Question 1

What is a requirement of PIM-SM?

Options:

A- It requires Cisco Express Forwarding to be enabled.

B- It must be enabled on loopback interfaces only

C- It requires OSPF to be configured on the network.
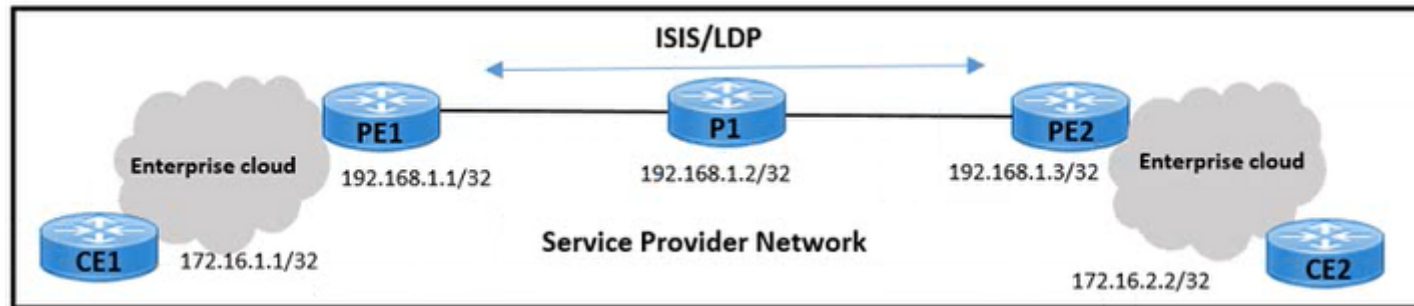
D- It must use an RP

Answer:

D

Question 2

Refer to the exhibit.

Refer to the exhibit. An engineer working for a private telecommunication company with an employee id 4115 46 881 is enabling a segment routing solution with these requirements.

A service provider is using the default range for prefix SID.

PE1 must allocate the first SID from the default range for the loopback address

PE1 and PE2 loopback SID allocation should have a minimum difference of 500.

Which configuration must be implemented to meet the requirements?

○ PE1(config-isis-if-af)# adjacency-sid absolute 16201
PE2(config-isis-if-af)# adjacency-sid absolute 16710

○ PE1(config-isis-if-af)# prefix-sid absolute 16001
PE2(config-isis-if-af)# prefix-sid index 610

○ PE1(config-isis-if-af)# prefix-sid absolute 16201
PE2(config-isis-if-af)# prefix-sid absolute 16710

○ PE2(config-isis-if-af)# adjacency-sid absolute 16001
PE1(config-isis-if-af)# adjacency-sid index 610

Options:

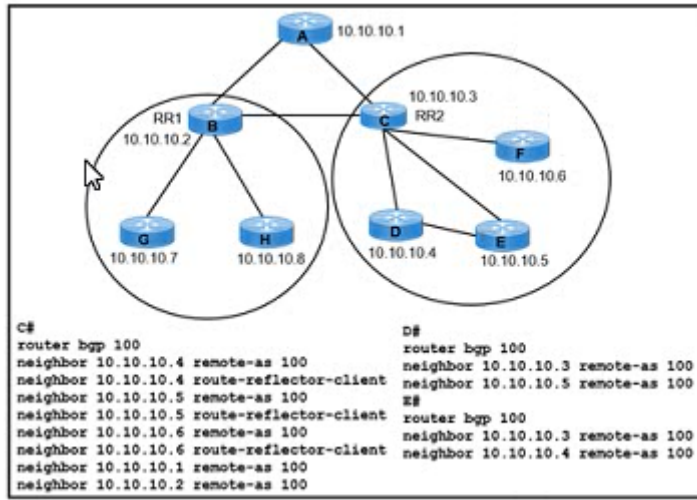**A-** Option A

B- Option B

C- Option C

D- Option D

Answer:

