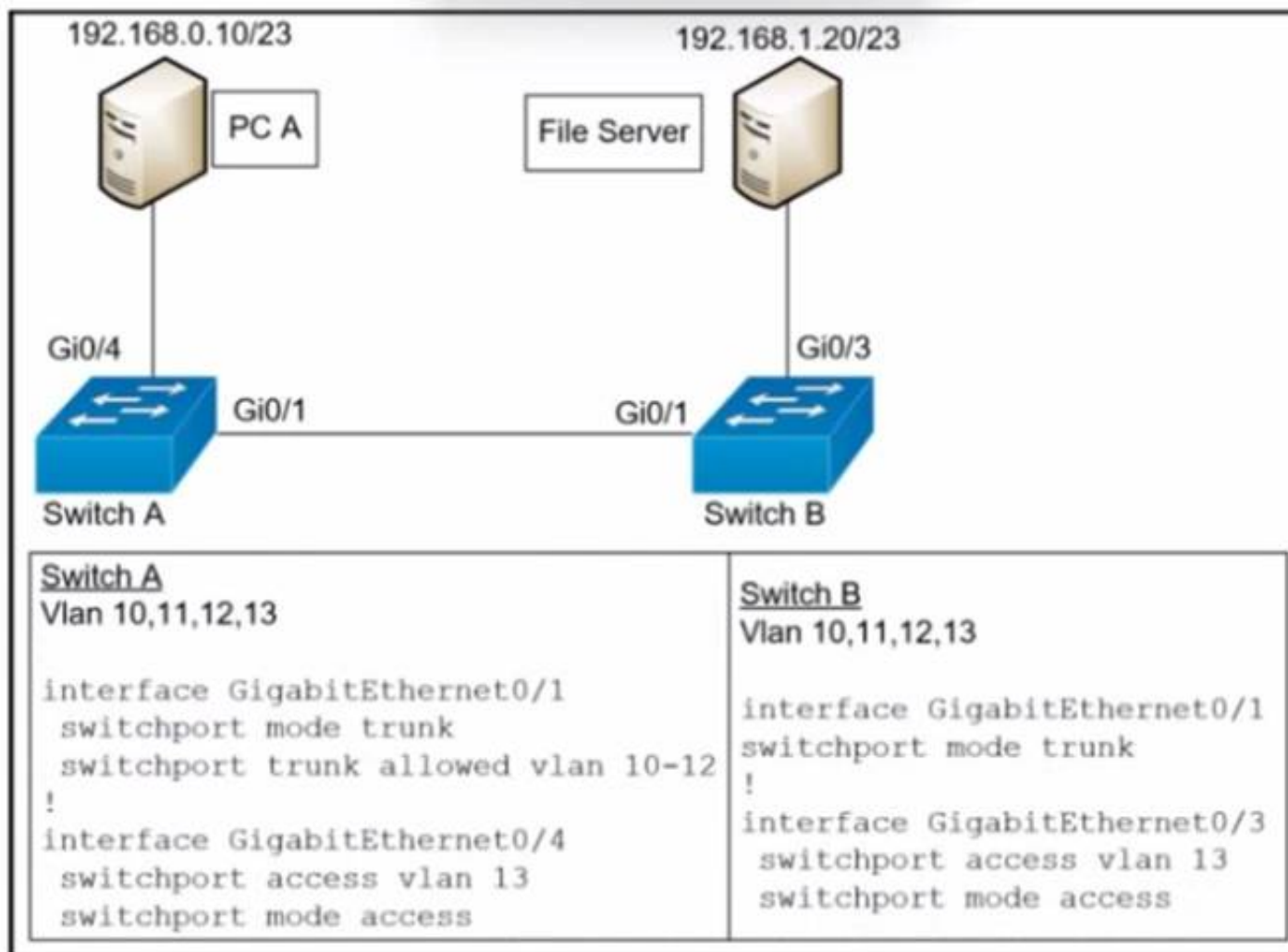
This type provides a centralized view of the network.

