

Cisco

Exam 642-889

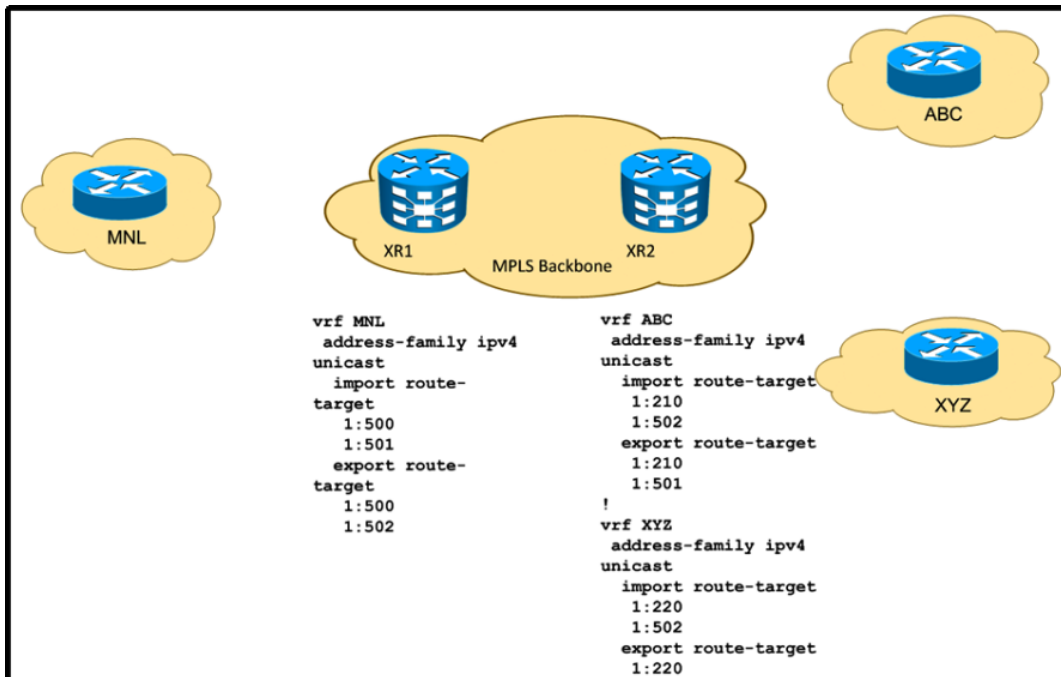
Implementing Cisco Service Provider Next-Generation Edge Network Services

Version: 7.0

[Total Questions: 126]

Question No : 1

Refer to the exhibit.



Which two descriptions outline the traffic flow among the three sites? (Choose two.)

- A. The MNL site communicates with the XYZ and ABC sites.
- B. The XYZ and ABC sites communicate using the default route that points to the MNL site.
- C. XYZ sees the MNL and ABC routes.
- D. ABC sees the MNL and XYZ routes.
- E. The MNL site acts as a central site for the ABC and XYZ sites.

Answer: A,E

Question No : 2

In MPLS Layer 3 VPN implementations, what is used on the PE router to isolate potential overlapping routing information between different customers?

- A. route targets
- B. VRFs
- C. VC IDs
- D. pseudowire IDs
- E. pseudowire classes

