

# Cisco

## Exam 642-996

### Designing Cisco Data Center Unified Fabric

Version: 9.0

[ Total Questions: 178 ]

**Question No : 1**

In the data center architecture, which layer performs load balancing between data centers?

- A. Core layer
- B. Access layer
- C. Aggregation layer
- D. Collapse core

**Answer: A**

**Question No : 2**

Your customer is designing a new data center and would like the aggregation layer to be able to route and have Layer 3 capability. What Cisco platform will meet this requirement?

- A. Cisco Nexus 1000v—no advantages to this model
- B. Cisco Nexus 5596 without Layer 3 daughter card
- C. Cisco MDS 9506 chassis with supervisor engine
- D. Cisco Nexus 7010 switch with Enterprise Services Package

**Answer: D**

**Question No : 3**

You are designing the virtual access layer. Virtual machines must have visibility into all VLANs on the network. Which VLAN tagging configuration must you use?

- A.  
virtual switch tagging
- B.  
virtual machine guest tagging
- C.  
external switch tagging
- D.  
disabled VLAN tagging

**Answer: A**

**Question No : 4**

What is a typical output of the design planning phase that characterizes an existing data center?

- A. a high-level conceptual architecture proposal
- B. a gap analysis
- C. a verification plan
- D. reactive fault detection and correction

**Answer: B**

**Question No : 5**

Which command sequence represents a correct process to establish OSPF peer authentication credentials?

- A. N7010-C2(config)# key chain OSPF  
N7010-C2(config-keychain)# key 0  
N7010-C2(config-keychain-key)# key-string
- B. N7010-C2(config)# key-chain 0  
N7010-C2(config-key-chain)# key-name OSPF  
N7010-C2(config-key-chain-key)# key-string
- C. N7010-C2(config)# key ring OSPF  
N7010-C2(config-keyring)# key 0  
N7010-C2(config-keyring-key)# key-string
- D. N7010-C2(config)# key-ring 0  
N7010-C2(config-key-ring)# key-name OSPF  
N7010-C2(config-key-ring-key)# key-string

**Answer: A**

**Question No : 6**

You plan to implement Cisco Nexus 7000 Series switches in a data center. Which two factors must be considered for the implementation? (Choose two.)

- A.**  
M-Series modules support FcoE.
- B.**  
In storage VDCs, you can have only storage traffic.
- C.**  
Each F-Series module that runs FCoE requires an FCoE license.
- D.**  
F1-Series and F2-Series modules cannot exist in the same VDC.
- E.**  
F3-Series modules lack support for FEX.

**Answer: C,E**

**Question No : 7**

Instructions ✕

- **THIS TASK DOES NOT REQUIRE DEVICE CONFIGURATION.**
- To access the multiple-choice questions, click on the numbered boxes on the left of the top panel.
- There are **two** multiple-choice questions with this task. Be sure to answer all four questions before selecting the Next button.

Scenario ✕

Based on your knowledge of Cisco MDS 9500 Series Fibre Channel Directors and Cisco Nexus 7000 Series Data Center Switches, answer two questions on the supplied topology.

