



Vendor: Cisco

Exam Code: 300-320

**Exam Name: Designing Cisco Network Service Architectures
(ARCH)**

Version: Demo

QUESTION 1

Which VRF component ensures control plane separation between the different Layer 3 VPNs?

- A. FIB
- B. routing protocol instance
- C. RIB
- D. a subset of the router interfaces

Correct Answer: B

QUESTION 2

Which option is a recommended firewall topology?

- A. using two firewalls with stateful failover switched mode
- B. using one firewall with NAT enabled in transparent mode
- C. using two firewalls in active/active mode
- D. using one firewall with stateful failover enabled in routed mode

Correct Answer: C

QUESTION 3

Which routing protocol provides the fastest convergence and greatest flexibility within a campus environment?

- A. OSPF
- B. IS-IS
- C. BGP
- D. EIGRP

Correct Answer: D

QUESTION 4

To which switch or switches should you provide redundant links in order to achieve high availability with reliable fast convergence in the enterprise campus?

- A. to a core switch running Cisco NSF and SSO from redundant distribution switches connected with a Layer 2 link
- B. to a core switch running Cisco NSF and SSO from redundant distribution switches connected with a Layer 3 link
- C. to two core switches from redundant distribution switches connected with a Layer 2 link
- D. to two core switches from redundant distribution switches connected with a Layer 3 link
- E. to two core switches running Cisco NSF and SSO from two redundant distribution switches running Cisco NSF and SSO

Correct Answer: D

QUESTION 5

A network engineer must perform posture assessments on Cisco ASA remote access VPN clients and control their network access based on the results. What mode is the Cisco best practice NAC deployment design for this situation?

- A. Layer 2 in-band real IP gateway mode
- B. Layer 2 out-of-band real IP gateway mode
- C. Layer 3 in-band virtual gateway mode
- D. Layer 3 out-of-band virtual gateway mode

Correct Answer: C

QUESTION 6

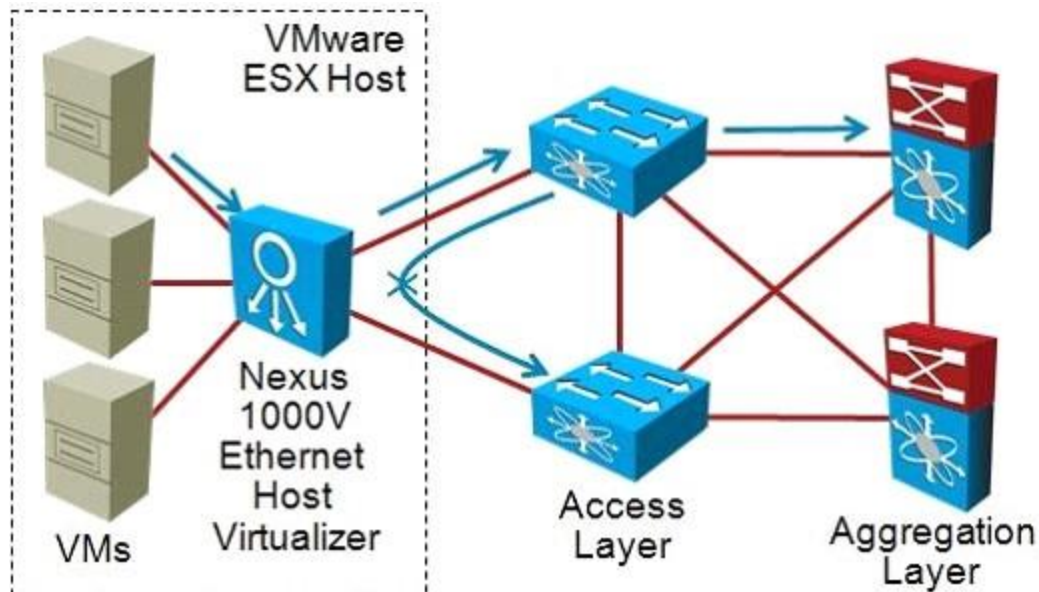
Which option does best practice dictate for the maximum number of areas that an OSPF router should belong to for optimal performance?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

Correct Answer: C

QUESTION 7

Refer to the exhibit. The Cisco Nexus 1000V in the VMware vSphere solution effectively creates an additional access layer in the virtualized data center network; which of the following 1000V characteristics can the designer take advantage of?



