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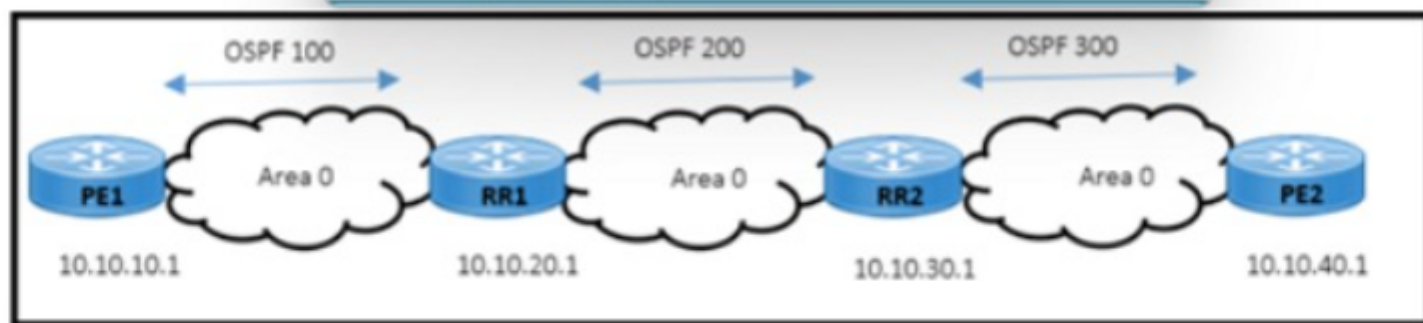
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Question 1

Question Type: MultipleChoice

Refer to the exhibit.

Diagram: OSPF 100 — Area 0 — PE1 (10.10.10.1); RR1 (10.10.20.1); OSPF 200 — Area 0 — RR2 (10.10.30.1); OSPF 300 — Area 0 — PE2 (10.10.40.1)

```
PE1
router bgp 100
 bgp log-neighbor-changes
 network 10.10.10.1 mask 255.255.255.255
 neighbor 10.10.20.1 remote-as 100
 neighbor 10.10.20.1 update-source Loopback0
 neighbor 10.10.20.1 send-label

RR1
router bgp 100
 bgp log-neighbor-changes
 neighbor 10.10.30.1 remote-as 100
 neighbor 10.10.30.1 update-source Loopback0
 neighbor 10.10.30.1 next-hop-self all
 neighbor 10.10.10.1 remote-as 100
 neighbor 10.10.10.1 update-source Loopback0
 neighbor 10.10.10.1 route-reflector-client
 neighbor 10.10.10.1 next-hop-self all
 neighbor 10.10.10.1 send-label
```

```
RR2
router bgp 100
 bgp log-neighbor-changes
 neighbor 10.10.20.1 remote-as 100
 neighbor 10.10.20.1 update-source Lo
 neighbor 10.10.20.1 next-hop-self al
 neighbor 10.10.20.1 send-label
 neighbor 10.10.40.1 remote-as 100
 neighbor 10.10.40.1 update-source Lo
 neighbor 10.10.40.1 route-reflector-
 neighbor 10.10.40.1 next-hop-self al
 neighbor 10.10.40.1 send-label

PE2
router bgp 100
 bgp log-neighbor-changes
 network 10.10.40.1 mask 255.255.255.
 neighbor 10.10.30.1 remote-as 100
 neighbor 10.10.30.1 update-source Lo
 neighbor 10.10.30.1 send-label
```

Refer to the exhibit. A network engineer is investigating a report of packet drops in an application running on a server connected to PE2 The engineer determined that:

The OSPF adjacency in area 0 is up. and it is learning the loopback addresses of all routers in area 0.

Traffic from users connected to PE1 to the application is also passing normally.

Packets from PE2 back to PE1 are being dropped

Which action resolves the issue?

