

Vendor: Cisco

Exam Code: 400-101

Exam Name: CCIE Routing and Switching Written v5.0

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QUESTION 1

Refer to the exhibit.

```
hostname R1
interface Loopback0
 ip address 192.168.1.1 255.255.255.0
interface FastEthernet0/0
 ip address 192.168.12.1 255.255.255.0
 duplex auto
 speed auto
router ospf 1
 log-adjacency-changes
 network 192.168.1.0 0.0.0.255 area 0
 network 192.168.12.0 0.0.0.255 area 0
 distribute-list 1 in
 access-list 1 deny 192.168.2.1

hostname R2
interface Loopback0
 ip address 192.168.2.1 255.255.255.0
interface FastEthernet0/0
 ip address 192.168.12.2 255.255.255.0
router ospf 1
 log-adjacency-changes
 network 192.168.2.0 0.0.0.255 area 0
 network 192.168.12.0 0.0.0.255 area 0
```

Which statement about the effect of this configuration is true ?

- A. The 192.168.2.1/24 network is summarized and advertised as 192.168.2.0/24
- B. The 192.168.2.1/32 network appears in the route table on R1 ,but it is missing from its OSPF database.
- C. The 192.168.2.1/32 network is missing from the OSPF database and the route table on R1.
- D. The 192.168.2.1/32 network appears in the R1 OSPF database , but it is missing from its route table.

Correct Answer: D

Explanation

Explanation/Reference:

QUESTION 2

Refer to the exhibit.

```
interface tunnel 1
 tunnel source ethernet 0
 tunnel mode ipv6ip isatap
 ipv6 address 2001:DB8::/64 eui-64
```

What is wrong with the configuration of this tunnel interface ?

- A. ISATAP tunnels cannot use the EUI-64 address format.
- B. The tunnel source of an ISATAP tunnel must always point to a loopback interface.
- C. Router advertisements are disabled on this tunnel interface.
- D. No tunnel destination has been specified.

Correct Answer: C

Explanation

QUESTION 3

Which two statements about IGMP filtering are true?

- A. It eliminates the need for a multicast RP.
- B. It can be implemented on Layer-3 routed ports using the ipigmp access-list command.
- C. It allows Anycast RP to operate within a single AS.
- D. It supports IGMPv3 traffic only
- E. It can be implemented on Layer-2 switchports using IGMP profiles.

Correct Answer: BC

Explanation

Explanation/Reference:

QUESTION 4

What are two ways DHCPv6 guard can mitigate man-in-the-middle attacks?

- A. An interface in the server device role can use ACLs to filter authorized servers.
- B. An interface in the server device role can drop all DHCPv6 server messages.
- C. An interface in the client device role can use ACLs to filter authorized servers.
- D. An interface in the server device role can use prefix-lists to filter authorized DHCP reply messages.
- E. An interface in the client device role blocks all DHCPv6 server messages by default.

Correct Answer: CE

Explanation

QUESTION 5

Which statement is true about trunking?

- A. DTP only supports autonegotiation on 802.1q and does not support autonegotiation for ISL
- B. Cisco switches that run PVST+ do not transmit BPDU on nonnative VLANs when using a
- C. dot1q trunk.
- D. DTP is a point-to-point protocol.
- E. When removing VLAN 1 from a trunk, management traffic such as CDP is no longer passed in that VLAN.

Correct Answer: C

Explanation

Explanation/Reference:

QUESTION 6

Which tunneling method can transmit IPv6 traffic over an MPLS infrastructure?