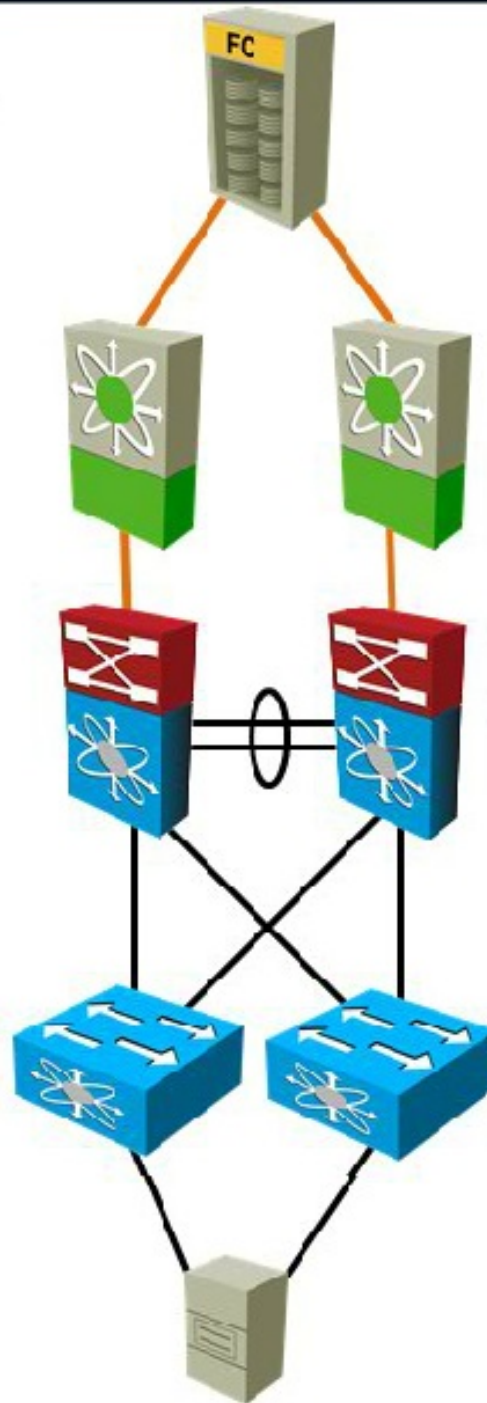
## Exhibit1

Dual-Homed Fibre Channel  
Storage Controller

Cisco MDS 9500 Series  
Fibre Channel Directors

Cisco Nexus 7000  
Collapsed Core

Access Layer



Which item represents a hardware requirement on the Cisco MDS 9500 Series Director to achieve Fibre Channel connectivity with the Cisco Nexus 7000 Series data center switch? (Choose one.)

A. Cisco MDS 9000 Family 48-Port 8-Gbps Advanced Fibre Channel Switching Module

- B. Cisco MDS 9000 Family 4-Port 10-Gbps Fibre Channel Switching Module
- C. Cisco MDS 9000 16-Port Storage Services Node
- D. Cisco MDS 9000 10-Gbps 8-Port FCoE Module

**Answer: D**

**Question No : 8**

Which two platforms are supported by using the Cisco Prime Data Center Network Manager?

(Choose two.)

- A.  
CiscoCatalyst routers
- B.  
Cisco MDS switches
- C.  
Cisco Aironet
- D.  
Cisco Nexus switches
- E.  
Cisco ACE

**Answer: B,D**

Reference:<http://www.cisco.com/c/en/us/products/cloud-systems-management/prime-data-centernetwork-manager/index.html>

**Question No : 9**

The classical access layer has its limitations due to high rate in which of the following?

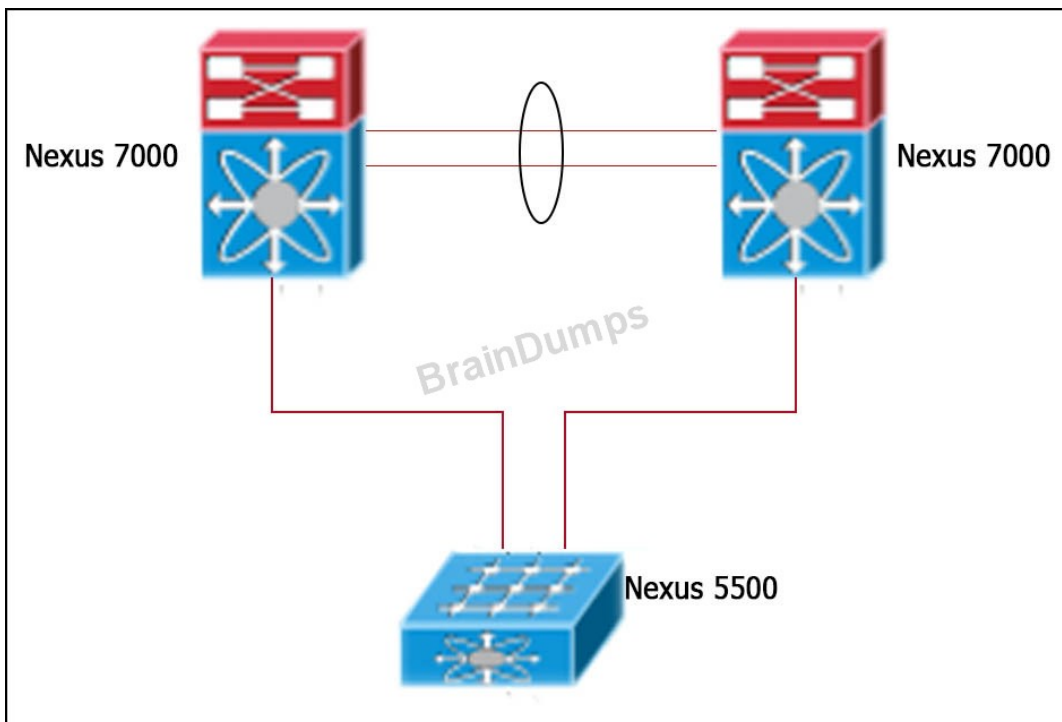
- A. oversubscription
- B. jitter

- C. cost
- D. 10 Gigabit Ethernet links

Answer: A

Question No : 10

Refer to the exhibit.