Answer: B**Question No : 3**

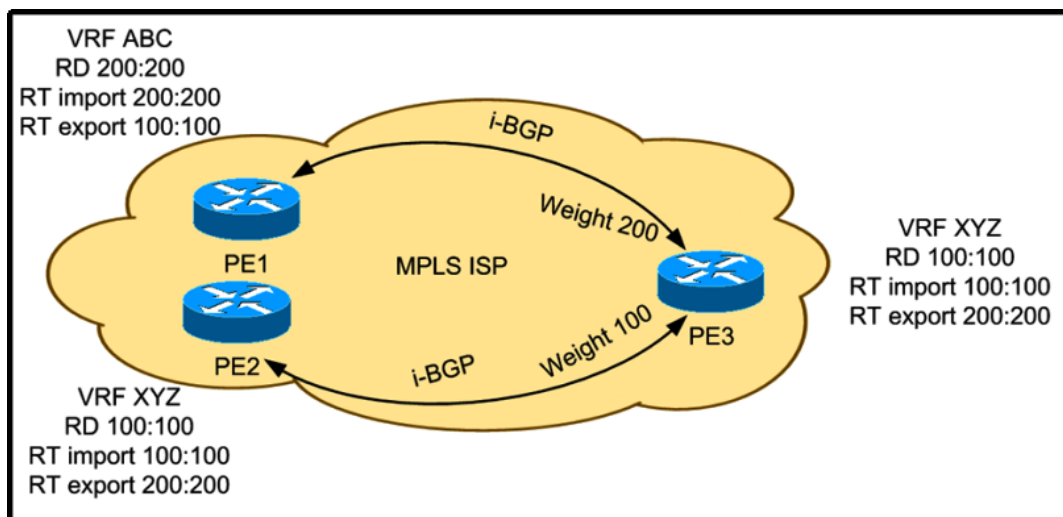
When implementing MPLS Layer 3 VPNs with customers running OSPF as the CE-PE routing protocol, the service provider MPLS backbone looks like what to the CE routers?

- A. the backbone (Area 0)
- B. an external routing domain
- C. a superbackbone that is transparent to the CE OSPF routers
- D. a transit area (similar to a transit area for supporting virtual links)

Answer: C**Question No : 4**

O: 121

Refer to the exhibit.



PE1 and PE2 are advertising the same subnet 196.168.10.0/24 to PE3. Which PE advertised subnet is installed at PE3 BGP table?

- A. PE2 subnet only due to the same RD value with PE1
- B. PE2 subnet only due to the same RD value with PE3
- C. Both PE1 and PE2 subnets due to exported subnet with RT matches import RT on PE3

D. PE1 subnet only due to exported subnet with RT matches import RT on PE3

Answer: D

Question No : 5

Refer to the partial Cisco IOS XR PE router VRF configuration exhibit.

```
vrf customer1
address-family ipv4 unicast
import route-target
 1:1
 2:1
export route-target
 1:1
 2:2
!
vrf customer2
address-family ipv4 unicast
import route-target
 1:2
 2:1
export route-target
 1:2
 2:2
!
```

To implement a central-service VPN supporting both customer1 and customer2, what will be the required corresponding VRF configuration on the central-service-server PE router?

- A.** vrf central-service-server
address-family ipv4 unicast
import route-target
3:1
2:2
export route-target
3:1
2:1
!
- B.** vrf central-service-server

```
address-family ipv4 unicast
import route-target
3:1
2:1
export route-target
3:1
2:2
!
```

```
C. vrf central-service-server
address-family ipv4 unicast
import route-target
3:1
1:1
1:2
export route-target
3:1
1:1
1:2
!
```

```
D. vrf central-service-server
address-family ipv4 unicast
import route-target
3:1
1:1
1:2
2:1
2:2
export route-target
3:1
1:1
1:2
2:1
2:2
!
```

Answer: A

Question No : 6

When you are using OSPF as the CE-to-PE routing protocol in MPLS VPN implementations, an OSPF route from customerA site 1 in Area 0 will appear as which kind of OSPF route in customerA site 2, also in Area 0?

- A. intra-area
- B. interarea
- C. E1
- D. E2

Answer: B

Question No : 7

What is the primary difference between 6PE and 6VPE?

- A. 6VPE does not require an MPLS core.
- B. 6VPE requires an IPv6-aware core.
- C. 6VPE provides IPv6 VPN services.
- D. 6VPE tunnels IPv6 packets inside IPv4 packets.

