Cisco

Exam 352-001

CCDE™ Written Exam

Version: 10.0

[Total Questions: 314]

Topic break down

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Topic 1, Volume A

Question No : 1 - (Topic 1)

When you design a network, when would it be required to leak routes into a Level 1 area?

A. when a multicast RP is configured in the nonbackbone area
B. when MPLS L3VPN PE devices are configured in the Level 1 areas
C. when equal cost load balancing is required between the backbone and nonbackbone areas
D. when unequal cost load balancing is required between the backbone and nonbackbone areas

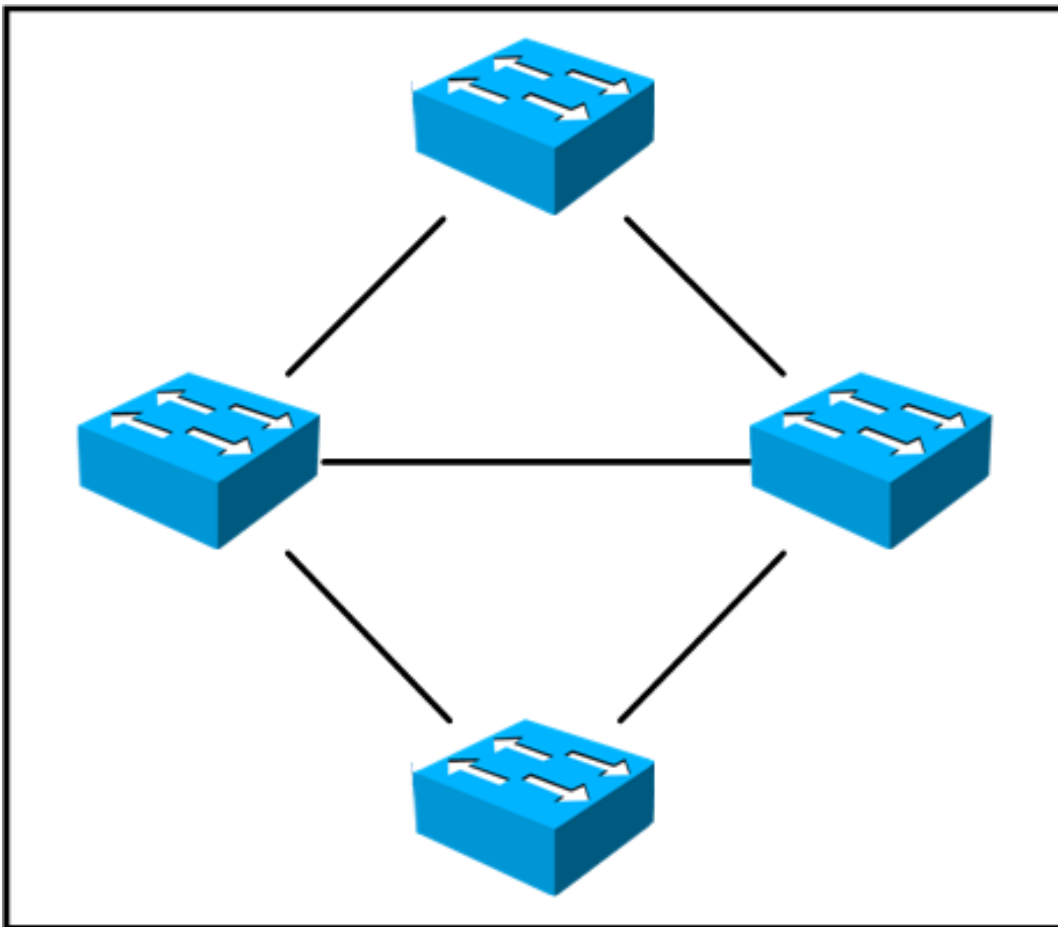**Answer: B**

Question No : 2 - (Topic 1)

You are working on a network design plan for a company with approximately 2000 sites. The sites will be connected using the public Internet. You plan to use private IP addressing in the network design, which will be routed without NAT through an encrypted WAN network. Some sites will be connected to the Internet with dynamic public IP addresses, and these addresses may change occasionally. Which VPN solution will support these design requirements?

A. GET VPN must be used, because DMVPN does not scale to 2000 sites.
B. DMVPN must be used, because GET VPN does not scale to 2000 sites.
C. GET VPN must be used, because private IP addresses cannot be transferred with DMVPN through the public Internet.
D. DMVPN must be used, because private IP addresses cannot be transferred with GET VPN through the public Internet.
E. GET VPN must be used, because DMVPN does not support dynamic IP addresses for some sites.
F. DMVPN must be used, because GET VPN does not support dynamic IP addresses for some sites.