NEW QUESTION 610

- (Topic 4)

Refer to the exhibit.

A network engineer must configure communication between PC A and the file server. Which command 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 613

- (Topic 4)

What is the MAC address used with VRRP as a virtual address?

- A. 00-00-0C-07-AD-89
- B. 00-00-5E-00-01-0a
- C. 00-07-C0-70-AB-01
- D. 00-C6-41-93-90-91

**Answer: B**

#### NEW QUESTION 618

- (Topic 4)

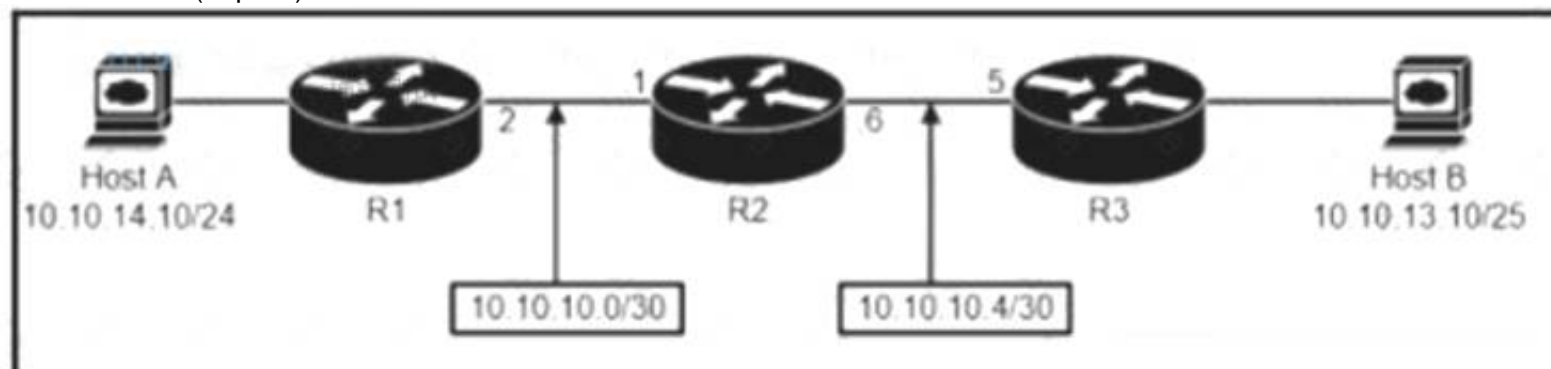
What describes the functionality of southbound APIs?

- 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 622

DRAG DROP - (Topic 4)