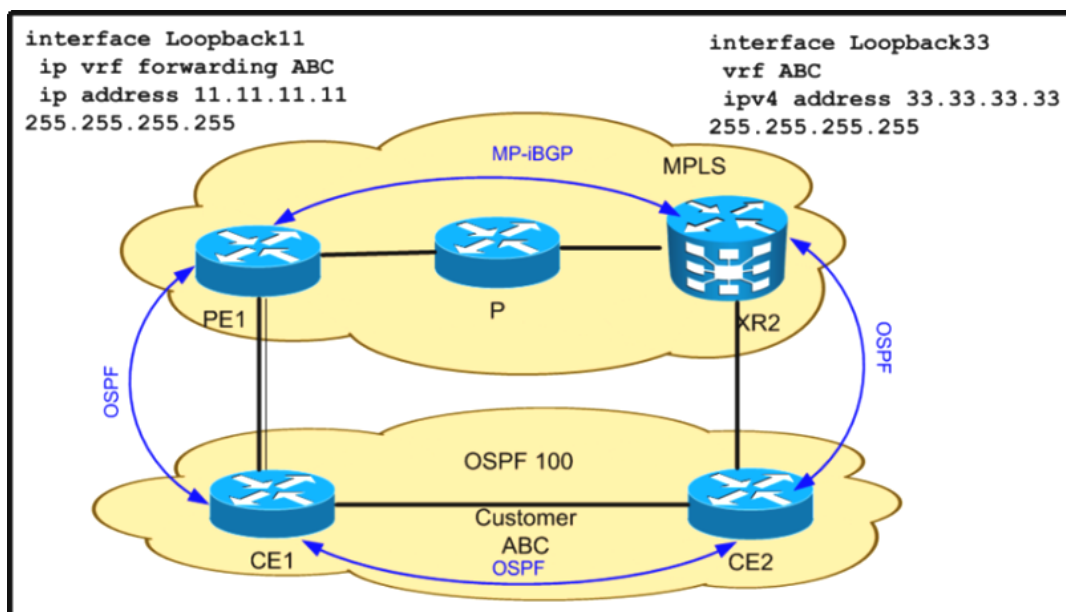
Answer: C

Explanation:

6PE is for transporting ipv6 natively and 6VPE is for ipv6 mpls vpns

Question No : 8

Refer to the exhibit.



XR2 must be configured with OSPF sham-link to PE1. Which configuration achieves this goal?

- A.** router ospf 100
area 0
sham-link 11.11.11.11 33.33.33.33
- B.** router ospf 100
vrf ABC
area 0
sham-link 33.33.33.33 11.11.11.11
- C.** router ospf 100
area 0 sham-link 33.33.33.33 11.11.11.11
- D.** router ospf 100
vrf ABC
area 0 sham-link 11.11.11.11 33.33.33.33

Answer: B

Question No : 9

In Layer 3 MPLS VPN implementations, if a customer is using the same AS number at both customer sites and the PE-to-CE routing protocol is BGP, what must be enabled on the PE router?

- A.** BGP AS override
- B.** BGP allowas-in
- C.** BGP SOO extended community
- D.** BGP AS path prepending

Answer: A

Explanation:

<https://supportforums.cisco.com/docs/DOC-21837>

Loop prevention in BGP is done by verifying the AS number in the AS Path. If the receiving router sees its own AS number in the AS Path of the received BGP packet, the packet is dropped. The receiving Router assumes that the packet was originated from its own AS and has reached the same place from where it originated initially.

The feature could be a disaster if customers are using same AS number along the various sites and disallows customer sites having identical AS numbers to be linked by another AS number. In such a scenario, routing updates from one site will be dropped when the other site receives them.

To override this feature, AS-Override function causes to replace the AS number of originating router with the AS number of the sending BGP router. The command is neighbor ip-address as-override and can only be executed under the VPNv4 address-family

Question No : 10

A service provider is tasked to write up a template for the network operations center to set up a Layer 2 VPN. Which command is the first command to issue on a Cisco IOS XR router?

- A. xconnect peer_ip vc_id encapsulation encapsulation_type
- B. connect name_pw interface_path_id dlci_value l2transport
- C. l2vpn
- D. pseudowire-class class_name

Answer: C

Question No : 11

In Layer 3 MPLS VPN implementations, if some of the VPNv4 routes on one PE router do not appear on another PE router, what could be the problem?

- A. RD mismatch between the PE routers
- B. RT export and import configuration errors
- C. RD export and import configuration errors
- D. VRF name mismatch between the PE routers

Answer: B

Explanation:

<http://blog.initialdraft.com/archives/1537/>

Question No : 12

Instructions

Enter the proper CLI commands and analysis the outputs on the Cisco routers to answer the multiple-choice questions.

From the network topology diagram, click on the router icon to gain access to the console of the router.

No console or enable passwords are required.

There are four multiple-choice questions with this task. Be sure to answer all four questions before selecting the Next button.