Answer: D

Question No : 3 - (Topic 1)

Refer to the exhibit.

In this design, which technology would provide for the best use of resources to provide end-to-end Layer 2 connectivity?

A. MSTP
B. PAgP
C. Multichassis EtherChannel
D. LACP

Answer: C

Question No : 4 - (Topic 1)

You are designing an optical network. Your goal is to ensure that your design contains the highest degree of resiliency. In which two ways will you leverage a wavelength-switched optical network solution in your network design? (Choose two.)

A. a wavelength-switched optical network assigns routing and wavelength information

B. a wavelength-switched optical network takes linear and nonlinear optical impairment calculation into account

C. a wavelength-switched optical network guarantees restoration based strictly on the shortest path available

D. a wavelength-switched optical network eliminates the need for dispersion compensating units in a network

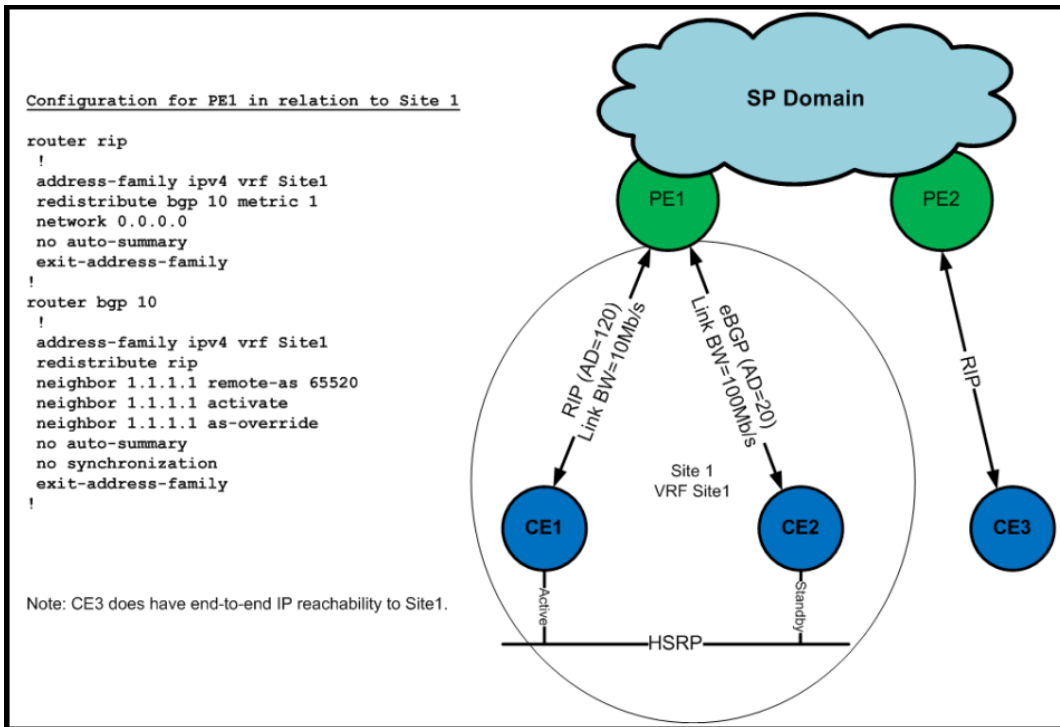**Answer: A,B**

Question No : 5 - (Topic 1)

Tesla Radio GmbH is going to build a new research lab network based on a set of switches that would connect to their existing enterprise network. They are considering a design that would guarantee loop-free behavior within the set of switches. The design would also allow the group of switches to seem like a single switch to the enterprise network, because it is owned by a separate administrative group. Which Spanning Tree Protocol should be used to support the design requirements?

A. IEEE 802.1w

B. IEEE 802.1D

C. IEEE 802.1s

D. IEEE 802.1p

Answer: C

Question No : 6 - (Topic 1)

Refer to the exhibit.

```
Configuration for PE1 in relation to Site 1

router rip
 !
 address-family ipv4 vrf Site1
 redistribute bgp 10 metric 1
 network 0.0.0.0
 no auto-summary
 exit-address-family
 !
router bgp 10
 !
 address-family ipv4 vrf Site1
 redistribute rip
 neighbor 1.1.1.1 remote-as 65520
 neighbor 1.1.1.1 activate
 neighbor 1.1.1.1 as-override
 no auto-summary
 no synchronization
 exit-address-family
 !

Note: CE3 does have end-to-end IP reachability to Site1.
```

Your junior design engineer presents this configuration design. What is the next-hop router for CE3, and why?