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



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

- A. Mastered  
 B. Not Mastered

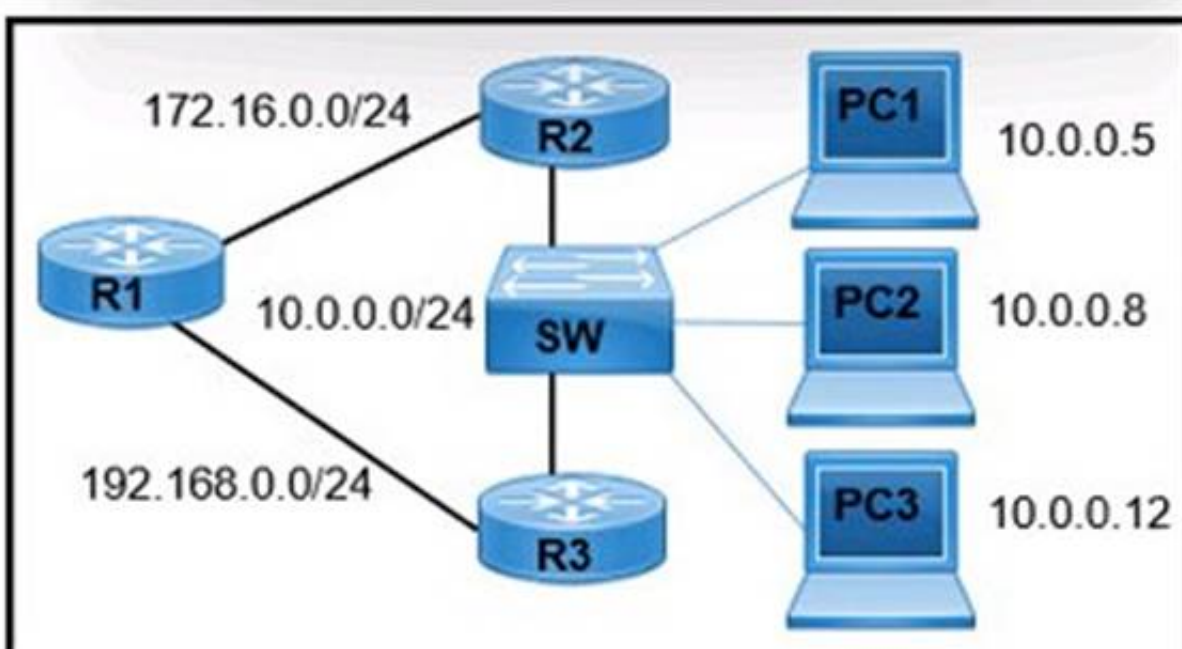
Answer: A

Explanation:

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

#### NEW QUESTION 627

- (Topic 4)  
 Refer to the exhibit.



A network engineer must configure R1 so that it sends all packets destined to the 10.0.0.0/24 network to R3, and all packets destined to PC1 to R2. Which configuration must the engineer implement?

A)  
 R1(config)#ip route 10.0.0.0 255.255.255.0 172.16.0.2  
 R1(config)#ip route 10.0.0.5 255.255.255.255 192.168.0.2



B)

```
R1(config)#ip route 10.0.0.0 255.255.0.0 172.16.0.2
R1(config)#ip route 10.0.0.5 255.255.255.255 192.168.0.2
```

C)

```
R1(config)#ip route 10.0.0.0 255.255.255.0 192.168.0.2
R1(config)#ip route 10.0.0.5 255.255.255.255 172.16.0.2
```

D)

```
R1(config)#ip route 10.0.0.0 255.255.0.0 192.168.0.2
R1(config)#ip route 10.0.0.0 255.255.255.0 172.16.0.2
```

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

**Answer:** C

#### NEW QUESTION 629

- (Topic 4)

A switch is forwarding a frame out of an interface except the interface that received the frame. What is the technical term for this process?

- A. ARP
- B. CDP
- C. flooding
- D. multicast

**Answer:** C

#### NEW QUESTION 630

- (Topic 4)

What is the put method within HTTP?

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

**Answer:** D

#### NEW QUESTION 631

- (Topic 4)

What is the role of community strings in SNMP operations?

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

**Answer:** B

#### NEW QUESTION 635

- (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 638

- (Topic 4)

Refer to the exhibit.

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

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

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

Answer: A

NEW QUESTION 640

- (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 644

DRAG DROP - (Topic 4)  
Drag and drop the HTTP methods used with REST-Based APIs from the left onto the descriptions on the right.