Not all the CLI commands or commands options are supported or required for this simulation.

For example, the show running-config command is **NOT** supported in this simulation.

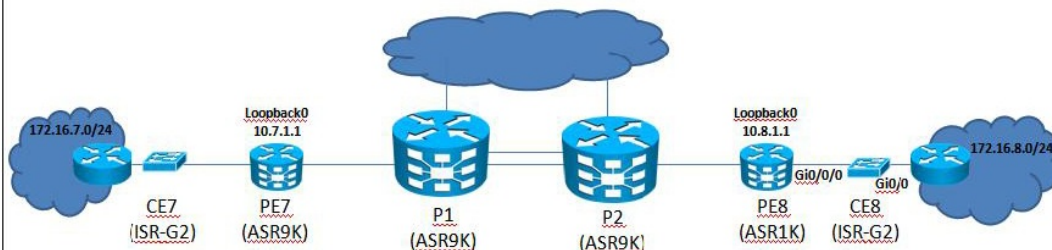
All the devices in this simulation have been pre-configured and you are not required to enter in any configurations.

Scenario

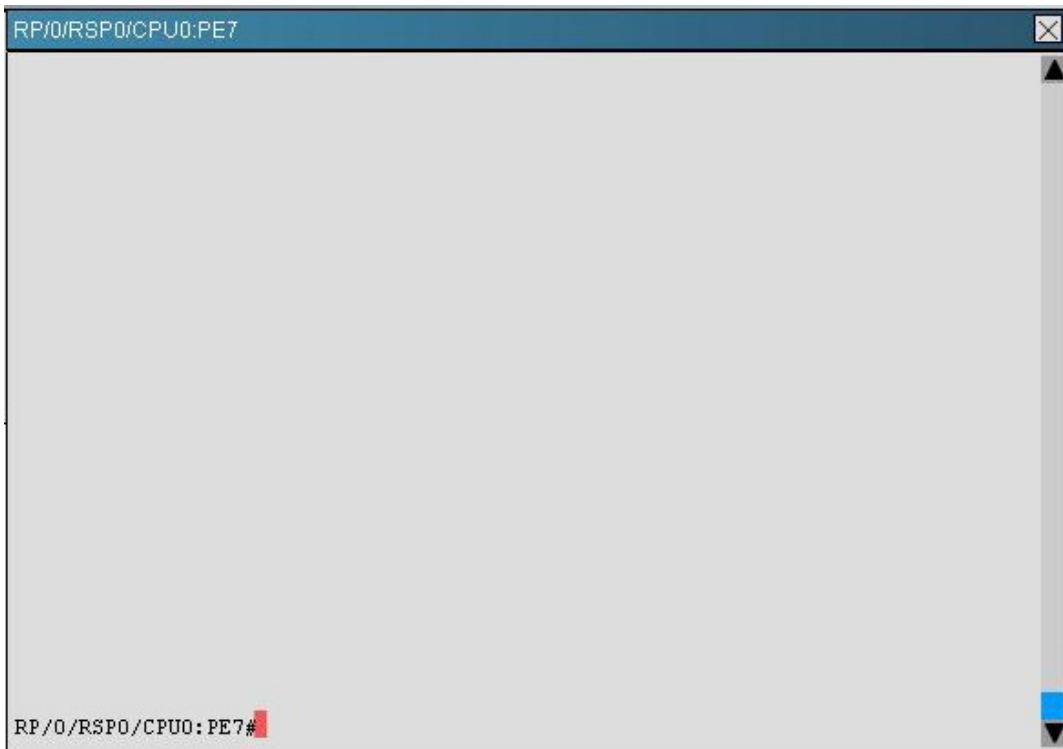
Referring to the network topology diagram shown in the exhibit, use the proper CLI commands on PE7 router and interpret the supported CLI commands outputs to answer the four multiple choice questions.

The PE7 router is an ASR9K router.

Topology



In this simulation, you will only have access to the PE7 router console
Click on the PE7 router icon to access the PE7 router console



On PE7, what is the pseudowire ID that connects to the 10.8.1.1 neighbor?

- A. 70
- B. 80
- C. 123
- D. 0x840001
- E. 0x4000080

Answer: C

Question No : 13