A. CE1. BGP weight is higher than CE2.
B. CE2. EBGP administrative distance is lower than RIP.
C. CE2. The link between CE2 and PE1 has more bandwidth than CE1-to-PE1.
D. CE1. HSRP on CE1 is in active state.

Answer: D

Question No : 7 - (Topic 1)

You are designing a Group Encrypted Transport virtual private network solution for an existing branch network. The existing network has the following characteristics:

- 50 remote sites (with an additional 30 remote sites expected over the next 3 years)
- Connectivity between all sites is via Multiprotocol Label Switching Layer 3 virtual private network service from a single provider
- Open Shortest Path First is the routing protocol used between provider edge and customer edge routers
- The customer edge routers will become group members performing the encryption between sites

Which additional routing protocol would you use for the overlay routing between the group

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members?

A. Open Shortest Path First (with a different process ID)
B. Enhanced Interior Gateway Routing Protocol
C. No additional protocol is necessary.
D. External Border Gateway Protocol
E. Routing Information Protocol Version 2
F. Next Hop Resolution Protocol

Answer: C

Question No : 8 - (Topic 1)

A new video multicast application is deployed in the network. The application team wants to use the 239.0.0.1 multicast group to stream the video to users. They want to know if this choice will impact the existing multicast design. What impact will their choice have on the existing multicast design?

A. Because 239.0.0.1 is a private multicast range, a flood of PIM packets that have to be processed by the CPU and hosts will be sent by the routers in the network.
B. Because 239.0.0.1 is a private multicast range, the rendezvous point has to send out constant group updates that will have to be processed by the CPU and hosts.
C. The multicast application sends too many packets into the network and the network infrastructure drops packets.
D. The 239.0.0.1 group address maps to a system MAC address, and all multicast traffic will have to be sent to the CPU and flooded out all ports.

Answer: D

Question No : 9 - (Topic 1)

A service provider has a Resilient Ethernet Protocol ring running as a metro backbone between its locations in one city. A customer wants to connect one site with one box redundant to the Resilient Ethernet Protocol ring at two different service provider locations. How can this be done without producing any Layer 2 loops within the network design?

A. Spanning tree at the service provider side only must be enabled.
B. Spanning tree at the customer side only must be enabled.
C. Flex Links at the service provider side only must be enabled.

D. Flex Links at the customer side only must be enabled.

E. EtherChannel at the service provider side and the customer side must be enabled.

F. Spanning tree at the service provider side and the customer side must be enabled.

G. Flex Links at the service provider side and the customer side must be enabled.

Answer: D

Question No : 10 - (Topic 1)