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

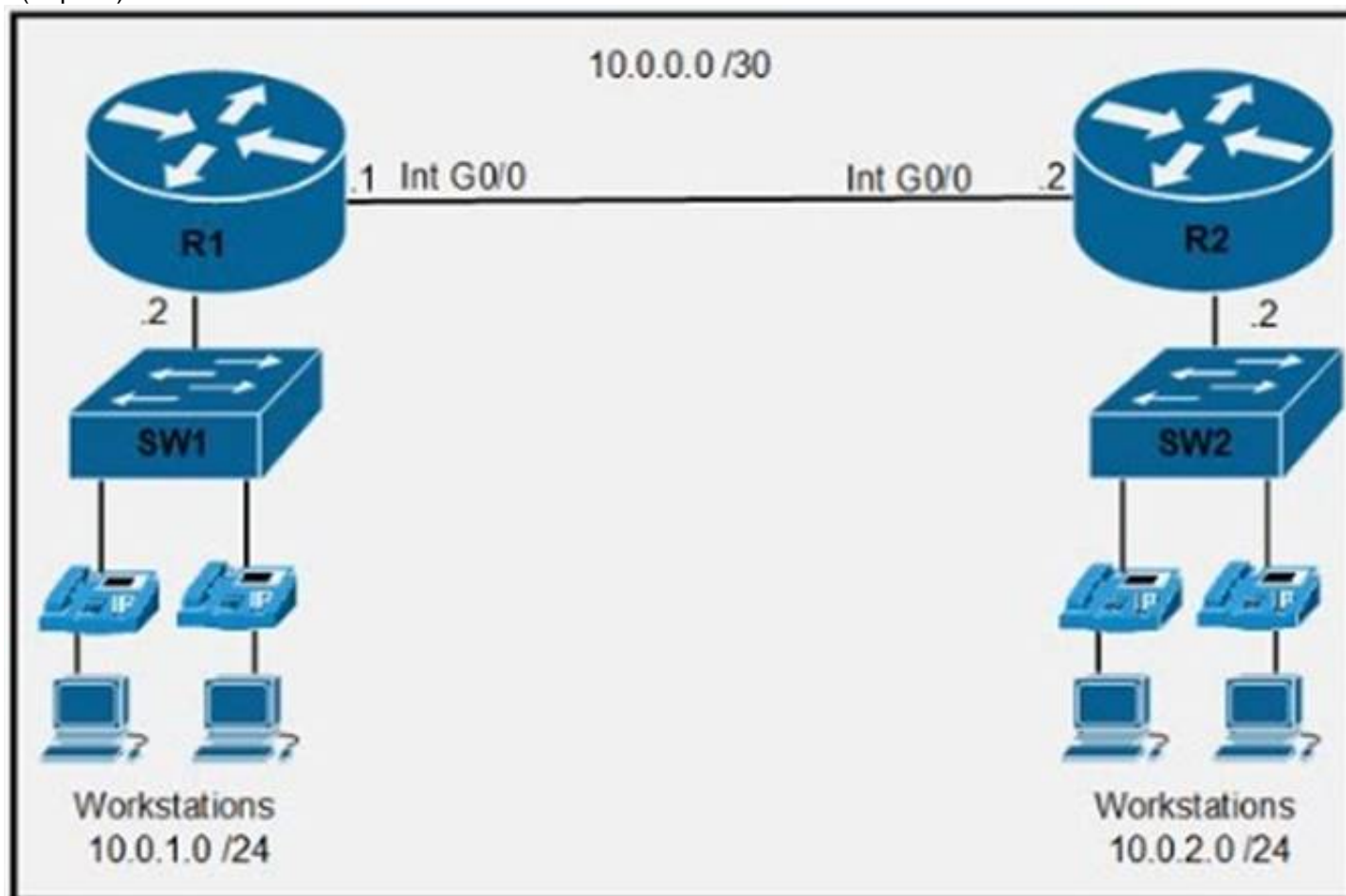
Answer: A

Explanation:

DELETE	POST
GET	DELETE
POST	PATCH
PATCH	PUT
PUT	GET

#### NEW QUESTION 645

- (Topic 4)



Refer to the exhibit. An engineer is asked to configure router R1 so that it forms an OSPF single-area neighbor relationship with R2. Which command sequence must be implemented to configure the router?