○ RR2(config)# **router bgp 100**
RR2(config-router)# **no neighbor 10.10.20.1 send-label**

○ RR1(config)# **router bgp 100**
RR1(config-router)# **redistribute ospf 100**

○ RR1(config)# **router bgp 100**
RR1(config-router)# **neighbor 10.10.30.1 send-label**

○ RR2(config)# **router bgp 100**
RR2(config-router)# **redistribute ospf 100**

Options:

A- Option A

B- Option B

C- Option C

D- Option D

Answer:

C

Question 2

Question Type: MultipleChoice

Which IPv6 prefix format defines the destination of a dynamic 6to4 tunnel?

Options:

A- 2001:db8::/32
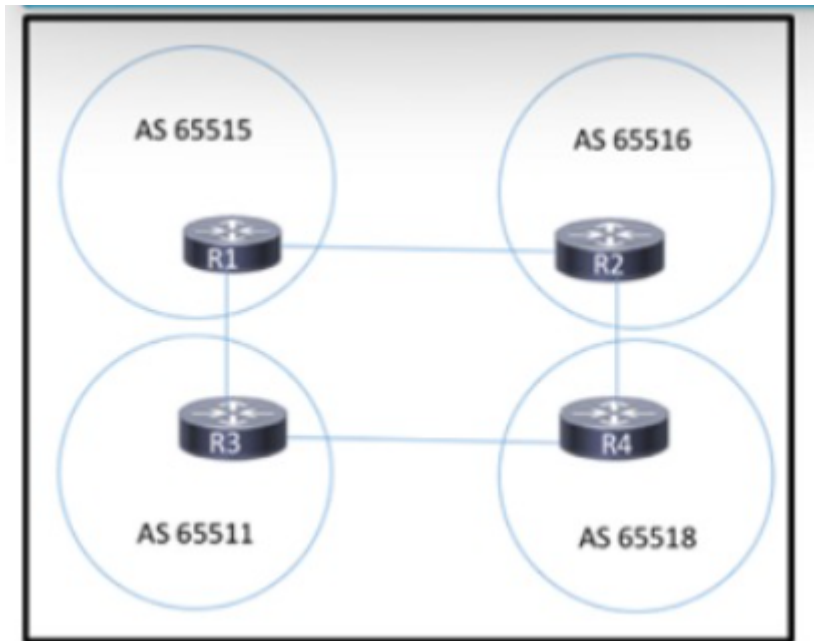
B- 2002::/16

C- fe80::/10

D- ff00::/8

Question 3

Question Type: **MultipleChoice**

Refer to the exhibit.

Refer to the exhibit. Routers R1. R2, R3. and R4 are peer routers that reside in different administrative domains. PIM-SM is running in each autonomous system, and EBGP is configured between the peers. A network administrator has just implemented MSDP between the connected peers. When the administrator enabled the MSDP configuration. R1 and R2 failed to establish a peering relationship. All other connected routers successfully established peering sessions Which action must the engineer take to resolve the issue between R1 and R2?

Options:

A- Change the MSDP authentication method to clear text

B- Configure the peers to be in the same autonomous system.

C- Set the same MSDP password on both peers

D- Implement BGP authentication between the peers.

Answer:

C

Question 4

Question Type: DragDrop

Drag and drop the features about multicast from the left onto the multicast protocols on the right. Not all options ate used.

Its mroute entry is (*,G) in most environments.   nts.

Its mroute entry is (S,G).   e entry is (S,G).

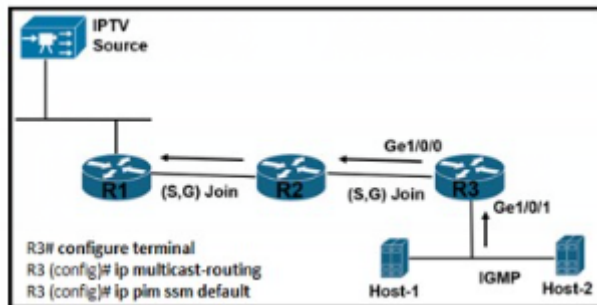...comes aware of the sender only when it receives s a message.

Question Type: MultipleChoice

The receiver specifies the multicast addresses from which it wants to receive traffic.

Refer to the exhibit.