B

Question 3

Question Type: **MultipleChoice**

Refer to the exhibit.

```
                          A     10.10.10.1

                                      10.10.10.3
              RR1                 C   RR2
               B
         10.10.10.2                        F
                                      10.10.10.6

           G        H         D        E
       10.10.10.7  10.10.10.8  10.10.10.4  10.10.10.5
```

```
C#                                      D#
router bgp 100                          router bgp 100
neighbor 10.10.10.4 remote-as 100       neighbor 10.10.10.3 remote-as 100
neighbor 10.10.10.4 route-reflector-client  neighbor 10.10.10.5 remote-as 100
neighbor 10.10.10.5 remote-as 100       E#
neighbor 10.10.10.5 route-reflector-client  router bgp 100
neighbor 10.10.10.6 remote-as 100       neighbor 10.10.10.3 remote-as 100
neighbor 10.10.10.6 route-reflector-client  neighbor 10.10.10.4 remote-as 100
neighbor 10.10.10.1 remote-as 100
neighbor 10.10.10.2 remote-as 100
```

Refer to the exhibit While troubleshooting a networking issue an engineer identified a suboptimal communication issue on route reflector RR2 In the current environment

Router A is a non-route-reflector client for RR1 and RR2

Routers D and E are directly connected iBGP peers.

Router F is not an iBGP peer of routers D and E

Which action resolves the issue?

Options:

A- Disable BGP Client-to-Client reflection on router RR2.

B- Enable next-hop-self for BGP peering on router C.

C- Remove the route-reflector configuration on router RR2.
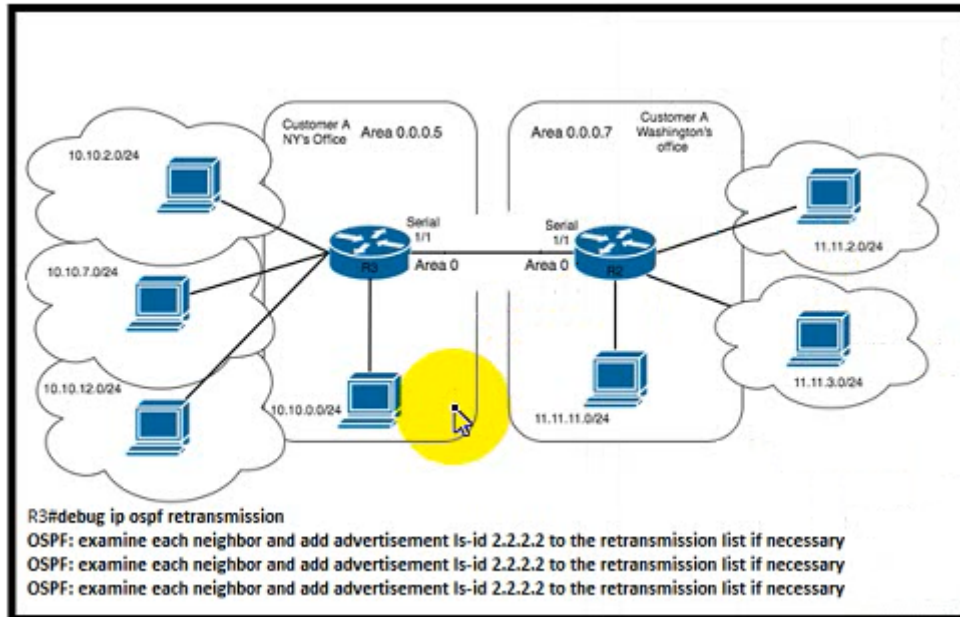
D- Enable next-hop-self for BGP peering on router D.

Answer:

B

Question 4

Question Type: MultipleChoice

Refer to the exhibit.

R3#debug ip ospf retransmission
OSPF: examine each neighbor and add advertisement ls-id 2.2.2.2 to the retransmission list if necessary
OSPF: examine each neighbor and add advertisement ls-id 2.2.2.2 to the retransmission list if necessary
OSPF: examine each neighbor and add advertisement ls-id 2.2.2.2 to the retransmission list if necessary

Refer to the exhibit. Customer A is a small media company with two offices connected by a 512 Kbps line. Their NY office is connected to several external partners by static routes on router R3. VoIP services use VoIP codec G729 Users reported poor voice quality and slow data transfer between the offices A network engineer configured ip tcp header-compression iphc-format on R2 and R3 routers Which additional action must the engineer take to fix the issue?

Options:

A- Configure the ip ospf I area O command under Serial 1/1 interfaces on R2 and R3 to avoid routing loops

B- Change the OSPF router ID on either router so that the router IDs are unique.