- ☐ router ospf 10  
network 10.0.0.0 0.0.0.3 area 0  
network 10.0.2.0 0.0.0.255 area 0
- ☐ router ospf 10  
network 10.0.0.0 0.0.0.3 area 0  
network 10.0.1.0 0.0.0.255 area 0
- ☐ router ospf 100  
network 10.0.0.0 0.0.0.3 area 0  
network 10.0.2.0 255.255.255.0 area 0
- ☐ router ospf 100  
network 10.0.0.0 0.0.0.252 area 0  
network 10.0.1.0 0.0.0.255 area 0

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

Answer: B

#### NEW QUESTION 646

- (Topic 4)



```
Cat9300-1# show interface gi1/0/1 switchport
Name: Gi1/0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 321 (VLAN0321)
Administrative Native VLAN tagging: enabled
Trunking VLANs Enabled: 100,200,300
Pruning VLANs Enabled: 2-1001
```

Refer to the exhibit.

A network administrator configures an interface control re switch so that it connects to interface Gi1/0/1 on switch Cat9300-1. Which configuration must be applied to the new interface?

A)

```
switchport mode trunk
switchport trunk native vian 321
switchport trunk allowed vian 100,200,300
```

B)

```
switchport trunk encapsulation dot1q
switchport trunk native vian 321
switchport trunk allowed vian 100-300
```

C)

```
switchport mode dynamic desirable
switchport trunk native vian 321
switchport trunk allowed vian 100,200,300
```

D)

```
switchport nonegotiate
switchport access vian 321
switchport trunk allowed vian except 2-1001
```

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

**Answer:** A

#### NEW QUESTION 651

- (Topic 4)

Refer to the exhibit.

```
    "attributes": {
      "pwd": "password1",
      "firstName": "Abraham",
      "lastName": "Lincoln",
      "phone": "5555551212",
      "email": "test@cisco.com"
    },
    "children": [{
      "aaaUserDomain": {
        "attributes": {
          "name": "ExampleCisco"
        },
        "children": [{
          "aaaUserRole": {
            "attributes": {
              "name": "admin"
            }
          }
        ]
      }
    ]
  }
]
```

How many objects are present in the given JSON-encoded data?

- A. one
- B. four
- C. seven
- D. nine

Answer: B

NEW QUESTION 655

- (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 657

DRAG DROP - (Topic 4)

Drag and drop the TCP or UDP details from the left onto their corresponding protocols on the right.

used to reliably share files between devices

appropriate for streaming operations with minimal latency

provides best-effort service

supports reliable data transmission

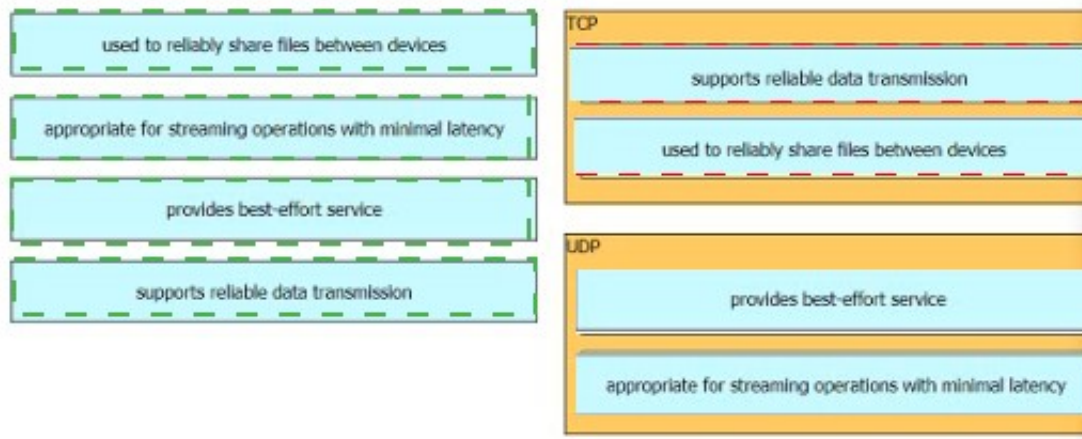
TCP

UDP

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



#### NEW QUESTION 659

- (Topic 4)

What are two characteristics of a small office / home office connection environment? (Choose two.)

