

Cisco

Exam 642-874

Designing Cisco Network Service Architectures

Version: 25.0

[Total Questions: 162]



Question No: 1

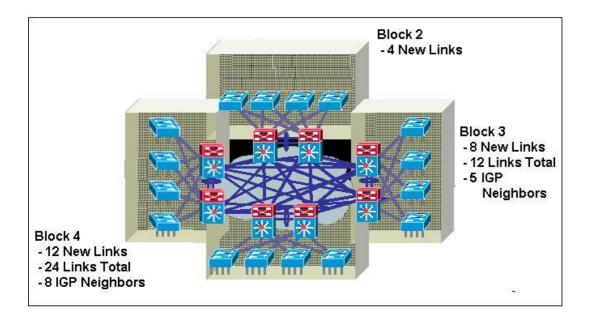
Which two services are provided at the aggregation layer in a data center design? (Choose two.)

- A. service module integration
- **B.** default gateway redundancy
- C. high-speed packet switching backplane
- **D.** network interface card teaming
- E. Layer 3 domain definitions

Answer: A,B

Question No: 2

Refer to the exhibit.



Which recommended practice is applicable?

- **A.** If no core layer is deployed, the design will be easier to scale.
- **B.** A dedicated campus core layer should be deployed for connecting three or more buildings.
- **C.** If no core layer is deployed, the distribution switches should not be fully meshed.
- **D.** A dedicated campus core layer is not needed for connecting fewer than five buildings.

Answer: B



Question No: 3

Which three major points are important for network virtualization to separate logical networks on a shared physical infrastructure? (Choose three.)

- A. VLANs
- B. data plane
- C. control plane
- **D.** VPNs
- E. VSANs
- F. management plane

Answer: B,C,F

Question No: 4

Which three Layer 2 access designs have all of their uplinks in an active state? (Choose three.)

- A. Flex Links
- B. loop-free U
- C. looped square
- D. looped triangle
- E. loop-free inverted U

Answer: B,C,E

Question No:5

Which statement about Fibre Channel communications is correct?

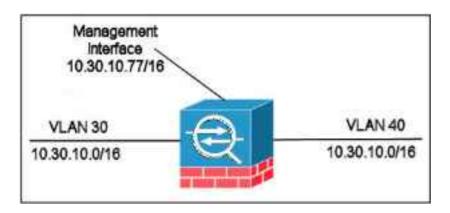
- **A.** N_Port to N_Port connections use logical node connection points.
- **B.** Flow control is only provided by QoS.
- **C.** It must be implemented in an arbitrated loop.
- **D.** Communication methods are similar to those of an Ethernet bus.



Answer: A

Question No: 6

Refer to the exhibit.



Which statement about the ASA is true?

- A. The management interface is reachable only from VLAN 30.
- B. The management interface is reachable only from VLAN 40.
- **C.** It is running in transparent mode.
- **D.** It is running in routed mode.

Answer: C

Question No:7

Which option does the FabricPath technology use to create loop-free Layer 2 networks?

- A. STP
- B. TTL
- C. fabric tags
- D. FSTP

Answer: B



To which network layer should Cisco Express Forwarding be tuned to support load balancing and to make more informed forwarding decisions?

- A. Layer 1
- B. Layer 2
- C. Layer 3
- D. Layer 4
- E. Layer 5
- F. Layer 6
- G. Layer 7

Answer: D

Question No:9

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

Answer: C

Question No: 10

Which three statements about Network Attached Storage are correct? (Choose three.)

- A. Data is accessed using NFS or CIFS.
- **B.** Data is accessed at the block level.
- **C.** NAS is referred to as captive storage.
- **D.** Storage devices can be shared between servers.
- **E.** A NAS implementation is not as fast as a DAS implementation.

Answer: A,D,E



Which statement about NIC teaming configurations is true?

- A. With ALB, all ports use one IP address and multiple MAC addresses.
- **B.** With AFT, two NICs connect to the different switches.
- C. With SFT, all ports are active.
- **D.** With AFT, all ports use one IP address and multiple MAC addresses.

Answer: A

Question No: 12

Which option is the Cisco recommendation for data oversubscription for access ports on the access-to-distribution uplink?