SSM

ASM

IPTV Source

Ge1/0/0

R1   (S,G) Join   R2   (S,G) Join   R3

Ge1/0/1

R3# configure terminal
R3 (config)# ip multicast-routing
R3 (config)# ip pim ssm default

Host-1   IGMP   Host-2

Refer to the exhibit. A network engineer is configuring router R3 to handle multicast streams, but Host-2 cannot send subscriptions messages to the IPTV source. Which configuration must the engineer apply to router R3 so it passes the IPTV stream to Host-2?

```
R3# configure terminal
R3(config)# ip multicast-routing
R3(config)# interface gigabitethernet 1/0/0
R3(config-if)# ip pim sparse-mode
R3(config-if)# ip igmp version 3
R3(config)# interface gigabitethernet 1/0/1
R3(config-if)# ip pim sparse-mode
R3(config-if)# ip igmp version 3
R3(config-if)# ip pim ssm default
```

```
R3# configure terminal
R3(config)# no ip pim ssm default
R3(config)# interface gigabitethernet 1/0/0
R3(config-if)# ip pim sparse-mode
R3(config-if)# ip igmp version 3
R3(config-if)# ip pim ssm default
R3(config)# interface gigabitethernet 1/0/1
R3(config-if)# ip pim sparse-mode
R3(config-if)# ip igmp version 3
R3(config-if)# ip pim ssm default
```

```
R3(config)# interface gigabitethernet 1/0/0
R3(config-if)# ip pim sparse-mode
R3(config-if)# ip igmp version 3
R3(config)# interface gigabitethernet 1/0/1
R3(config-if)# ip pim sparse-mode
R3(config-if)# ip igmp version 3
```

```
R3(config)# interface gigabitethernet 1/0/0
R3(config-if)# ip pim sparse-mode
R3(config)# interface gigabitethernet 1/0/1
R3(config-if)# ip pim sparse-mode
R3(config-if)# ip igmp version 3
```

Options:

A- Option A

B- Option B

C- Option C

D- Option D

Answer:

D

Question 6

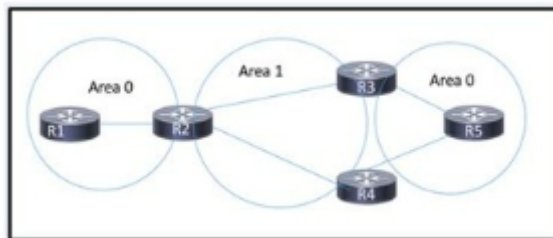**Question Type: MultipleChoice**

Refer to the exhibit.

Refer to the exhibit. A network engineer just replaced five routers on this OSPF network. When the routing protocol is brought up, R5 cannot reach routes that originate on R1. The engineer verified that all connected links have established neighbor relationships. R5 reaches routes originating on R3 and R4. Which action resolves the issue?

Options:

A- Configure an OSPF virtual link to bridge Area 0 on routers R3 and R4.

B- Configure automatic neighbor discovery on RI and R5.

C- Configure OSPF to have a contiguous Area O.

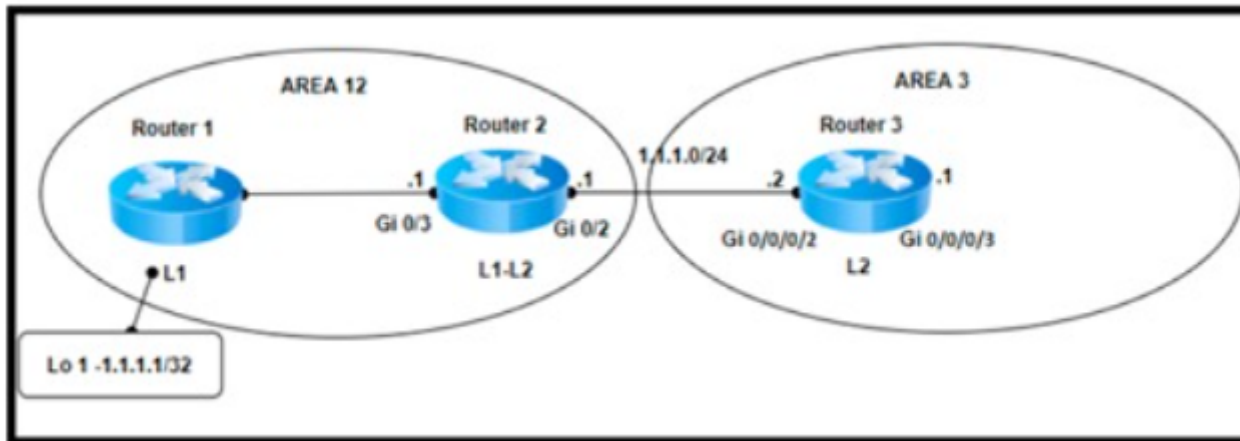**D-** Configure each link to be point-to-point.