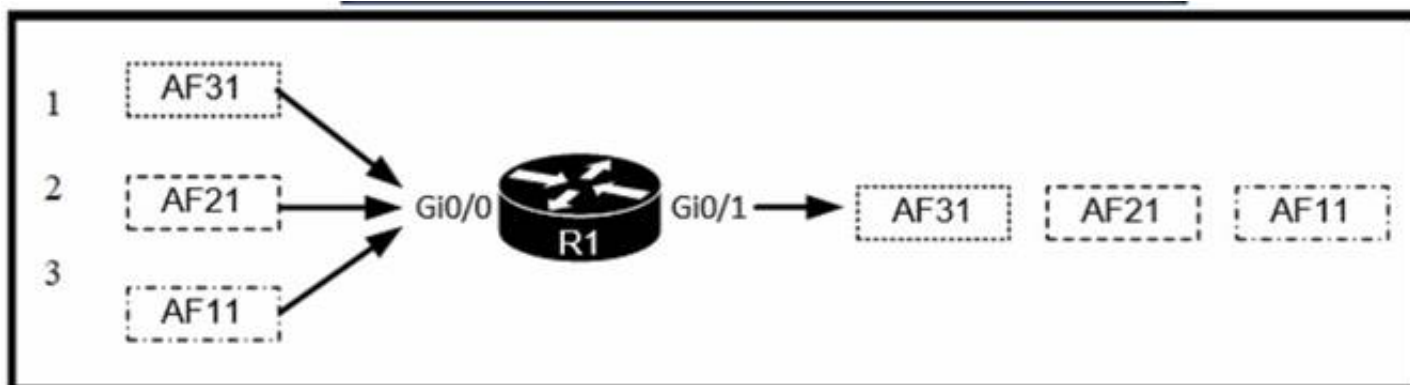
- A. It requires 10Gb ports on all uplinks.
- B. It supports between 50 and 100 users.
- C. It supports between 1 and 50 users.
- D. It requires a core, distribution, and access layer architecture.
- E. A router port connects to a broadband connection.

**Answer:** CE

#### NEW QUESTION 664

- (Topic 4)

Refer to the exhibit.



Which per-hop QoS behavior is R1 applying to incoming packets?

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

**Answer:** D

#### Explanation:

R1 is applying policing to incoming packets. Policing is a QoS mechanism that limits the rate of traffic flow by dropping or remarking packets that exceed the configured rate limit. In this case, R1 is applying policing to incoming packets on interface G0/0 and G0/1. The exhibit shows that R1 is configured to police traffic at a rate of AF31, AF21, and AF11. This means that R1 is limiting the rate of traffic flow for these three traffic classes .

References:

? : Cisco CCNA Certification Guide - Chapter 16: Quality of Service (QoS)

? : Cisco IOS Quality of Service Solutions Configuration Guide - Configuring Class- Based Policing

#### NEW QUESTION 667

DRAG DROP - (Topic 4)

Drag and drop the wireless architecture benefits from the left onto the architecture types on the right.



Drag and drop the wireless architecture benefits from the left onto the architecture types on the right.

Appropriate for a small-business environment.

Work is divided between the access point and the controller.

The access points transmit beacon frames.

Supports per device configuration and management.

Uses the CAPWAP tunneling protocol.

Split-MAC

Autonomous

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Drag and drop the wireless architecture benefits from the left onto the architecture types on the right.

Appropriate for a small-business environment.

Work is divided between the access point and the controller.

The access points transmit beacon frames.

Supports per device configuration and management.

Uses the CAPWAP tunneling protocol.

Split-MAC

Work is divided between the access point and the controller.

Supports per device configuration and management.