C- Configure the summary-address 10.10.0.0 255.255.240.0 command on R3 to optimize OSPF communication

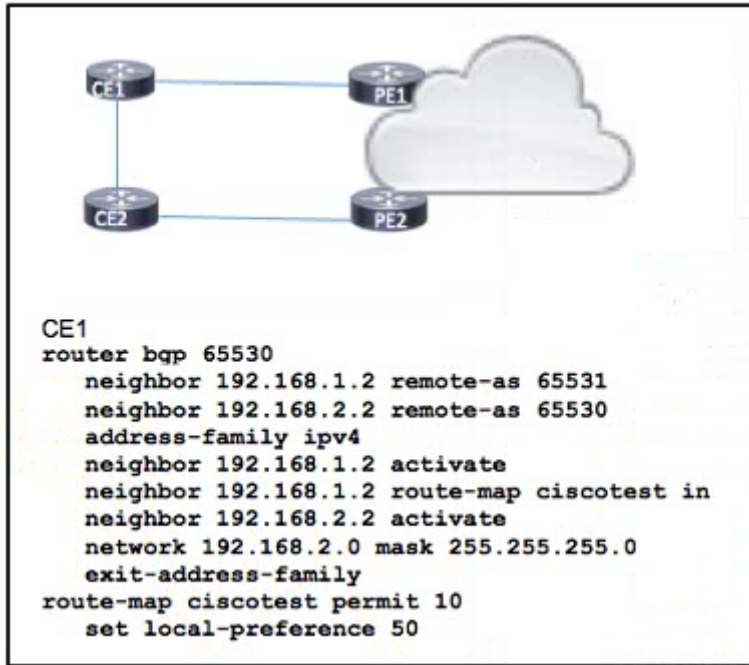**D-** Configure the BGP routing protocol between R2 and R3 to control route propagation.

Answer:

C

Question 5

Question Type: **MultipleChoice**

Refer to the exhibit.

```
CE1
router bgp 65530
   neighbor 192.168.1.2 remote-as 65531
   neighbor 192.168.2.2 remote-as 65530
   address-family ipv4
   neighbor 192.168.1.2 activate
   neighbor 192.168.1.2 route-map ciscotest in
   neighbor 192.168.2.2 activate
   network 192.168.2.0 mask 255.255.255.0
   exit-address-family
route-map ciscotest permit 10
   set local-preference 50
```

Refer to the exhibit. Routers CE1 and CE2 are in AS 65530. which is multihomed for Internet access. An engineer expects inbound traffic to AS 65530 to arrive from PE1. but it is coming from PE2 instead PE1 and PE2 routers are connected with CE routers through the same bandwidth Which action must be taken to correct the problem?

Options:

A- On router CE2, configure inbound routes from PE2 to CE2 with a local-preference value of 50 or greater.

B- Configure router CEI to prepend the AS path to routes it receives from PE 1.