Answer:

A

Question 7

Question Type: MultipleChoice

Refer to the exhibit.

Refer to the exhibit. A network engineer configured three new PE routers to expand the network. The new routers run in the IS-IS routing protocol and reside in the data center in the same exchange as the existing routers. However, the network is now experiencing suboptimal routing. The Layer 2 configuration and VLANs are configured correctly to provide segregation between networks, but the Level 1 routes are not being converted to Level 2 routes. Which action resolves the issue?

Options:

A- On Router 1, redistribute the routes into IGP.

B- On Router 1, summarize internal routes between areas.

C- On Router 2, redistribute the routes into IGP.

D- On Router 2. summarize internal routes between areas.

Question 8

Question Type: DragDrop

Drag and drop the BGP attributes from the left into the order of route selection preference on the right.

multiexit discriminator	exit discriminator	

step 1

Answer:

AS path	AS path	

step 2

origin	origin

step 3

Question 9

Question Type: MultipleChoice

local preference	local preference	

step 4

Which difference must an engineer consider when Implementing Inter-domain and Intra-domain multicast routing on the network?

weight	weight	

step 5

Options:

A- Intra-domain routing allows the service provider to control incoming and outgoing multicast data streams on its network, but inter-domain routing limits the service provider's control.

B- Intra-domain routing uses the PIM and MBGP protocols for multicast routing, but inter-domain routing must use PIM.SSM or MSDP.

C- Intra-domain routing is dependent on the RP router within the same SP network, but inter-domain routing reduces the dependency on the other SP network.

D- Inter-domain routing supports policy routing to connect different multicast domains using PIM.SM, but intra-domain routing supports policy routing using PIM-SM only within a single domain.

Answer:

C

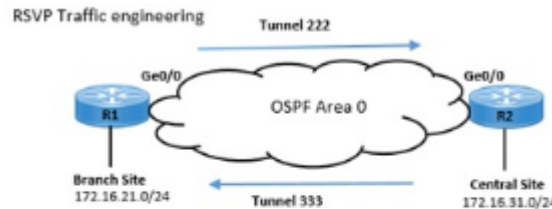# Question 10

Question Type: MultipleChoice

Refer to the exhibit.

```
R1# sh run inter tu222                    RSVP Traffic engineering        Tunnel 222
interface Tunnel222
 description R1>msR2
 bandwidth 33000
 ip unnumbered Loopback0
 load-interval 30
 tunnel destination 10.10.11.1
 tunnel mode mpls traffic-eng
 tunnel mpls traffic-eng autoroute announce
 tunnel mpls traffic-eng priority 1 1 2
 tunnel mpls traffic-eng path-option 10 dynamic
 tunnel mpls traffic-eng record-route
 no routing dynamic
End
R1# show ip rsvp reservation
To              From        Pro DPort Sport Next Hop       I/F     Fi Serv BPS
10.0.1.4        10.10.11.1  0   5542  203   10.0.1.4               SE LOAD 33M
10.0.1.4        10.10.11.1  0   5543  35    10.0.1.4               SE LOAD 33M
10.10.11.1      10.0.1.4    0   5543  1154  10.0.252.18 Ge0/0 SE LOAD 33M
```

