

Exam Questions 300-510

Implementing Cisco Service Provider Advanced Routing Solutions (SPRI)

<https://www.2passeasy.com/dumps/300-510/>



NEW QUESTION 1

<pre>PE-A vrf definition Customer-A rd 65000:1111 route-target export 65000:1111 route-target import 65000:1111 ! address-family ipv4 mdt default 233.0.0.1 mdt data 233.0.0.2 0.0.0.0 threshold 100 exit-address-family</pre>	<pre>PE-B vrf definition Customer-A rd 65000:1111 route-target export 65000:1111 route-target import 65000:1111 ! address-family ipv4 mdt default 233.0.0.1 mdt data 233.0.0.3 0.0.0.0 threshold 100 exit-address-family</pre>
--	--

Refer to the exhibit. Which tree does multicast traffic follow?

- A. shared tree
- B. MDT default
- C. source tree
- D. MDT voice

Answer: B

NEW QUESTION 2

<pre>R1 interface g0/0 ip address 192.168.1.1 255.255.255.0 ip router isis router isis net 49.0022.1111.1111.1111.00 area-password ciSCo</pre>
<pre>R2 interface g0/1 ip address 192.168.1.2 255.255.255.0 ip router isis router isis net 49.0022.1111.1111.1111.00 area-password ciSco</pre>

Refer to the exhibit. After you applied these configurations to routers R1 and R2, the two devices could not form a neighbor relationship. Which reason for the problem is the most likely?

- A. The two routers cannot authenticate with one another.
- B. The two routers have the same area ID.
- C. The two routers have the same network ID.
- D. The two routers have different IS-types.

Answer: C

NEW QUESTION 3

```
RP/0/0/CPU0:XR1#show run

route-policy AGGRO
  if destination in (10.0.0.0/8 ge 8 le 25) then
    set community (10:825)
  endif
  if destination in (10.2.0.0/24) then
    drop
  endif
  if destination in (10.1.0.0/24) then
    suppress-route
  endif
end-policy
!
!
router bgp 1
  bgp router-id 192.168.0.7
  address-family ipv4 unicast
    aggregate-address 10.0.0.0/8 route-policy AGGRO

RP/0/0/CPU0:XR1#
```

Refer to the exhibit. A network operator is working to filter routes from being advertised that are covered under an aggregate announcement. The receiving router of the aggregate announcement block is still getting some of the more specific routes plus the aggregate. Which configuration change ensures that only the aggregate is announced now and in the future if other networks are to be added?

- A. Configure the summary-only keyword on the aggregate command
- B. Set each specific route in the AGGRO policy to drop instead of suppress-route
- C. Filter the routes on the receiving router
- D. Set each specific route in the AGGRO policy to remove instead of suppress-route

Answer: A

NEW QUESTION 4

A network consultant is troubleshooting IS-IS instances to identify why a routing domains is having communication problems between the two instances. Which description of the possible cause of issues in the routing domain is true?

- A. The same interface cannot be advertised in two different IS-IS instances
- B. The IS-IS "ISP" and "ISP2" instances are unrelated and unable to intercommunicate
- C. The configured IS-IS NSEL value is not allowing the routing systems to establish a neighborhood
- D. The interface mode ip router is-is command was not included in the script

Answer: A

NEW QUESTION 5

```
Router 1:

interface TenGigE0/1
  point-to-point
  address-family ipv4 unicast
    fast-reroute per-prefix
    Fast-reroute per-prefix ti-lfa

R1#show isis fast-reroute 172.16.200.9/32

L2 172.16.200.9/32 [30/115]
  via 192.168.20.1, TenGigE0/1, R2, SRGB Base: 16000, Weight: 0
  FRR backup via 192.168.30.1, TenGigE0/2, R3, SRGB Base: 16000,
  Weight: 0, Metric 40
```

Refer to the exhibit. Router 1 is connected to router 2 on interface TenGigE0/1. Which interface provides the alternate path to 172.16.200.9/32 when the link between router 1 and router 2 goes down?