- A. Offloads the STP requirement from the external Access layer switches
- B. If upstream access switches do not support vPC or VSS the dual-homed ESX host traffic can still be distributed using virtual port channel host mode using subgroups automatically discovered

through CDP

- C. Allows transit traffic to be forwarded through the ESX host between VMNICs
- D. Can be divided into multiple virtual device contexts for service integration, enhanced security, administrative boundaries, and flexibility of deployment

Correct Answer: B

QUESTION 8

A campus network utilizes EIGRP to connect to several remote branch offices. Which configuration should be established on all branch routers to improve routing scalability and performance?

- A. Configure authentication between the campus and branch offices.
- B. Enable stub routing on all branch routers.
- C. Adjust EIGRP k-values to utilize delay.
- D. Utilize offset lists to direct traffic more efficiently.

Correct Answer: B

QUESTION 9

Which two of these are characteristics of multicast routing? (Choose two.)

- A. multicast routing uses RPF.
- B. multicast routing is connectionless.
- C. In multicast routing, the source of a packet is known.
- D. When network topologies change, multicast distribution trees are not rebuilt, but use the original path
- E. Multicast routing is much like unicast routing, with the only difference being that it has a group of receivers rather than just one destination

Correct Answer: AC

QUESTION 10

Which two of these correctly describe asymmetric routing and firewalls? (Choose two.)

- A. only operational in routed mode
- B. only operational in transparent mode
- C. only eight interfaces can belong to an asymmetric routing group
- D. operational in both failover and non-failover configurations
- E. only operational when the firewall has been configured for failover

Correct Answer: CD

QUESTION 11

What is an advantage of having an out-of-band management?

- A. It is less expensive to have an out-of-band management.
- B. Network devices can still be managed, even in case of network outage.
- C. There is no separation between the production network and the management network.

D. SSH protocol must be used to manage network devices.

Correct Answer: B

QUESTION 12

From a design perspective which two of the following OSPF statements are most relevant?
(Choose two)

- A. OSPF stub areas can be thought of as a simple form of summarization
- B. OSPF cannot filter intra-area routes
- C. An ABR can only exist in two areas - the backbone and one adjacent area
- D. Performance issues in the Backbone area can be offset by allowing some traffic to transit a non-backbone area
- E. The size of an area (the LSDB) will be constrained by the size of the IP MTU

Correct Answer: AB

QUESTION 13

A company's virtualization team wants to transfer control of network switching and policy management for VMware virtual servers to the networking team. What Cisco network virtualization solution should be implemented?

- A. Unified Computing System
- B. Nexus distributed virtual switch
- C. virtual network agent
- D. Nexus unified fabric switch

Correct Answer: B

QUESTION 14

Which feature set enables the full OSPF routing process when using a Cisco Catalyst 3750X Switch?

- A. LAN base
- B. IP base
- C. IP services
- D. enterprise access

Correct Answer: C

QUESTION 15

Which type of connectivity is required for VPLS?

- A. full mesh
- B. partial mesh
- C. star
- D. bus
- E. ring

Correct Answer: A

QUESTION 16

Which protocol will not adhere to the design requirement of the control plane being either separated or combined within a virtualization technology?

- A. FHRP
- B. STP
- C. CEF
- D. NSF with SSO

Correct Answer: B

QUESTION 17

Which option describes the effect of using softphones instead of VoIP handsets on QoS implementation for the voice traffic?

- A. It provides a Layer 2 CoS marking in the frames that can be used for QoS implementation.
- B. Using softphones means that 802.1Q tagging must be configured between the PC and the switch.
- C. The voice traffic of softphones is mixed with data traffic of PC on the access VLAN.
- D. By using softphones, the implementation of a QoS depends only on trusting DSCP markings set by the PC.

Correct Answer: C

QUESTION 18

An engineer notices that many BGP peers utilize the same configuration parameters. What can the engineer configure to simplify BGP neighbor statements and generate more efficient BGP peer updates?

- A. peer groups
- B. policy templates
- C. session templates
- D. peer address families

Correct Answer: A

QUESTION 19

A network engineer is designing a dual router, dual ISP solution and must prefer one ISP for inbound traffic over the other. Which two BGP attributes can be manipulated to accomplish this goal? (Choose two.)

- A. AS path
- B. MED
- C. local preference
- D. weight
- E. origin code

Correct Answer: AB

QUESTION 20

ACME corporation owns a single MDS. Which two SAN tools can be used to optimize the use and cost of the switching hardware? (Choose two.)

- A. zoning
- B. IVR
- C. VSAN
- D. iSCSI

Correct Answer: AC