Diagram labels: RSVP Traffic engineering, Tunnel 222, Ge0/0, Ge0/0, R1, OSPF Area 0, R2, Branch Site 172.16.21.0/24, Tunnel 333, Central Site 172.16.31.0/24

```
R1#sh mpls traffic-eng tunnels tu222
Name: R1>msR2

                 (Tunnel222) Destination: 10.10.11.1
Status:
  Admin: up  Oper: down  Path: valid  Signalling: RSVP signalling proceeding
  path option 10, type dynamic (Basis for Setup, path weight 2)
Config Parameters:
  Bandwidth: 33000    kbps (Global)  Priority: 1  1 Affinity: 0x0/0xFFFF
  Metric Type: TE (default)
  AutoRoute:  enabled   LockDown: disabled  Loadshare: 33000 bw-based
  auto-bw: disabled
RSVP Signalling Info:
     Src 10.0.1.4, Dst 10.10.11.1, Tun_Id 222, Tun_Instance 73
Shortest Unconstrained Path Info:
  Path Weight: 2 (TE)
  Explicit Route: 10.0.4.254 10.10.11.1
History:
  Tunnel:
    Time since created: 6 hours, 10 minutes
    Time since path change: 1 minutes, 22 seconds
  Current LSP:
    Setup Time: 3 minutes, 37 seconds remaining
  Prior LSP:
    ID: path option 10 [72]
    Removal Trigger: setup timed out
```

Refer to the exhibit. A network engineer is investigating a report of packet drops between the branch site and the central site.

The two sites are connected via OSPF and RSVP-TE tunnels.

Traffic from the central site to the branch site is passing normally.

Technicians at both sites successfully ping the loopback IP addresses on routers R1 and R2.

Which configuration corrects the packet-drop problem?

R1(Config)# interface Tunnel222
R1(Config-if)# tunnel mpls traffic-eng bandwidth 33000

R2(Config)# interface Tunnel333
R2(Config-if)# tunnel mpls traffic-eng bandwidth 33000

R2(Config)# interface Ge0/0
R2(Config-if)# ip rsvp bandwidth 33000 3300

R1(Config)# interface Ge0/0
R1(Config-if)# ip rsvp bandwidth 33000 3300

Options:

A- Option A

B- Option B

C- Option C

D- Option D

Answer:

D

Question 11

What Is a characteristic of a segment routing mapping server?

Options:

A- It must be placed in the core of the network.

B- It serves multiple VRFs.

C- It must have an IGP adjacency.

