



**Vendor: Cisco**

**Exam Code: 400-101**

**Exam Name: CCIE Routing and Switching Written Exam v5.1**

**Version: Demo**

**QUESTION 1**

Refer to the exhibit. Which two statements about this topology are true? (Choose two)

```

R5#show ip eigrp topology all
IP-EIGRP Topology Table for AS(100)/ID(192.168.45.5)

Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
       r - reply Status, s - sia Status

P 192.168.45.0/24, 1 successors, FD is 281600, serno 1
  via Connected, FastEthernet0/1
P 192.168.35.0/24, 1 successors, FD is 281600, serno 7
  via Connected, FastEthernet0/0
P 192.168.12.0/24, 2 successors, FD is 309760, serno 9
  via 192.168.35.3 (309760/284160), FastEthernet0/0
  via 192.168.45.4 (309760/284160), FastEthernet0/1
P 192.168.24.0/24, 1 successors, FD is 307200, serno 2
  via 192.168.45.4 (307200/281600), FastEthernet0/1
  via 192.168.35.3 (332800/307200), FastEthernet0/0
P 192.168.23.0/24, 1 successors, FD is 307200, serno 8
  via 192.168.35.3 (307200/281600), FastEthernet0/0
  via 192.168.45.4 (332800/307200), FastEthernet0/1
P 172.16.1.1/32, 2 successors, FD is 437760, serno 10
  via 192.168.35.3 (437760/412160), FastEthernet0/0
  via 192.168.45.4 (437760/412160), FastEthernet0/1
    
```

- A. Destination 192.168.23.0/24 is unable to use interface Fa0/1 as the LFA.
- B. Interface FastEthernet 0/1 is the primary path to destination 192.168.23.0/24.
- C. The FastEthernet 0/0 and FastEthernet 0/1 interfaces are used as LFA for destination 192.168.23.0/24.
- D. Only interface FastEthernet 0/1 are used as the LFA for destination 192.168.23.0/24.
- E. Interface FastEthernet 0/0 is the primary path to destination 192.168.23.0/24.
- F. Only FastEthernet 0/0 is used as the LFA to destination 192.168.23.0/24.

**Correct Answer:** AE

**QUESTION 2**

Which IPv4 feature can limit indiscriminate flooding of multicast traffic on a VLAN?

- A. PIM Snooping
- B. IGMP Filtering
- C. MLD Filtering
- D. IGMP Snooping

**Correct Answer:** D

**QUESTION 3**

Which statement about Auto-RP is true?

- A. All interface s must be configured in sparse mode .
- B. All interfaces must be configured in sparse-dense mode.
- C. All interfaces must be configured in dense mode .
- D. An RP that it tied to a loopback address must be configured.

**Correct Answer:** D

**QUESTION 4**

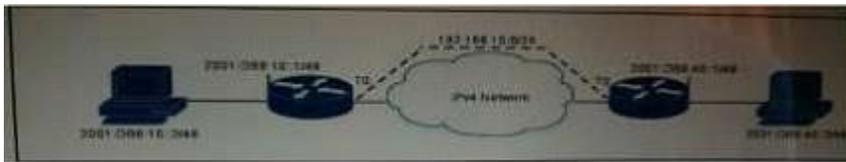
Which Catalyst switch feature configured on a per-port basis can be used to prevent attached hosts from joining select multicast group?

- A. IGMP Filtering
- B. MLD Filtering
- C. IGMP Snooping
- D. PIM Snooping

**Correct Answer:** A

**QUESTION 5**

Refer to the exhibit. Which IPv6 migration method is in use on this network?