You are evaluating a proposed topology design. Which technology can you recommend to provide high availability for the topology?

- A. OTV
- B. STP
- C. LLDP
- D. vPC

Answer: A

**Question No : 11**

Cisco VM-FEX technology extends Cisco Fabric Extender technology to the virtual machine that eliminates which one of the following?

- A. The dedicated interface on the parent switch is eliminated.
- B. The software-based switch in the hypervisor is eliminated.
- C. All virtual machine traffic is eliminated.
- D. The need for a physical switch is eliminated.

**Answer: B**

**Question No : 12**

Your client is a large financial institution that is subject to security regulations. They have asked you for the highest level of traffic separation natively available on the Cisco Nexus 5500. Which answer is correct?

- A. VDC
- B. VRF
- C. VLAN
- D. Subnet
- E. Port Profile

**Answer: B**

**Question No : 13**

In a medium size Data Center, which three routing protocols would you use? (Choose Three.)

- A. EIGRP
- B. ISIS
- C. OSPF
- D. RIPv2
- E. HSRP

**Answer: A,B,C**



**Question No : 14**

Which three Cisco technologies or solutions are used during the virtualization design into the data center access layer? (Choose three.)

- A. Cisco Nexus 1000V switch
- B. Cisco UCS pass-through switching with VM-FEX
- C. Cisco Virtual Services Appliance
- D. Cisco Adapter-FEX when using Cisco UCS C-Series Servers
- E. Cisco Distributed Virtual Switch
- F. Fibre Channel switch mode

**Answer: A,B,D**

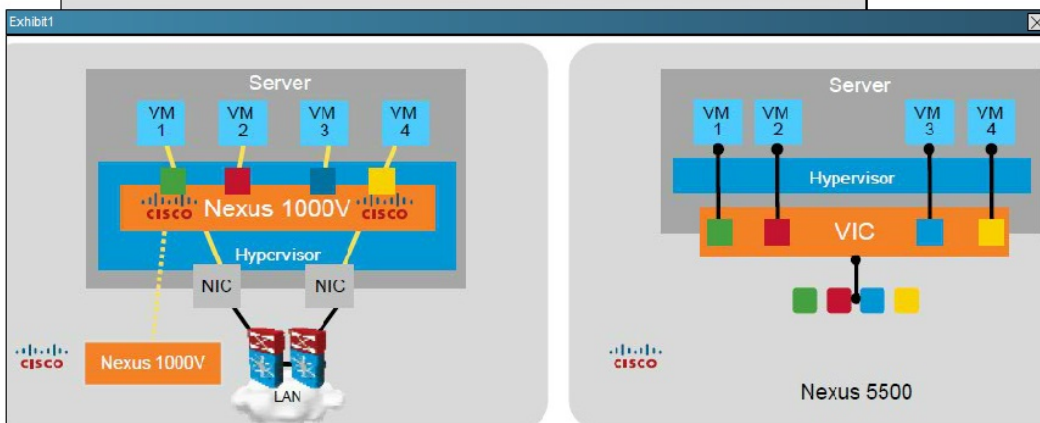
**Question No : 15**

**Instructions**

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**Scenario**

Use your knowledge of Cisco VM-FEX to answer the questions associated with the VM-FEX topologies.



Which two items represent features of VM-FEX with Cisco Nexus 5500? (Choose two)

- A. Software packet switching
- B. Hardware packet switching
- C. 802.1 Q
- D. VN-Tag (802.1 Qbh)
- E. Feature rich

F. Higher performance

**Answer: B,D**

**Question No : 16**

Spanning Tree Protocol runs at which functional layer of the data center?

- A. core layer
- B. access layer
- C. application layer
- D. network layer

**Answer: B**

**Question No : 17**

You plan to implement a new Cisco Nexus 7000 Series Switch that will have N7K-F132XP-15 F1 modules. How many fabrics modules (FAB 1) do you need to achieve the full F1 module capacity?

- A.  
2
- B.  
3
- C.  
5
- D.  
10

**Answer: D**

**Question No : 18**

Which three control plane operations are used by vPC? (Choose three.)