

# Cisco

## Exam 642-874

### Designing Cisco Network Service Architectures

Version: 25.0

[ Total Questions: 162 ]

**Question No : 1**

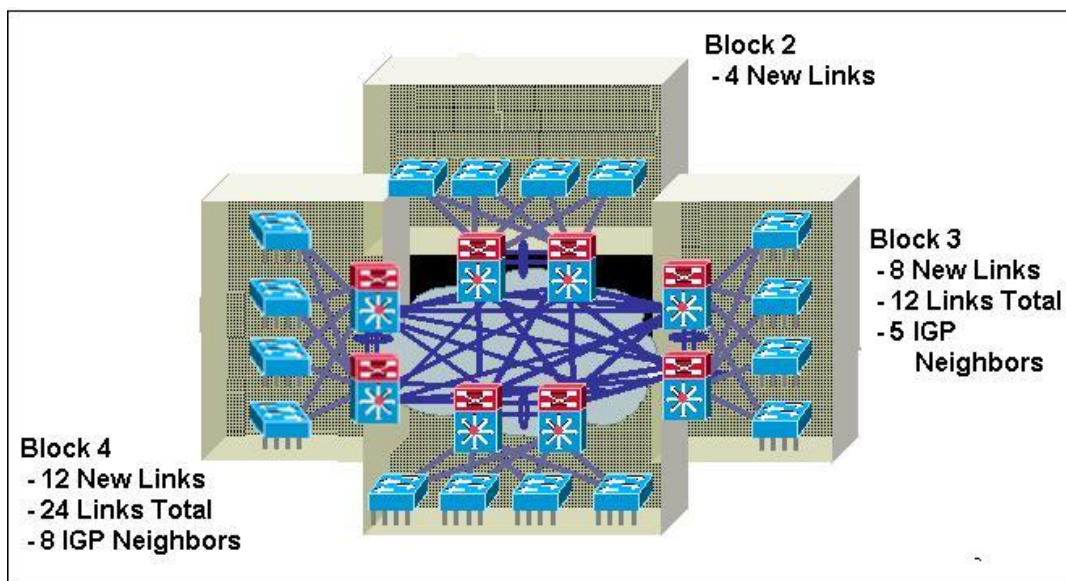
Which two services are provided at the aggregation layer in a data center design? (Choose two.)

- 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**

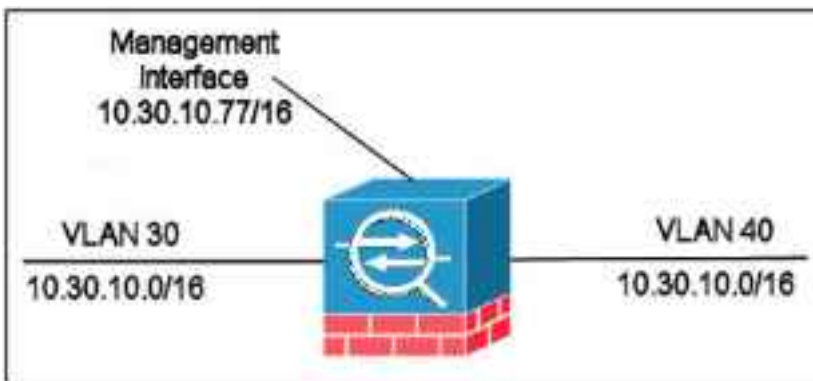
Which statement about Fibre Channel communications is correct?

- 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

**Question No : 8**

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**

**Question No : 11**

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**

**Question No : 20**



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**

**Question No : 23**

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**

**Question No : 26**