- A. 6to4 tunnel
- B. NAT-PT
- C. ISATAP tunnel
- D. dual stack

**Correct Answer:** B

**QUESTION 6**

DRAG DROP

Drag each statement about EIGRP neighbor peering on the left to the matching peering type on the right

Forms a half-mesh topology through peers configured with the "unicast-listen" keyword.	Multicast
The default EIGRP peering method.	OTP point-to-point
Uses the "neighbor" statement on a non-passive interface with default options.	OTP route-reflector
Uses the "remote" keyword in the neighbor statement to form peerings.	Unicast

**Correct Answer:**

Forms a half-mesh topology through peers configured with the "unicast-listen" keyword.	The default EIGRP peering method.
The default EIGRP peering method.	Uses the "remote" keyword in the neighbor statement to form peerings.
Uses the "neighbor" statement on a non-passive interface with default options.	Forms a half-mesh topology through peers configured with the "unicast-listen" keyword.
Uses the "remote" keyword in the neighbor statement to form peerings.	Uses the "neighbor" statement on a non-passive interface with default options.

**QUESTION 7**

Refer to the exhibit. If R1 and R2 cannot establish an OSPF neighbor relationship, which two action can you take to? (Choose two)

```

interface Dialer1
  mtu 1492
  ip address negotiated
  encapsulation ppp
  dialer pool 1
  ppp authentication pap

router ospf 1
  network 0.0.0.0 255.255.255.255 area 0

interface GigabitEthernet0/1
  no ip address
  pppoe enable group pppool

interface Virtual-Template1
  mtu 1492
  ip unnumbered loopback1
  peer default ip address pool po
  ppp authentication pap

router ospf 1
  network 0.0.0.0 255.255.255.255
  ip local pool pool1 192.168.1.3 192
    
```

- A. Configuration PPP authentication under the R2 Gigabitethernet 0/1 interface
- B. Change the ip local pool command on R2 to ip local pool pool! 192 168 12 192 168 1.5
- C. Configuration R1 to send the username and password on the Dialer 1 interface
- D. Change the PPP authentication to CHAP authentication
- E. Configure PPP encapsulation under the R1 virtual-template interface

**Correct Answer: CE**

**QUESTION 8**

Refer to the exhibit. Which tag will be applied to the 172.16.50.0/24 route?

```
ip prefix-list ccie1 seq 5 permit 172.16.0.0/17 le 24
ip prefix-list ccie2 seq 5 permit 172.16.128.0/17 le 24
ip prefix-list ccie3 seq 5 permit 172.17.128.0/17 le 24

route-map ccie permit 10
  match ip address prefix-list ccie1
  set tag 10
route-map ccie permit 20
  match ip address prefix-list ccie2
  set tag 20
route-map ccie permit 30
  match ip address prefix-list ccie3
  set tag 30
route-map ccie permit 40
  set tag 40
```

- A. 10
- B. 20
- C. 30
- D. 40

**Correct Answer:** A

#### QUESTION 9

Which two statements about VSS are true? (Choose two.)

- A. It requires physical switches to be collocated.
- B. It is dependent on spanning-tree.
- C. It requires three IP addresses per ULAN.
- D. Each VSS has a single management IP address
- E. It can eliminate the need for HSRP.

**Correct Answer:** DE

#### QUESTION 10

Which two statements about IPv6 PIM are true? (Choose two)

- A. PIM-SM and PIM-SSM can be configured in the same network
- B. PIM-SM bases its RPF checks on the unicast routing table
- C. It supports both sparse mode and dense mode
- D. It supports both Auto-RP and BSR
- E. It works in conjunction with unicast routing protocols to send and receive multicast updates

**Correct Answer:** AB

**QUESTION 11**

Which two statements about Cisco Express Forwarding are true? (Choose two)

- A. The FIB table and the adjacency table reside on the line cards when distributed Cisco Express Forwarding is enabled.
- B. Layer 2 next-hop address information is maintained in the adjacency table.
- C. The FIB table and the adjacency table reside on the line cards when Cisco Express Forwarding is enabled.
- D. Layer 2 next-hop address information is maintained in the FIB table.
- E. The FIB table resides on the route processor and the adjacency table resides on the line cards when Cisco Express Forwarding is enabled.