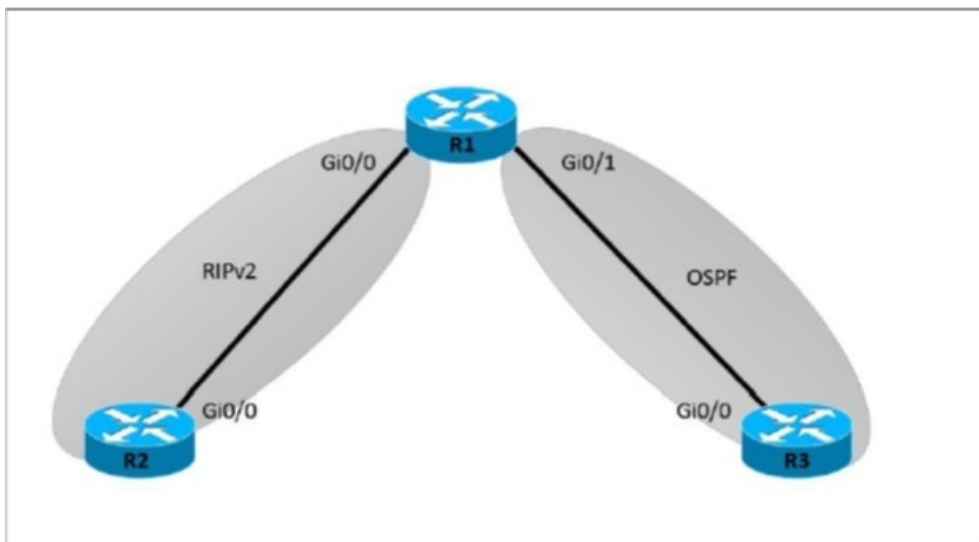
- A. 6RD
- B. ISATAP
- C. 6to4
- D. 6PE

Correct Answer: D

Explanation

QUESTION 7

Refer to the exhibit.



- A. R1 is performing mutual redistribution, but OSPF routes from R3 are unable to reach R2.
- B. The RIP version supports only classful subnet masks.
- C. R3 and R1 have the same router ID
- D. R1 requires a seed metric to redistribute RIP.
- E. R1 and R3 have an MTU mismatch.
- F. R2 is configured to offset OSPF routes with a metric of 16.
- G. R1 is filtering OSPF routes when redistributing into RIP.

Correct Answer: BDE

Explanation

Explanation/Reference:

QUESTION 8

Which three factors does Cisco PFR use to calculate the best exit path?(Choose three)

- A. Reachability
- B. Delay
- C. Quality of service
- D. Packet size
- E. Administrative distance
- F. Loss

Correct Answer: ABF

Explanation

QUESTION 9

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

Explanation

Explanation/Reference:

QUESTION 10

Refer to the exhibit.

```
Router1#show run
Building configuration...

ip cef
no ip domain loopup

pseudowire-class R1toR2
 ip local interface Loopback0

interface Loopback0
 ip address 10.1.1.1 255.255.255.255

interface FastEthernet1/0
 no snmp trap link-status
 no cdp enable
 xconnect 10.10.12.1 12 pw-class R1toR2

end
```

You are configuring Router1 and Router2 for L2TPv3 tunneling. Which two additional configurations are required to enable Router1 and Router2 to establish the

tunnel?(choose two)

- A. Router1 must be configured to encapsulate traffic by using L2TPv3 under the pseudowire-class R1toR2.
- B. An IP address must be configured on interface FastEthernet1/0 on Router1.
- C. Loopback 0 on Router1 must be advertised to Router2.
- D. Cisco Express Forwarding must be disabled on Router1.
- E. Cisco Discovery Protocol must be enabled on interface FastEthernet1/0 on Router1.

Correct Answer: AC

Explanation

Explanation/Reference:

QUESTION 11

Refer to the exhibit .

```
R1#show debug
Condition 1: interface Fa0/0 (1 flags triggered)
  Flags: Fa0/0
Condition 2: ip 192.168.12.1 (0 flags triggered)
Condition 3: username cisco (0 flags triggered)
```

If R1 generated this response to the show debug command, which statement about its debug output is true?

- A. As soon as interface Fa0/0 becomes active, it generate debug output because one condition has been met.
- B. When debug output is generated, only the user Cisco is permitted to view it.
- C. R1 generates debug output as soon as IP address 192.168.0.0 is applied to interface Fa0/0.
- D. R1 generates debug output as soon as all three conditions are met.

Correct Answer: A

Explanation

Explanation/Reference:

QUESTION 12

Which TCP feature allows a client to request a specific packet that was lost?