- **A.** 4 to 1
- **B.** 20 to 1
- **C.** 16 to 1
- **D.** 10 to 1

Answer: B

Question No: 13

Which of these Layer 2 access designs does not support VLAN extensions?

- A. FlexLinks
- B. loop-free U
- C. looped square
- **D.** looped triangle
- E. loop-free inverted U

Answer: B

Question No: 14

What two sensor types exist in an IDS/IPS solution? (Choose two.)



- A. host
- B. anomaly based
- C. policy based
- D. network based
- E. signature

Answer: A,D

Question No: 15

Which two modes does LACP support? (Choose two.)

- A. on
- **B.** passive
- C. associated
- **D.** link

Answer: A,B

Question No: 16

Which two options improve BGP scalability in a large autonomous system? (Choose two.)

- A. route reflectors
- B. route redistribution
- C. confederations
- **D.** communities

Answer: A,C

Question No: 17

Which two options are advantages of having a modular design instead of an EOR design in a data center? (Choose two.)

- A. cooling constraints
- B. cable bulk



- C. decreased STP processing
- D. redundancy options
- E. cost minimization
- F. low-skilled manager

Answer: C,D

Question No: 18

Distinct, physical redundancy within a network layer is a key characteristic that contributes to the high availability of the hierarchical network design. Which of the following is not an examples of this model?

- **A.** SAN extension with dual fabrics such as a yellow VSAN and a blue VSAN utilized via multipath software
- **B.** Redundant power supplies and hot-swappable fan trays in Aggregate switches
- C. A single SAN fabric with redundant uplinks and switches
- **D.** Servers using network adapter teaming software connected to dual-attached access switches

Answer: C

Question No: 19

The Cisco Nexus 1000V is intended to address which disadvantage of the VMware vSphere solution?

- **A.** Inability to deploy new functional servers without requiring physical changes on the network
- **B.** Complexity added by the requirement for an ESX host for each virtual machine
- C. Network administrators lack control of the access layer of the network
- **D.** To increase the number of physical infrastructure and the virtual machines that can be managed

Answer: C



What are two characteristics of Cisco Global Site Selector? (Choose two.)

- **A.** It helps verify end-to-end path availability.
- **B.** It provides traffic rerouting in case of disaster.
- C. HSRP, GLBP, and VRRP can be clients of GSS.
- **D.** BGP must be the routing protocol between the distributed data centers.
- **E.** DNS responsiveness is improved by providing centralized domain management.

Answer: B,E

Question No: 21

What is the primary benefit of implementing Virtual Device Contexts on Nexus hardware In a multi-tenant environment?

- A. resource isolation
- B. software partitioning
- C. resource allocation
- **D.** granular monitoring

Answer: A

Question No: 22

Which of the following is true regarding the effect of EIGRP queries on the network design?

- **A.** EIGRP queries will be the most significant issue with respect to stability and convergence
- **B.** EIGRP queries are not a consideration as long as EIGRP has a feasible successor with a next hop AD that is greater than the FD of the current successor route
- **C.** EIGRP queries will only increase the convergence time when there are no EIGRP stubs designed in the network

Answer: A



Which option maximizes EIGRP scalability?

- A. route redistribution
- **B.** route redundancy
- C. route filtering
- D. route summarization

Answer: D

Question No: 24

Which two design recommendations are most appropriate when EIGRP is the data center core routing protocol? (Choose two.)

- A. Summarize data center subnets.
- **B.** Advertise a default route into the data center core from the aggregation layer.
- **C.** Tune the EIGRP timers to enable EIGRP to achieve quicker convergence.
- **D.** Adjust the default bandwidth value to ensure proper bandwidth on all links.

Answer: A,B

Question No: 25

Which of the following two are effective and simple means of employing route summarization within the Enterprise Campus network? (Choose two)

- **A.** A default route (0.0.0.0 /0) advertised dynamically into the rest of the network
- **B.** Route filtering to manage traffic flows in the network, avoid inappropriate transit traffic through remote nodes, and provide a defense against inaccurate or inappropriate routing updates
- C. Use manual split horizon
- **D.** Use a structured hierarchical topology to control the propagation of EIGRP queries
- E. Open Shortest Path First (OSPF) stub areas

Answer: A,E