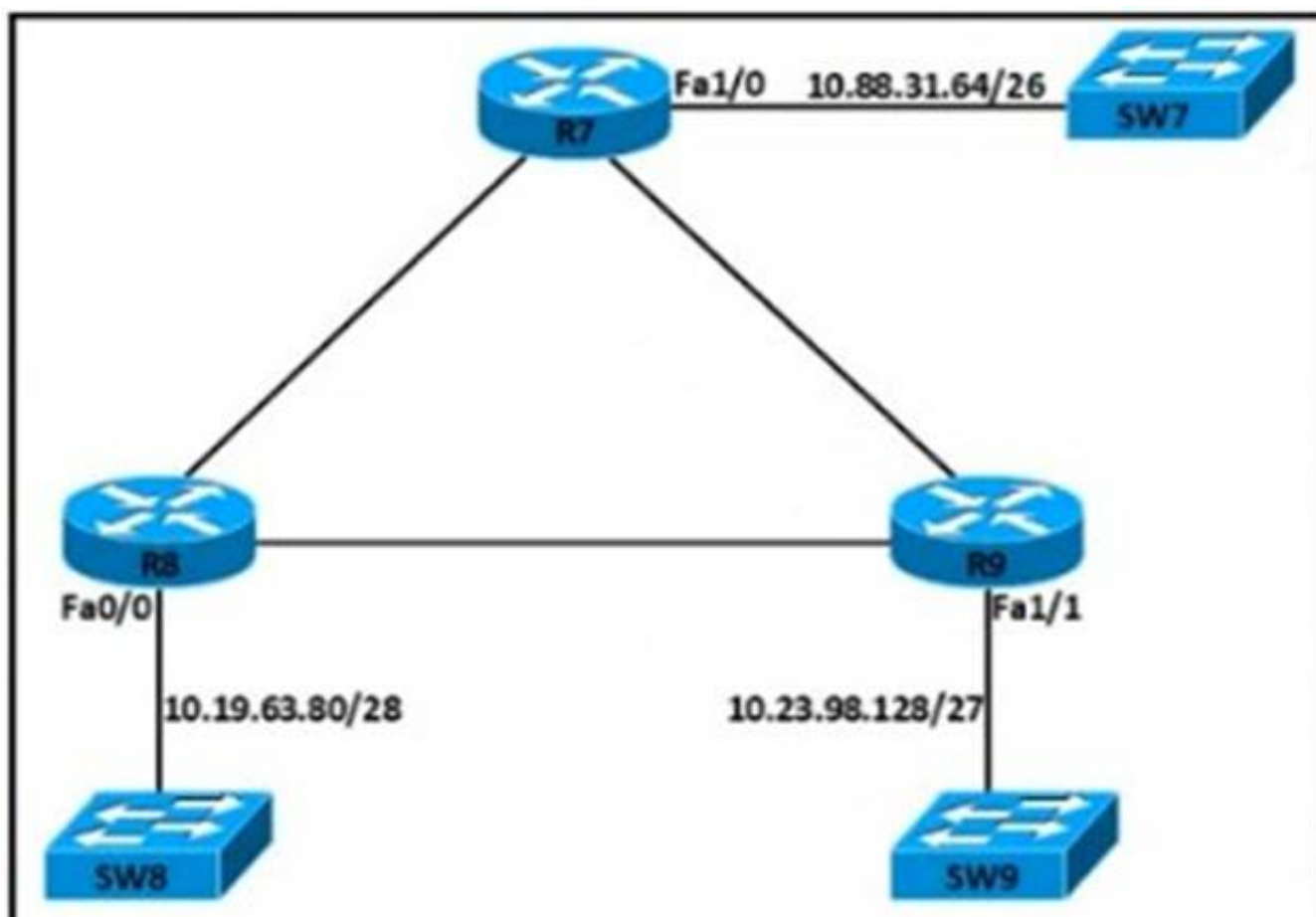
Uses the CAPWAP tunneling protocol.

Autonomous

The access points transmit beacon frames.

Appropriate for a small-business environment.