C- Set the local-preference value on router CEI to 100 or greater

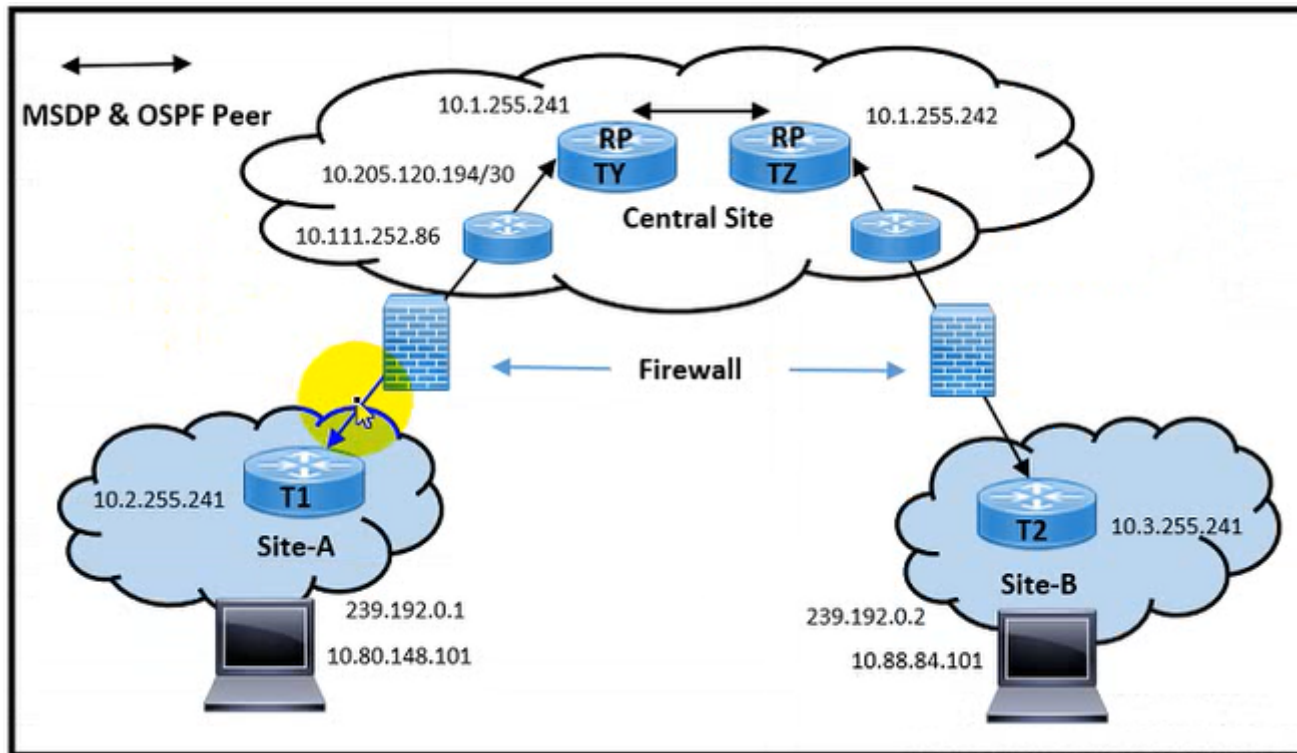**D-** On router PEI , change the origin for routes that are redistributed from CEI to CE2.

Answer:

C

Question 6

Question Type: **MultipleChoice**

Refer to the exhibit.

MSDP & OSPF Peer

10.1.255.241

RP
TY

RP
TZ

10.1.255.242

10.205.120.194/30

Central Site

10.111.252.86

Firewall

10.2.255.241

T1

Site-A

239.192.0.1

10.80.148.101

10.3.255.241

T2

Site-B

239.192.0.2

10.88.84.101

```
TZ# show ip msdp sa-cache rejected-SA det read-only <snip>
86854209.328, (10.80.148.101, 239.192.0.1), RP: 10.2.255.241, Peer:
10.1.255.241, Reason: rpf-fail -> learned from central site RT1 but not
accepted (originated from site A RT1)
86854209.328, (10.88.84.101, 239.192.0.2), RP: 10.3.255.241, Peer:
10.1.255.241, Reason: rpf-fail -> learned from central site RT1 but not
accepted (originated from site B RT1)

TZ# show ip rpf 10.1.255.241
RPF information for ? (10.1.255.241)|
RPF interface: Vlan10
RPF neighbor: ? (10.111.254.9)
RPF route/mask: 10.1.255.241/32
RPF type: unicast (ospf 15)
Doing distance-preferred lookups across tables
RPF topology: ipv4 multicast base, originated from ipv4 unicast base

TZ# show ip route 10.1.255.241
Routing Table: CENT1
Routing entry for 10.1.255.241/32
Known via "ospf 15", distance 110, metric 3, type intra area
Last update from 10.111.254.9 on Vlan10, 1d22h ago
Routing Descriptor Blocks:
* 10.111.254.9, from 10.205.0.197, 1d22h ago, via Vlan10
Route metric is 3, traffic share count is 1
```

```
TY# sh ip msdp sa-cache
MSDP Source-Active Cache - 2 entries
(10.80.148.101, 239.192.0.1), RP 10.2.255.241, AS ?,1d23h/00:05:42, Peer
10.2.255.241 -> learned from RT1 at site A (which is 10.2.255.241)
(10.88.84.101, 239.192.0.2), RP 10.3.255.241, AS ?,1d21h/00:05:31, Peer
10.3.255.241 -> learned from RT1 at site B (which is 10.3.255.241)

TY# sh ip rpf 10.2.255.241
RPF information for ? (10.2.255.241)
RPF interface: Fo9/1.1035
RPF neighbor: ? (10.111.252.86)
RPF route/mask: 10.2.255.241/32
RPF type: unicast (ospf 15)
Doing distance-preferred lookups across tables
RPF topology: ipv4 multicast base, originated from ipv4 unicast base
|
TY# sh ip route 10.2.255.241
Routing Table: CLNT1
Routing entry for 10.2.255.241/32
Known via "ospf 15", distance 110, metric 150, type extern 2, forward
metric 2
Last update from 10.111.252.86 on FortyGigabitEthernet9/1.1035, 04:06:26
ago
Routing Descriptor Blocks:
* 10.111.252.86, from 10.205.120.195, 04:06:26 ago, via
FortyGigabitEthernet9/1.1035
Route metric is 150, traffic share count is 1
```