**Correct Answer:** AB

**QUESTION 12**

Which two statements about SNMP inform requests are true? (choose two)

- A. For a particular event, an SNMP inform may be sent more than once
- B. SNMP informs are sent to the SNMP manager and are acknowledged
- C. SNMP informs are sent to the SNMP manager without acknowledgement
- D. For a particular event, an SNMP inform is sent only once
- E. SNMP informs are sent to the SNMP agent without acknowledgement
- F. SNMP informs consume less bandwidth than SNMP traps

**Correct Answer:** AC

**QUESTION 13**

Which routing protocol is not supported with VRF-lite?

- A. IS-IS
- B. OSPF
- C. EIGRP
- D. BGP

**Correct Answer:** A

**QUESTION 14**

Which two statements about PfR are true? (Choose two)

- A. It manages traffic classes
- B. It provides a narrower scope of route control than OER
- C. It provides intelligent route control on a per-application basis
- D. It supports split tunneling and spoke-to-spoke links.
- E. It always prefers the least cost path.

**Correct Answer:** AE

**QUESTION 15**

Which statement about EIGRP request packets is true?

- A. They determine whether a destination is reachable
- B. They are transmitted unreliably
- C. They are transmitted via broadcast
- D. They are sent in response to queries

**Correct Answer: B**

**QUESTION 16**

Which two authentication mechanisms are supported by SNMPv3? (Choose two)

- A. SHA
- B. username without password
- C. username and password
- D. DES
- E. a community string
- F. 256-bit AES

**Correct Answer: AC**

**QUESTION 17**

Which two statements about DMVPN are true? (Choose two.)

- A. It flows both the hub and the spokes to use dynamic IP addresses.
- B. It supports multicast and QoS within tunnels.
- C. It provides a routable interface for terminating IPsec tunnels.
- D. It is a tunnel-less VPN technology.
- E. It is an open standard.
- F. It uses automatic IPsec triggering to build IPsec tunnels.

**Correct Answer: BF**

**QUESTION 18**

Which two statements about the Cisco Express Forwarding glean adjacency type are true? (Choose two)

- A. Packets destined for the interface are discarded and the prefix is checked.
- B. The router FIB table maintains a prefix for the subnet instead of individual hosts.
- C. The adjacency database is used to gather specific prefixes when packets are destined to a specific host.
- D. Packets destined for the interface can be dropped, which provide a form of access filtering.
- E. Packets destined for the interface are discarded and the prefix check is skipped.

**Correct Answer: BC**

**QUESTION 19**

Which IPv4 feature prevents multicast joins on a per-port basis?

- A. MLD filtering
- B. IGMP filtering
- C. IGMP snooping
- D. PIM snooping

**Correct Answer:** B

**QUESTION 20**

Which two statements about BGP PIC are true? (Choose two)

- A. PIC Core supports fast convergence with external neighbor links.
- B. It is prefix-dependent for Internet routes.
- C. When the path to a distant PE router changes, PIC is independent of the number of VRFs on the router.
- D. It achieves subsecond convergence in the BGP FIB.
- E. PIC Edge provides fast convergence when an external neighbor node fails.

**Correct Answer:** AD

**QUESTION 21**

Refer to the exhibit. What are two effects of the given configuration? (Choose two)

```
interface FastEthernet0/0
  ip address 192.168.12.1 255.255.255.224

router eigrp 100
  passive-interface FastEthernet0/0
  network 192.168.12.0
  no auto-summary
```

- A. The router will fail to form neighbor adjacencies over all EIGRP interfaces except F0/0
- B. The router will fail to form neighbor adjacencies over interface F0/0
- C. The router will advertise the 192.168.12.0/27 network
- D. The router will manually summarize the 192.168.12.0/27 network
- E. Auto-summarization will be enabled on the F0/0 interface

**Correct Answer:** BC