- A. TenGigE0/1 interface provides the alternate path
- B. A backup path must be statically installed
- C. TenGigE0/2 interface provides the alternate path
- D. A primary path must be manually installed

Answer: C

NEW QUESTION 6

What can be used to determine a path from the head-end to a tail-end router when implementing SR-TE with a head-end, with little information on the network topology?

- A. traffic controller
- B. path computation engine
- C. tail-end router
- D. SNMP server

Answer: B

NEW QUESTION 7

Which two conditions must be met before separate ISPs can provide interdomain multicast routing? (Choose two.)

- A. Each ISP must configure MSDP to connect its individual multicast administrative domain to the domains at other ISPs.
- B. Each ISP must dedicate a single router to handle multicast traffic between providers.
- C. Each ISP must replace its RP assignment with a global RP.
- D. Each ISP must configure its network to use PIM-DM.
- E. Each ISP must support intradomain multicast routing.

Answer: AE

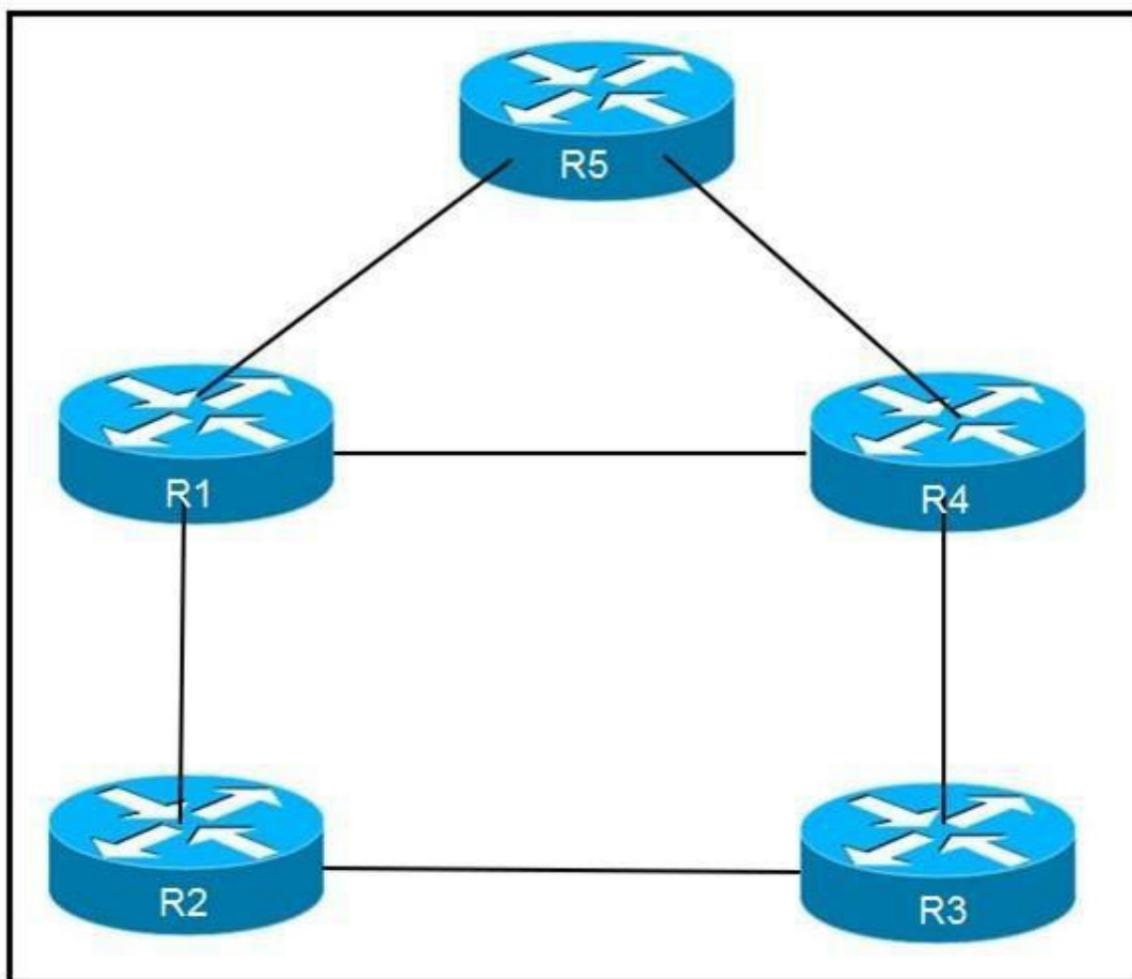
NEW QUESTION 8

Which feature is used in multicast routing to prevent loops?