Refer to the exhibit. Multicast traffic destined from T1 and T2 routers to RP routers works well. A network engineer observes problems with multicast traffic flows between Site-A and Site-B. Site-A users fail to receive multicast stream on Site-B via RPTY site, while Site-B users fail to receive multicast stream on Site-Avia RPTZ site. Which action must be implemented to resolve the issues?

Options:

A- Establish MDSP peering with interface IP subnet.

B- Configure Site-A and Site-B in 10.80.14804

C- Allow the OSPF and MSDP packets on the firewall.

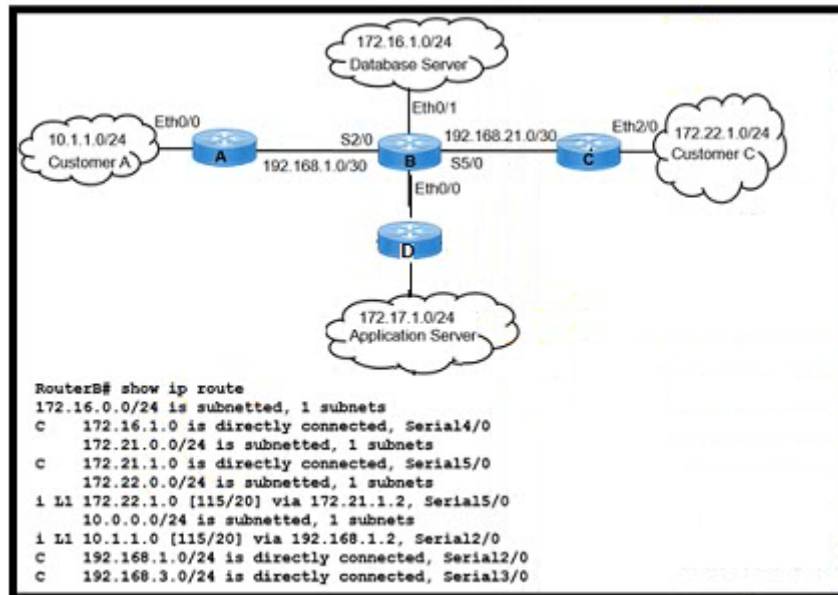**D-** Configure direct OSPF peering between Site-A and Ste-B

Answer:

C

Question 7

Question Type: **MultipleChoice**

Refer to the exhibit.

```
RouterB# show ip route
172.16.0.0/24 is subnetted, 1 subnets
C    172.16.1.0 is directly connected, Serial4/0
     172.21.0.0/24 is subnetted, 1 subnets
C    172.21.1.0 is directly connected, Serial5/0
     172.22.0.0/24 is subnetted, 1 subnets
i L1 172.22.1.0 [115/20] via 172.21.1.2, Serial5/0
     10.0.0.0/24 is subnetted, 1 subnets
i L1 10.1.1.0 [115/20] via 192.168.1.2, Serial2/0
C    192.168.1.0/24 is directly connected, Serial2/0
C    192.168.3.0/24 is directly connected, Serial3/0
```

Refer to the exhibit. Customers A and C are experiencing packet drops when connecting to the application server While troubleshooting the problem the network engineer confirms that the IS-IS Level- 1/2 adjacency is up between routers A B C. and D and both customers can communicate with the database server without packet loss Which action must the engineer take to resolve the issue?

Options:

A- Advertise the application server subnet in the router D IS-IS database

B- Advertise a static default route to the router B IS-IS database.

C- Leak the 172, 17.10/24 route in the IS-IS databases on routers A and C.

