

Cisco 642-996 Exam

Volume: 177 Questions

Question No: 1

What is one example of typical business requirements that are driving the design of installed base data centers?

- A. IT reorganization
- B. virtualization
- C. greater collaboration
- D. physical space

Answer: C

Question No: 2

What documents are not typically an output that is deliverable from the design phase?

- A. high-level design
- B. site requirements specification
- C. troubleshooting procedures
- D. migration plan

Answer: C

Question No: 3

What is the most common design requirement when creating a data center solution?

- A. high availability with disaster recovery
- B. multicore CPU servers
- C. traffic inspection for inbound traffic
- D. virtualization of network resources

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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 two characteristics are associated with the core layer of a Data Center Unified Fabric network? (Choose two.)

- A. no packet manipulation
- B. QoS-policing
- C. voice, data, and wireless convergence
- D. scalable routing protocols like OSPF
- E. Layer 2 default gateway redundancy
- F. QoS-classification and queuing

Answer: A, D

Question No: 6

Which three characteristics are associated with the aggregation layer of a Data Center Unified Fabric network? (Choose three.)

- A. no packet manipulation
- B. QoS-policing

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- C. voice, data, and wireless convergence
- D. scalable routing protocols like OSPF
- E. provides default gateway redundancy
- F. QoS-classification and queuing
- G. routing manipulation and filtering
- H. aggregates end users

Answer: B, E, G

Question No: 7

Which three characteristics are associated with the access layer of a Data Center Unified Fabric network?
(Choose three.)

- A. no packet manipulation
- B. QoS-policing
- C. voice, data, and wireless convergence
- D. scalable routing protocols like OSPF
- E. provides default gateway redundancy
- F. QoS - classification and queuing
- G. routing manipulation and filtering
- H. aggregates end users

Answer: C, F, H

Question No: 8

Which protocols are Cisco recommended for connecting the main data center to a remote data center?

- A. LISP

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- B. OTV
- C. FabricPath
- D. vPC

Answer: B

Question No: 9

When migrating an existing data center network to a unified fabric network, which transitions should you expect to see?

- A. IOS to Nexus networking equipment
- B. physical to virtual machines
- C. Fibre Chanel to FCoE
- D. iSCSI to NAS

Answer: C

Question No: 10

Which three protocols are effective in minimizing the use of STP in the data center design? (Choose three.)

- A. FCoE
- B. vPC
- C. vDC
- D. FabricPath
- E. 802.lad
- F. STP

Answer: A, B, D

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Question No: 11

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: 12

Layer 2 forwarding of multicast traffic with vPC is based on which modified protocol?

- A. CGMP
- B. PIM SS
- C. Auto-RP
- D. IGMP snooping
- E. Destination-based trees

Answer: D

Question No: 13

Which protocol is required in order for FabricPath to support switches or hosts that dual-attach through classical Ethernet?

- A. VDC
- B. vPC
- C. LISP
- D. OTV

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- E. VSS
- F. TRILL

Answer: B

Question No: 14

In a geographically diverse data center environment, which high-availability feature allows data centers to simultaneously serve the same content to all sites?

- A. HSRP
- B. VRRP
- C. SLB
- D. GSLB
- E. FCoE

Answer: D

Question No: 15

Given the requirements, which Cisco Nexus product is Cisco recommended?

A rich feature set that makes it well suited to top-of-rack, middle-of-row, or end-of-row access-layer applications.

Data center racks with standards-based 1 and 10 Gigabit Ethernet and FCoE features, and virtual machine awareness features that allow IT departments to consolidate networks.

A combination of high port density, lossless Ethernet, wire-speed performance, and extremely low latency that makes the switch family well suited to meet the growing demand for 10 Gigabit Ethernet.

- A. 1000v
- B. 1010
- C. 2000
- D. 3000
- E. 4000

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F. 5500

Answer: F

Question No: 16

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

- A. ARP cache
- B. MAC address learning
- C. CGMP snooping
- D. LACP
- E. BPDUs

Answer: A, B, E

Question No: 17

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: 18

Which innovation in the Cisco NX-OS Software brings an entirely new Layer 2 data plane by encapsulating the frames entering the device with a header that consists of a routable source and destination address?

- A. OTV
- B. MPLS

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- C. Routing
- D. RSTP
- E. LISP

Answer: A

Question No: 19

When designing a data center environment with ECMP and IP routing between the data center network segments, which design would be the most suitable?

- A. Layer 3 data center core
- B. Layer 3 data center core with Layer 2 extension
- C. Layer 2 data center core
- D. Layer 2 data center core with Layer 3 extension

Answer: A

Question No: 20

What design will effect traffic flows in the Data Center Core layer?

- A. The domain needed to extend a VLAN from one switch to another is determined at the core layer
- B. With a 3 layer (Access, Aggregation, Core) design the Layer 2 domain must be configured across the Core for VLAN extension to occur
- C. Extending Layer 2 through a core causes path blocking by STP and has the risk of uncontrollable broadcast issues related to extending Layer 2 domains, and therefore should be avoided
- D. Server-to-server traffic typically travels between aggregation modules by way of the core, while backup and replication traffic remains within the aggregation module

Answer: C

Question No: 21

When designing a collapsed core data center, which two technologies are used to virtualize the core and

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aggregation layers? (Choose two.)

- A. FCoE
- B. LISP
- C. HSRP
- D. VDC
- E. VRF

Answer: D, E

Question No: 22

The classical aggregation layer design does not provide isolation on the control plane and on the data plane. What is the solution to this problem?

- A. STP
- B. VDC
- C. Cisco ISO ISSU
- D. HSRP

Answer: B

Question No: 23

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

- A. oversubscription
- B. jitter
- C. cost
- D. 10 Gigabit Ethernet links

Answer: A

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Question No: 24

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
- B. Cisco Nexus 5596 without Layer 3 daughter card
- C. Cisco MOS 9506 chassis with supervisor engine
- D. Cisco Nexus 7010 switch with Enterprise Services Package

Answer: D

Question No: 25

Which technology provides additional scalability and simplification of an Ethernet network, providing more efficient forwarding and eliminating the need for the Spanning Tree Protocol?

- A. OTV
- B. vPC
- C. PVST+
- D. FabricPath

Answer: D

Question No: 26

Which technology provides the ability to use all links in a LAN topology by providing an active-active path to the upstream switch?

- A. STP
- B. vPC
- C. PVST+
- D. RSTP

Answer: B