- A. STP
- B. inverse ARP
- C. RPF
- D. split horizon

Answer: C

NEW QUESTION 9



Refer to the exhibit. An engineer is addressing an IS-IS design issue which is running within the topology. All links are running on FastEthernet, except the link between R5 and R4, which is Gigabit Ethernet. Which statement about the design is true?

- A. R4 prefer to reach R5 using R1 as the next hop
- B. All links have equal cost if the default metric is used
- C. R5 prefers to use R4 as the next hop for all routes
- D. R1 prefer to use R5 as the next hop to reach R4

Answer: B

NEW QUESTION 10

```
"PE#show ip msdp peer
MSDP Peer 10.10.10.10 (?), AS ?
Connection status:
  State: Listen, Resets: 0, Connection source: none configured
  Uptime (Downtime): 00:00:07, Messages sent/received: 0/0
  Output messages discarded: 0
  Connection and counters cleared 00:00:7 ago
SA Filtering:
  Input (S, G) filter: none, route-map: none
  Input RP filter: none, route-map: none
  Output (S, G) filter: none, route-map: none
  Output RP filter: none, route-map: none
SA-Requests:
  Input filter: none
Peer ttl threshold: 0
SAs learned from this peer: 0
Input queue size: 0, Output queue size: 0"
```

Refer to the exhibit. A service provider technician is working on a multicast issue for a customer. While checking the multicast table, the technician notices that no flags are present for the (1.1.1.1, 239.1.1.1) entry, yet flags are present for the (1.1.1.1, 232.1.1.1) entry. Which factor might explain this issue?

- A. Only the administratively scoped range is permitted
- B. Only ASM is permitted
- C. Only the default SSM range is permitted
- D. Only GLOP is permitted

Answer: C

NEW QUESTION 10

Which two statements about route reflectors are true? (Choose two.)

- A. Routes received from nonclient peers are reflected to route reflector clients as well as nonclient peers.
- B. Routes received from nonclient peers are reflected to route reflector cluster as well as OSPF peers.
- C. If a router received an iBGP route with the originator-ID attribute set to its own router ID, the route is discarded.
- D. Routes received from a route reflector client is reflected to other clients and nonclient peers.
- E. If a route reflector receives a route with a cluster-list attribute containing a different cluster ID, the route is discarded.

Answer: CD

NEW QUESTION 13

Which two statements about mapping multicast IP addresses to MAC addresses are true? (Choose two.)

- A. All mapped multicast MAC addresses begin with 0x0100.5E
- B. The router performs the mapping before it hands the packet off to a switch
- C. All multicast MAC addresses end with 0x0100.5E
- D. The mapping process may generate overlapping addresses, which can cause receivers to receive unwanted packets
- E. All destination MAC addresses begin with an octet of binary 1s

Answer: AD

NEW QUESTION 16

```
Router 1:
router ospf 20
 redistribute eigrp 1
 network 192.168.0.0 0.0.0.255 area 0
```

Refer to the exhibit. An engineer is troubleshooting an OSPF issue. Router 1 has a neighbor relationship with router 2. Only router 1 classful EIGRP routes can be seen on router 2. In order for all EIGRP routes to be redistributed correctly, which action should be taken?

- A. Router 1 must have the keyword subnets included in the redistribution command for all EIGRP routes to be redistributed.
- B. Router 1 must remove the AS number 1 from the redistribution command for all EIGRP routes to be redistributed.
- C. Router 1 must have the keyword ospf-metric included in the redistribution command for all EIGRP routes to be redistributed.
- D. Router 1 must have the keyword metric-type 1 included in the redistribution command for all EIGRP routes to be redistributed.