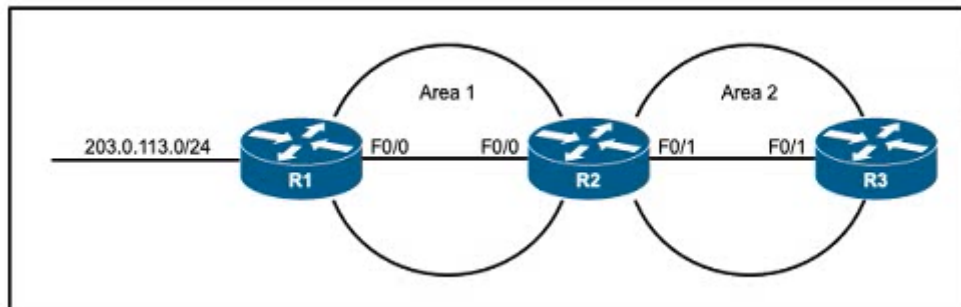**D-** Leak the customer A and customer C subnets in the router A IS-IS database.

Answer:

A

Question 8

Question Type: MultipleChoice

Refer to the exhibit.

Refer to the exhibit After recent configuration changes to a customer's network, a network engineer notices that R2 cannot communicate with R3 Both FastEthemet interfaces on R2 and R3 are up and configured with the correct IP addresses MD5 password configured en R2 and R3 match with no issues What is the minimum change the engineer must make to enable R2 and R3 to communicate and fix the problem?

A- Configure a loopback interface on R2 and assign it to area 0.

B- Define area 2 as a NSSA on R2 and R3

C- Configure virtual links between RI and R3.

D- Configure interface F0/0 on RI and R2 to be in area O.

Answer:

A

Question 9

Question Type: **MultipleChoice**

What are the two characteristics of route reflectors? (Choose two.)

Options:

A- If a router received an iBGP route with the originator-ID attribute set to its owm router ID, the route is discarded.

B- Routes received from nonclient peers are reflected to route reflector clients as well as nonclient peers.

C- Routes received from nonclient peers are reflected to route renector cluster as well as OSPF peers.

D- If a route reflector receives a route with a cluster-list attribute containing a different cluster ID, the route is discarded.

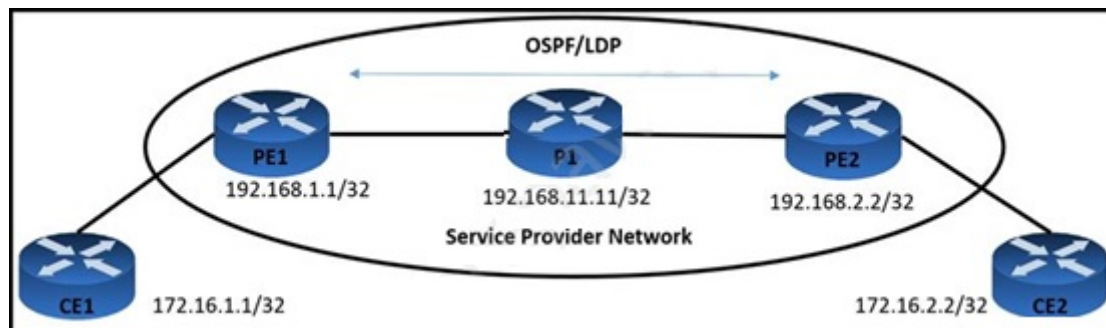**E-** Routes received from a route reflector Client are reflected to other clients and nonclient peers.

Answer:

A, E

Question 10

Question Type: MultipleChoice

Refer to the exhibit.

```
PE1# show mpls forwarding-table
Local   Outgoing   Prefix              Bytes Label   Outgoing     Next  Hop
Label   Label       or Tunnel Id  Switched          interface
16      No Label    172.16.1.1/32       0            drop
17      No Label    192.168.12.12/32    0            drop
20      No Label    192.168.2.2/32      0            drop
21      No Label    10.1.212.0/24       0            drop
22      No Label    10.1.211.0/24       0            drop
23      No Label    192.168.11.11/32    0            drop
24      No Label    172.16.11.0/24      0            drop
25      No Label    172.16.14.0/24      0            drop


PE2#show ip route 192.168.1.1
Routing entry for 192.168.1.0/24
Known via "bgp 100", distance 200, metric 0
Tag 1, type internal
Last update from 192.168.1.12 20:10:38 ago
Routing Descriptor Blocks:
* 192.168.1.12, from 192.168.12.12, 20:10:38
ago
Route metric is 0, traffic share count is 1
AS Hops 5


PE1#show ip route 192.168.11.11
Routing entry for 192.168.11.11/32
Known via "ospf 100", distance 110, metric 2, type
intra area
Last update from 10.1.111.11 on Gi0/1 00:04:34 ago
Routing Descriptor Blocks:
* 10.1.111.11, from 192.168.11.11, 00:04:34 ago
via GugabitEthernet0/1
Route metric is 2, traffic share count is 1
```

VPN users that are connected to PE routers are facing network issues. Traffic that originates from CE1 drops before reaching CE2. An engineer finds no outgoing traffic statistics on PE1 and PE2 routers toward CE devices and finds that the PE1 router is running the older software image. Which action must be implemented to resolve the issues?