D- It applies SID mappings from one IGP instance to another IGP instance.
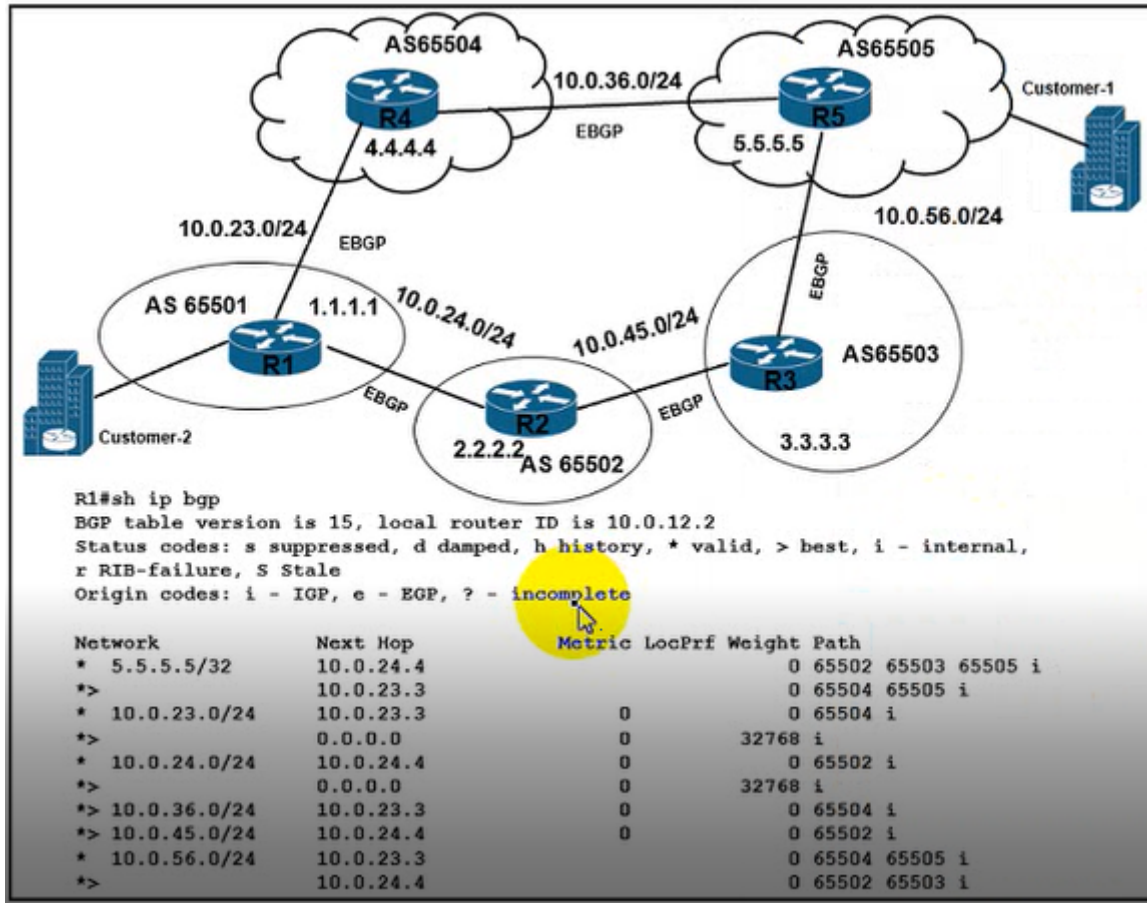
Answer:

C

Question 12

Refer to the exhibit.


```
R1#sh ip bgp
BGP table version is 15, local router ID is 10.0.12.2
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
r RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete

   Network            Next Hop          Metric LocPrf Weight Path
*  5.5.5.5/32         10.0.24.4                         0 65502 65503 65505 i
*>                    10.0.23.3                         0 65504 65505 i
*  10.0.23.0/24       10.0.23.3              0          0 65504 i
*>                    0.0.0.0               0       32768 i
*  10.0.24.0/24       10.0.24.4              0          0 65502 i
*>                    0.0.0.0               0       32768 i
*> 10.0.36.0/24       10.0.23.3             0          0 65504 i
*> 10.0.45.0/24       10.0.24.4             0          0 65502 i
*  10.0.56.0/24       10.0.23.3                         0 65504 65505 i
*>                    10.0.24.4                         0 65502 65503 i
```

Refer to the exhibit There is a BGP traffic path issue between Customer-1 and Customer-2 Users from Customer-2 have reported file transfer issues High utilization on the path between both customers causes many packet drops. Which configuration resolves the issue?

○ R1#neighbor 10.0.24.4 route-map LOCAL-PREF-150 in
route-map LOCAL-PREF-150
set local-preference 150
ip prefix-list 5-5-5-5 seq 5 permit 5.5.5.5/32
route-map LOCAL-PREF-150 permit 10
  match ip address prefix-list 5-5-5-5
  set local-preference 150

○ R4#router bgp 65504
neighbor 10.0.23.3 remote-as 65501
neighbor 10.0.23.3 filter-list 1 out
ip as-path access-list 1 deny ^65505$
ip as-path access-list 1 permit .*

○ R4#router bgp 65504
  address-family ipv4 unicast
  neighbor 10.0.23.3 remote-as 65501
  neighbor 10.0.23.3 activate
  neighbor 10.0.23.3 route-map PREPEND in
  exit-address-family
exit
route-map PREPEND permit 10
set as-path prepend 65506 65507

○ R1#neighbor 10.0.23.3 route-map LOCAL-PREF-150 out
route-map LOCAL-PREF-150
set local-preference 150

Options:

A- Option A

B- Option B

C- Option C

D- Option D

Answer:

B