Answer: A

NEW QUESTION 17

Refer to the exhibit. Routers R1 and R2 cannot form a neighbor relationship, but the network is otherwise configured correctly and operating normally. Which two statements describe the problem? (Choose two.)

- A. The two routers are in the same area
- B. The two routers are in different subnets

- C. The two routers have password mismatch issues
- D. The two routers have the same network ID
- E. The two routers are in different areas

Answer: BE

NEW QUESTION 19

```
RP/0/0/CPU/0:P1#
!
key chain BGP
key 1
accept-lifetime 13:14:06 february 14 1993 infinitive
send-lifetime 13:14:06 february 14 1993 infinitive
key-string password cisco123
cryptographic-algorithm MD5
!
!
router bgp 1
address-family ipv4 unicast
!
neighbor 192.168.13.3
remote-as 1
keychain BGP
address-family ipv4 unicast

RP/0/0/CPU/0:PE3#
!
key chain BGP
key 1
accept-lifetime 13:14:06 february 14 1993 infinitive
send-lifetime 13:14:06 february 14 1993 infinitive
key-string password cisco123
cryptographic-algorithm MD5
!
!
router bgp 1
address-family ipv4 unicast
!
neighbor 192.168.13.1
remote-as 1
keychain BGP
address-family ipv4 unicast
```

Refer to the exhibit. P1 and PE3 Cisco IOS XR routers are directly connected and have this configuration applied. The BGP session is not coming up. Assume that there is no IP reachability problem and both routers can open tcp port 179 to each other. Which two actions fix the issue? (Choose two.)

- A. Change MD5 to HMAC-SHA1-12
- B. Change MD5 to HMAC-ESP
- C. Change MD5 to SHA-1
- D. Change MD5 to HMAC-MD5
- E. Remove the send and accept lifetime under key 1

Answer: AD

NEW QUESTION 22

Which command is used to enable BIDIR-PIM under global configuration mode for Cisco IOS XE Software?

- A. ip pim bidir-enable
- B. ipv4 pim bidir-enable
- C. ip multicast-routing
- D. ip pim bidir

Answer: A

NEW QUESTION 26

A network engineer is troubleshooting OSPF multiarea. Which Cisco IOS XR feature should the engineer use in order to streamline OSPF issue?

- A. hierarchical CLI
- B. DR support for topology management
- C. routing process enabled by default on all interfaces
- D. show ip ospf topology command

Answer: A

NEW QUESTION 28

In a PIM-SM environment, which mechanism determines the traffic that a receiver receives?

- A. The receiver explicitly requests its desired traffic from the RP on the shared tree.
- B. The receiver explicitly requests traffic from a single source, which responds by forwarding all traffic.
- C. The RP on the shared tree floods traffic out of all PIM configured interfaces.
- D. The receiver explicitly requests traffic from each desired source, which responds by sending all traffic.

Answer: D

NEW QUESTION 32

```
RP/0/0/CPU0:iosxr# show run segment-routing

segment-routing
  global-block 18000 24999
!

RP/0/0/CPU0:iosxr#
```

Refer to the exhibit. A network engineer implemented this segment routing configuration. Which statement about the output is true?

- A. This range conflicts with the segment routing local block range.
- B. The device must be reloaded for these ranges to be allocated and used.
- C. The default segment routing global block range is being used on this device.
- D. A nondefault segment routing global block range is being used on this device.

Answer: D

NEW QUESTION 33

.....

THANKS FOR TRYING THE DEMO OF OUR PRODUCT

Visit Our Site to Purchase the Full Set of Actual 300-510 Exam Questions With Answers.

We Also Provide Practice Exam Software That Simulates Real Exam Environment And Has Many Self-Assessment Features. Order the 300-510 Product From:

<https://www.2passeasy.com/dumps/300-510/>

Money Back Guarantee

300-510 Practice Exam Features:

- * 300-510 Questions and Answers Updated Frequently
- * 300-510 Practice Questions Verified by Expert Senior Certified Staff
- * 300-510 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * 300-510 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year