Options:

A- Enable LDP protocol on PE1 and PE2 routers.

B- Advertise P1 router loopback on PE1 in OSPF.

C- Enable CEF-based forwarding on PE1 router.

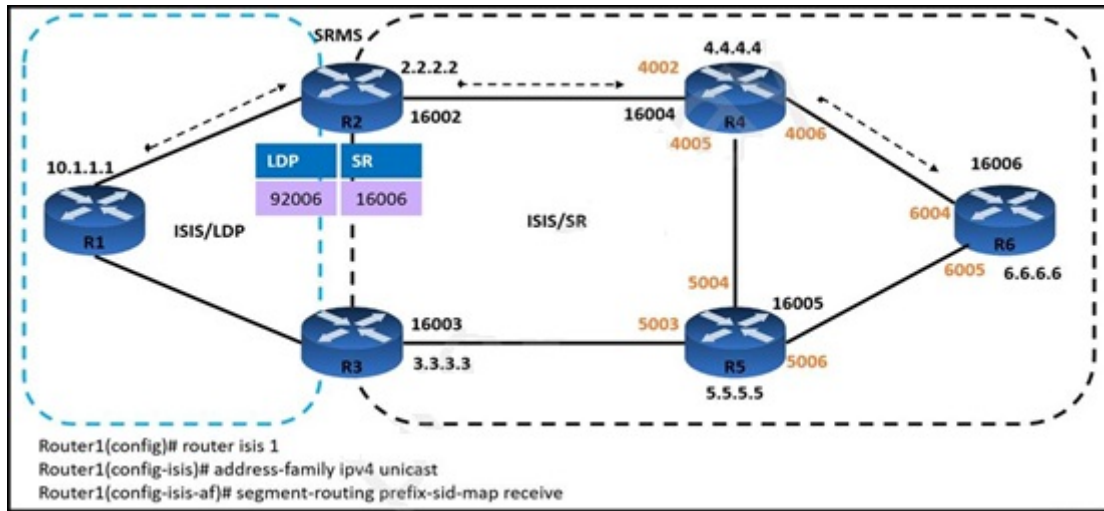**D-** Advertise PE2 router loopback on PE1 in OSPF.

Answer:

C

Question 11

Question Type: MultipleChoice

Refer to the exhibit

Router1(config)# router isis 1
Router1(config-isis)# address-family ipv4 unicast
Router1(config-isis-af)# segment-routing prefix-sid-map receive

An engineer is configuring service traffic from router R1 to R6 as shown. Which additional configuration must the engineer implement so that the LDP and SR domains will participate and interwork with each other?

Options:

A- Router2(config)# segment-routing
Router2(config-sr)# ldp mapping-server
Router2(config-sr-ms)# prefix-sid-map
Router2(config-sr-ms-map)#
Router2(config-sr-ms-map-af)# 2.2.2.2/32 500 range 4

B- Router2(config)# segment-routing
Router2(config-sr)# sr mapping-server
Router2(config-sr-ms)# ldp-sid-map

Router2(config-sr-ms-map)# address-family ipv4

Router2(config-sr-ms-map-af)# 10.1.1.1/32 500 range 50

C- Router2(config)# segment-routing

Router2(config-sr)# mapping-server

Router2(config-sr-ms)# prefix-sid-map

Router2(config-sr-ms-map)# address-family ipv4

Router2(config-sr-ms-map-af)# 10.1.1.1/32 500 range 50

D- Router2(config)# segment-routing

Router2(config-sr)# ldp mapping-server

Router2(config-sr-ms)# prefix-sid-map

Router2(config-sr-ms-map)# address-family ipv4

Router2(config-sr-ms-map-af)# 2.2.2.2/32 500 range 40

Answer:

C