- A. Selective acknowledge
- B. Flow control
- C. Fast recovery
- D. Sliding window

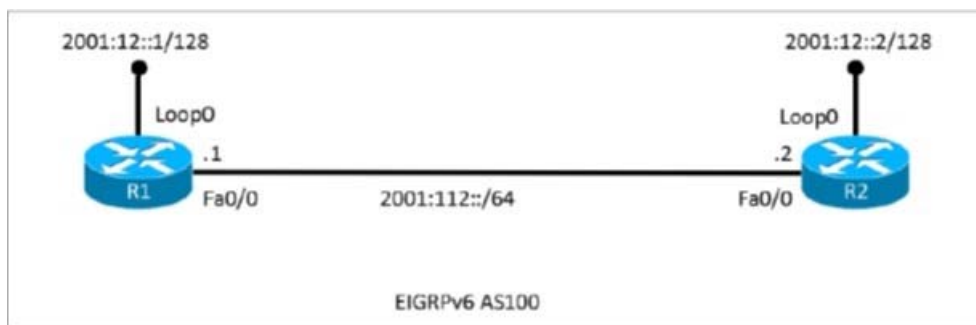
Correct Answer: A

Explanation

Explanation/Reference:

QUESTION 13

Refer to the exhibit.



Which EIGRP routes will appear in the routing table of R2?

- A. 2001:12::/64
- B. 2001:112::/64, 2001:12::1/64
- C. 2001:112::/64, 2001:12:1/128
- D. 2001:12::1/128

Correct Answer: D

Explanation

QUESTION 14

Which description of Infrastructure as a Service is true?

- A. a cloud service that delivers on-demand resources like networking and storage.
- B. a cloud service that delivers on-demand internet connection between sites
- C. a cloud service that delivers on-demand software services on a subscription
- D. a cloud service that delivers on-demand internet connection between sites

Correct Answer: A

Explanation

QUESTION 15

Which TCP feature allows a client to request a specific packet that was lost?

- A. Flow control
- B. Sliding window
- C. Fast recovery
- D. Selective acknowledgment

Correct Answer: D

Explanation

QUESTION 16

Exhibit:

SPANTREE-2-LOO PGUAR DBLOCK: No BPDUs were received on port FastEthernet 0/1 in VLAN 10. Moved to loop-inconsistent state

Refer to the exhibit. While troubleshooting an issue with a blocked switch port, you find this error in the switch log. Which action should you take first to locate the problem?

- A. Execute the show interface command to check FastEthernet 0/1
- B. Check the attached switch for a BPDU filter
- C. Test the link for unidirectional failures.
- D. Check the attached switch for an interface configuration issue.

Correct Answer: B

Explanation

Explanation/Reference:

QUESTION 17

Drag and drop the BGP attribute on the left to the correct category on the right.

Select and Place:

Originator ID	BGP Well-Known Mandatory Attribute
Community	Target
Local-Pref	Target
AS_path	BGP Well-Known Discretionary Attribute
Aggregator	Target
Next-Hop	BGP Optional Nontransitive Attribute
	Target

Correct Answer:

Community	BGP Well-Known Mandatory Attribute
	AS_path
	Next-Hop
Aggregator	BGP Well-Known Discretionary Attribute
	Local-Pref
	BGP Optional Nontransitive Attribute
	Originator ID

Explanation

Explanation/Reference:

BGP Well-Known Mandatory Attribute
AS_path
Next-Hop
BGP Well-Known Discretionary Attribute
Local-Pref
BGP Optional Nontransitive Attribute
Originator ID

QUESTION 18

Drag and drop the NAT operations on the left into the correct sequential order on the right.

Select and Place:

Drag and drop the NAT operations on the left into the correct sequential order on the right.	
Check the IP routing table.	step 1
Check the outbound access list.	step 2
Check the inbound access list.	step 3
Inspect CBAC.	step 4
Translate inside local to outside global.	step 5
Check the policy routing	step 6

Correct Answer:

Drag and drop the NAT operations on the left into the correct sequential order on the right.	
	Check the inbound access list.
	Check the policy routing
	Check the IP routing table.
	Translate inside local to outside global.
	Check the outbound access list.
	Inspect CBAC.

Explanation

Explanation/Reference:

QUESTION 19

Drag and drop the EIGRP query condition on the left to the corresponding action taken by the router on the right.