Refer to the exhibit.
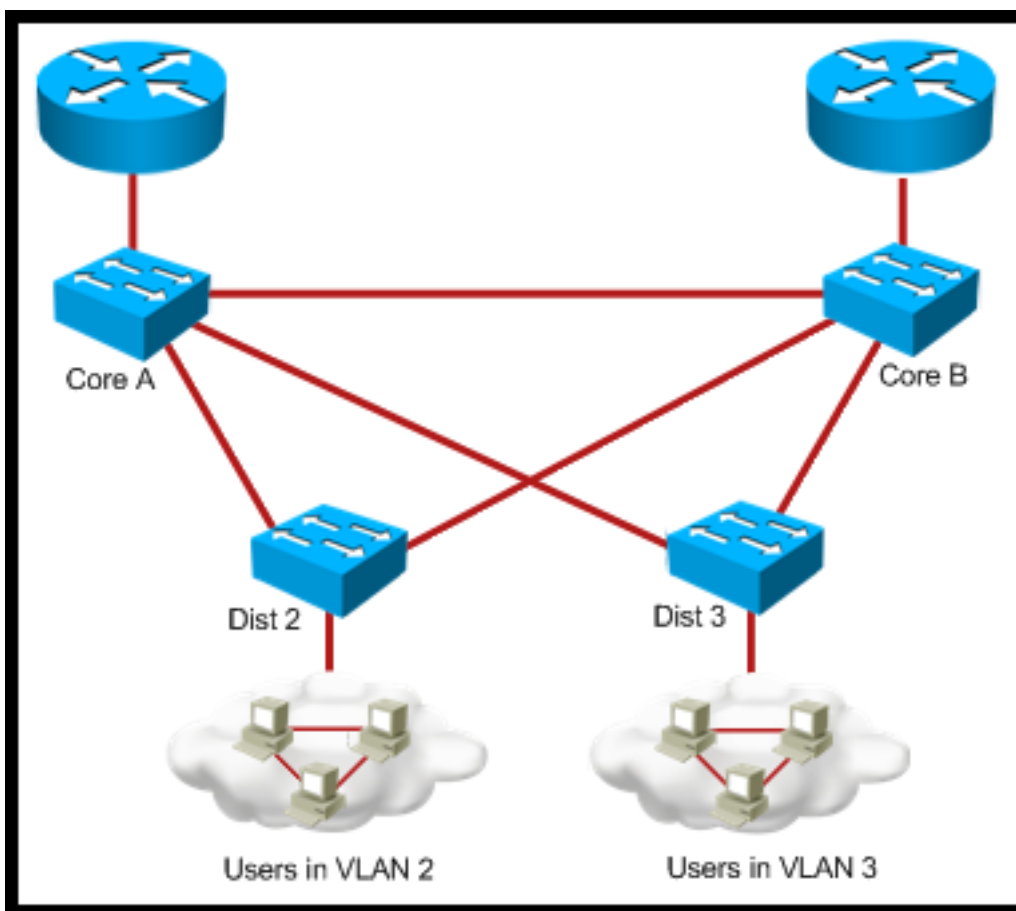
You are designing a spanning-tree network for a small campus. Which two of these options would result in a trouble-free spanning-tree network design? (Choose two.)

A. Convert all ports to trunk ports, prune off the VLANs that you do not require, and minimize the number of blocking ports.

B. Introduce Layer 3 VLANs (SVIs) and prune off the VLANs that you do not require.

C. Convert all the ports to trunk and enable BackboneFast.

D. Convert all the ports to trunk and enable UplinkFast between all the links.

Answer: A,B

Question No : 11 - (Topic 1)

Which restriction prevents a designer from using a GDOI-based VPN to secure traffic that traverses the Internet?

A. Enterprise host IP addresses are typically not routable.
B. GDOI is less secure than traditional IPsec.
C. Network address translation functions interfere with tunnel header preservation.
D. The use of public addresses is not supported with GDOI.

Answer: C

Question No : 12 - (Topic 1)

A network designer wants to improve a company network design due to multiple network crashes. Which technology would allow for the restore of a network connection without informing the Layer 3 protocol?

A. Bidirectional Forwarding Detection
B. automatic protection switching
C. UniDirectional Link Detection
D. Ethernet OAM

Answer: B

Question No : 13 - (Topic 1)

Service provider XYZ plans to provide dedicated Internet access and MPLS L3VPN services to business customers. XYZ has these design specifications:

- MP-BGP running on the core MPLS P routers with external Internet routes.
- The core network will include 16 Point of Presence IP POPs throughout the Asia-Pacific region.
- An additional nine non-P routers will use EBGP peering with multiple providers for Internet traffic.
- An additional 50 PE routers will provide end customers with dedicated Internet

access and L3VPN services throughout the Asia-Pacific region.

In what two ways can the MP-BGP be removed from the MPLS P core routers and still provide dedicated Internet access and MPLS L3VPN services? (Choose two.)

A. Disable BGP from the MPLS core P routers and have the MPLS core P routers run OSPF and LDP.
B. Enable separate BGP control plane routers using a route reflector server concept that will be fully meshed with peer route reflector servers and have clients as MPLS PE routers and EBGP peering routers.
C. Enable all EBGP routers as route reflector servers and MPLS PE routers as their clients.
D. It is not possible to disable BGP from the MPLS core P routers without impacting the dedicated Internet access and MPLS L3VPN services.

Answer: B,C

Question No : 14 - (Topic 1)

You have been tasked to create a Layer 2 network design that uses vPC to provide resiliency and avoid loops. vPC removes Layer 2 loops while providing redundancy through which mechanism?

A. dual-active detection
B. address synchronization
C. strict forwarding rules
D. Bridge Assurance

Answer: C

Question No : 15 - (Topic 1)

When creating a design plan for IPv6 integration, you decide to use stateless encapsulation of IPv6 packets into IPv4 tunnels between subscriber CPEs and a border relay. Which deployment technique allows for this functionality?

A. 6rd
B. Dual-Stack Lite
C. 4rd
D. DSTM