NEW QUESTION 668  
- (Topic 4)



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

☐ R7#  
 interface FastEthernet1/0  
 ip address 10.88.31.126 255.255.255.240

R8#  
 interface FastEthernet0/0  
 ip address 10.19.63.94 255.255.255.192

R9#  
 interface FastEthernet1/1  
 ip address 10.23.98.158 255.255.255.248

☐ R7#  
 interface FastEthernet1/0  
 ip address 10.88.31.127 255.255.255.240

R8#  
 interface FastEthernet0/0  
 ip address 10.19.63.95 255.255.255.192

R9#  
 interface FastEthernet1/1  
 ip address 10.23.98.159 255.255.255.248

☒ R7#  
 interface FastEthernet1/0  
 ip address 10.88.31.126 255.255.255.192

R8#  
 interface FastEthernet0/0  
 ip address 10.19.63.94 255.255.255.240

R9#  
 interface FastEthernet1/1  
 ip address 10.23.98.158 255.255.255.224

☐ R7#  
 interface FastEthernet1/0  
 ip address 10.88.31.127 255.255.255.192

R8#  
 interface FastEthernet0/0  
 ip address 10.19.63.95 255.255.255.240

R9#  
 interface FastEthernet1/1  
 ip address 10.23.98.159 255.255.255.224

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

Answer: C

#### NEW QUESTION 671

- (Topic 4)

What is the purpose of configuring different levels of syslog for different devices on the network?

- A. to rate-limit messages for different severity levels from each device
- B. to set the severity of syslog messages from each device
- C. to identify the source from which each syslog message originated
- D. to control the number of syslog messages from different devices that are stored locally

**Answer: B**

#### NEW QUESTION 676

- (Topic 4)

The address block 192.168.32.0/24 must be subnetted into smaller networks. The engineer must meet these requirements:

- Create 8 new subnets
- Each subnet must accommodate 30 hosts
- Interface VLAN 10 must use the last usable IP in the first new subnet
- A Layer 3 interface is used

Which configuration must be applied to the interface?

A)

```
no switchport mode access
ip address 192.168.32.62 255.255.255.240
```

B)

```
switchport
ip address 192.168.32.65 255.255.255.240
```

C)

```
no switchport mode trunk
ip address 192.168.32.97 255.255.255.224
```

D)

```
no switchport
ip address 192.168.32.30 255.255.255.224
```

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

**Answer: D**

#### NEW QUESTION 678

- (Topic 4)

Which command do you enter so that a switch configured with Rapid PVST+ listens and learns for a specific time period?

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

**Answer: D**

#### Explanation:

Forward time : Determines how long each of the listening and learning states last before the port begins forwarding.

Switch(config)# [ no ] spanning-tree vlan vlan\_ID forward-time forward\_time Configures the forward time of a VLAN. The forward\_time value can be from 4 to 30 seconds. <https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst4500/12-2/15-02SG/configuration/guide/config/spantree.html#56177>

#### NEW QUESTION 680

- (Topic 4)

Which device separates networks by security domains?

- A. firewall
- B. access point
- C. intrusion protection system
- D. wireless controller

**Answer: A**

#### Explanation:

Firewalls are devices that are used to separate networks into different security domains. They act as a barrier between two networks and control the flow of traffic between them. Firewalls use a set of rules to determine what types of traffic are allowed to pass through and what is blocked. This helps protect a network from malicious traffic and unauthorized access. Additionally, firewalls can be configured to log traffic and provide additional security measures such as packet filtering and stateful inspection.

**NEW QUESTION 681**  
DRAG DROP - (Topic 4)  
Drag and drop the WLAN components from the left onto the component details on the right.

access point	manages access points
virtual interface	provides Wi-Fi devices with a connection to a wired network
dynamic interface	used for out-of-band management
service port	used for guest authentication
wireless LAN controller	applied to the WLAN for wireless client communication

- A. Mastered  
B. Not Mastered

Answer: A

Explanation:

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

**NEW QUESTION 686**  
.....



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