Select and Place:

The EIGRP table is missing an entry for the route	A feasible successor is installed in the routing table, and a reply
The EIGRP table lists the querying router as the successor for	The router replies with the successor information
The querying router is the successor, and no feasible successor exists	The router replies to the query with an unreachable message
the EIGRP table has a successor	The router send a query on all interfaces except the interface that had the successor route

Correct Answer:

	The EIGRP table lists the querying router as the successor for
	the EIGRP table has a successor
	The EIGRP table is missing an entry for the route
	The querying router is the successor, and no feasible successor exists

Explanation

Explanation/Reference:

QUESTION 20

Drag and drop the MPLS term on the left to the function it performs on the right.

Select and Place:

label	instructs the router to keep the label when forwarding
implicit-null	groups IP packets so that they are given the same forwarding treatment
explicit-null	identifies the group to which an IP packet belongs
penultimate hop popping	instructs the penultimate router to pop the label before
FEC	identifies a layer 2 MPLS connection from one device to
virtual circuit	pops an MPLS label off one hop before its final destination

Correct Answer:

	explicit-null
	FEC
	label
	implicit-null
	virtual circuit
	penultimate hop popping

Explanation

Explanation/Reference:

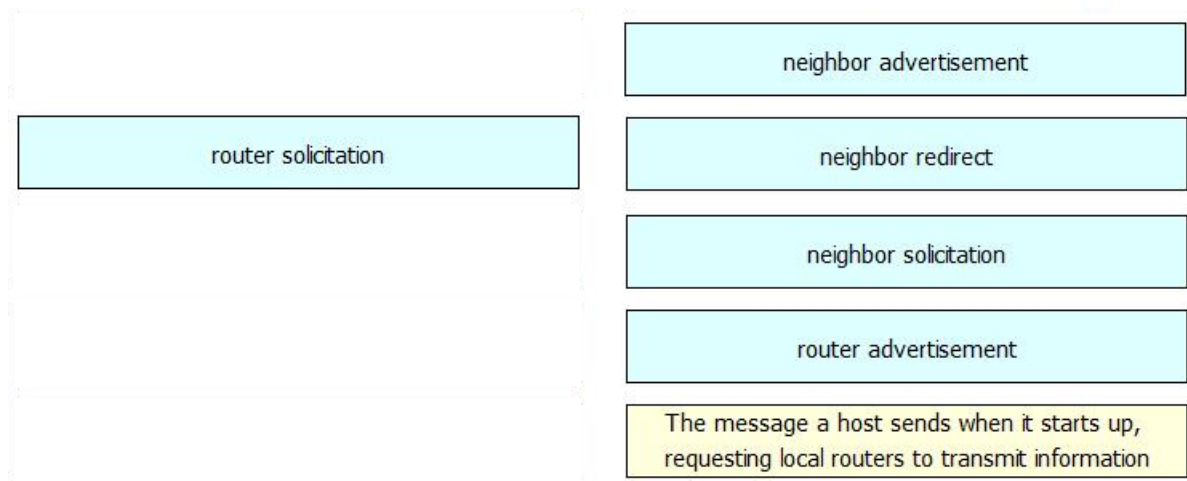
QUESTION 21

Drag and drop each IPv6 neighbor discovery message type on the left to the corresponding description on the right.

Select and Place:

neighbor redirect	The message a node uses to share its link-layer address
router solicitation	The message a node uses to notify hosts on the link of a better first-hop for a destination
router advertisement	The message a node uses to discover the link-local addresses of other nodes on the link
neighbor advertisement	The message a node uses to share information about its status and its local prefixes
neighbor solicitation	The message a host sends when it starts up, requesting local routers to transmit information

Correct Answer:



Explanation

Explanation/Reference:

QUESTION 22

What is the main function of VRF-lite?

- A. To segregate multiple routing tables on a single device.
- B. To connect different autonomous systems together to share routes.
- C. To allow device to use labels to make layer 2 path decisions.
- D. To route IPv6 traffic across an IPv4 backbone.

Correct Answer: A

Explanation

Explanation/Reference: