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Cisco 200-310

Designing for Cisco Internetwork Solutions

Version: 5.0
Cisco 200-310 Exam

QUESTION 1
Which two statements about designing the Data Center Access layer are correct? (Choose two.)

A. Multiport NIC servers should each have their own IP address.
B. Layer 3 connectivity should never be used in the access layer.
C. Layer 2 connectivity is primarily implemented in the access layer.
D. Multiport NIC servers should never be used in the access layer.
E. Layer 2 clustering implementation requires servers to be Layer 2 adjacent.

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 2
An organization needs a WAN Transport technology that meets these criteria:

· has a low initial cost

· provides low-to-medium BW

· has medium-to-high latency and jitter

Which technology should the organization use?

A. DSL
B. X.25
C. ISDN
D. wireless
E. analog modem

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 3
Which two of these are scalability benefits of designing a network that utilizes VPNs? (Choose two.)

A. extends the network to remote users

B. allows networks to be set up and restructured quickly

C. reduces dial infrastructure expenditures

D. reduces the number of physical connections

E. simplifies the underlying structure of a customer WAN
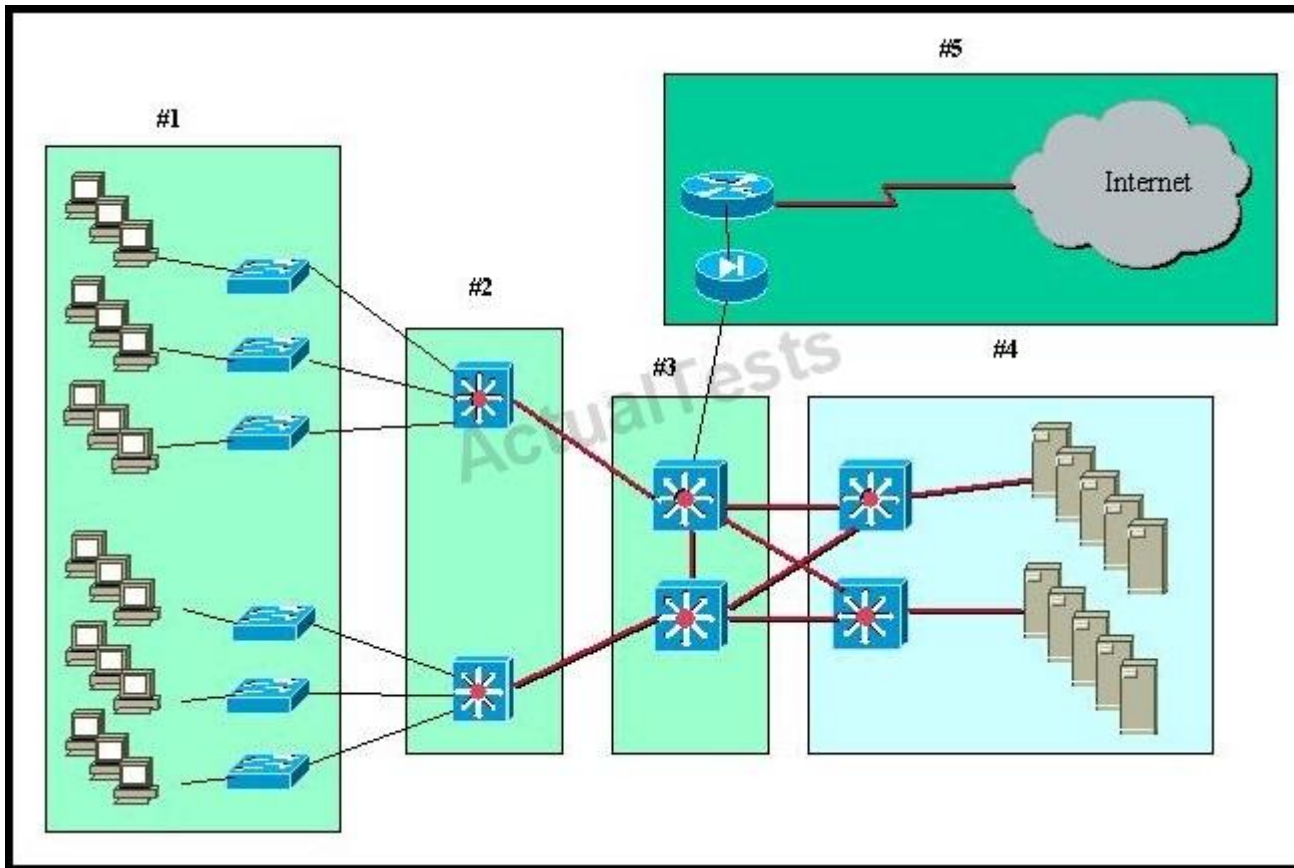
Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 4
Refer to the exhibit.

A standard Layer 2 campus network design is pictured. Which numbered box represents the core layer?

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 5
Which two design criteria require VLANs in a proposed solution? (Choose two.)

A. video streaming on the LAN
B. security between departments
C. the segmenting of collision domains
D. the segmenting of broadcast domains
E. the use of multivendor equipment
F. a limited corporate budget

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 6
Which three sources does a network designer use to collect information for characterizing an existing network? (Choose three.)

A. staff input
B. visual inventory
C. network audit
D. traffic analysis
E. server statistics

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 7
Which Cisco security mechanism has the attributes listed below?

· it is a sensor appliance

· it searches for potential attacks by capturing and analyzing traffic

· it is a "purpose-built device"

· it is installed passively

· it introduces no delay or overhead

A. IKE
B. PIX
C. HIPS
D. NIDS
E. HMAC

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 8
Which three pieces of information should be documented for each step in a design implementation plan? (Choose three.)

A. step description
B. design document references
C. easy guidelines in case of failure
D. estimated implementation time
E. simple implementation guidelines
F. estimated rollback time in case of failure

Correct Answer: ABD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 9
A company is implementing an Identity Management solution with these characteristics:

· existing AAA Server

· Cisco Catalyst switches

· minimal added investments

Which Cisco Trust and Identity Management solution would you recommend?

A. NAC Appliance
B. Cisco IBNS
C. CSM
D. Cisco Security MARS

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10
Which Cisco device management feature is most suited to metering network traffic and providing data for billing network usage?

A. BGP
B. Cisco Discovery Protocol
C. QoS
D. RMON
E. NetFlow

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 11
What are three valid methods of gathering information about an existing data network? (Choose three.)

A. Use organizational input.

B. Perform a traffic analysis.

C. Analyze the user-mapping of a running application.

D. Perform a packet-level audit to verify carrier service guarantees.

E. Perform a network audit to gather more detail about the network.

F. Use reports that analyze the metrics of the customer's existing network.

Correct Answer: ABE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 12
Which two routing protocols converge most quickly? (Choose two.)

A. RIPv1

B. RIPv2

C. BGP

D. OSPF

E. EIGRP

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 13
What is the benefit of VLSM?

A. reduces configuration complexity by using the same subnet mask length

B. reduces the routing table size by using automatic route summarization

C. reduces the routing table size by using manual route summarization

D. allows the subnet mask and classful routing updates to be advertised

E. secures the hosts on a subnet by using RFC 1918 addresses

Correct Answer: C

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 14
You want to gather as much detail as possible during a network audit with a minimal impact on the network devices themselves.

Which tool would you use to include data time stamping across a large number of interfaces while being customized according to each interface?

A. RMON
B. SNMPv3
C. NetFlow
D. Cisco Discovery Protocol

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 15
What is the primary consideration when choosing a routed network design over a traditional campus network design?

A. Layer 3 service support at the network edge
B. the routing protocol choice: open (OSPF) or proprietary (EIGRP)
C. the routing abilities of the host devices
D. the need to control the broadcast domains within the campus core

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 16
Which statement is true concerning the data center access layer design?

A. The access layer in the data center is typically built at Layer 3, which allows for better sharing of services across multiple servers.

B. With Layer 2 access, the default gateway for the servers can be configured at the access or aggregation layer.

C. A dual-homing NIC requires a VLAN or trunk between the two access switches to support the dual IP addresses on the two server links to two separate switches.

D. The access layer is normally not required, as dual homing is standard from the servers to the aggregation layer.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 17
Which statement is true concerning the data center distribution (aggregation) layer design?

A. With Layer 3 at the aggregation layer, the physical loops in the topology must still be managed by STP.

B. The boundary between Layer 2 and Layer 3 must reside in the multilayer switches, independent of any other devices.

C. A mix of both Layer 2 and Layer 3 access is the most optimal.

D. In a small data center, the aggregation layer can connect directly to the campus core, exchanging IP routes and MAC address tables.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 18
When considering the three VoIP design models - single site, centralized multisite, and distributed multisite - which question below would help to eliminate one of the options?

A. Will the switches be required to provide inline power?

B. Will users need to make offsite calls, beyond the enterprise?

C. Will users require applications such as voice mail and interactive voice response?

D. Are there users whose only enterprise access is via a QoS-enabled WAN?

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 19
With deterministic Wireless LAN Controller redundancy design, the different options available to the designer have their own strengths. Which statement is an example of such a strength?

A. Dynamic load balancing, or salt-and-pepper access point design, avoids the potential impact of oversubscription on aggregate network performance.
B. N+N redundancy configuration allows logically grouping access points on controllers to minimize intercontroller roaming events.
C. N+N+1 redundancy configuration has the least impact to system management because all of the controllers are colocated in an NOC or data center.
D. N+1 redundancy configuration uses Layer 3 intercontroller roaming, maintaining traffic on the same subnet for more efficiency.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 20
When there is a need for immunity to EMI for connecting locations that are greater than 100 meters apart, which two solutions can be utilized? (Choose two.)

A. multimode fiber
B. Fibre Channel
C. HVDC transmission lines
D. single-mode fiber
E. serial RS-232
F. Gigabit Ethernet 1000BASE-CX

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 21
Which mode is used to exclusively look for unauthorized access points?

A. monitor mode

B. sniffer mode

C. rogue detector mode

D. local mode

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 22
OSPF will be used as the IGP within a campus network. Which two things should you consider before deployment? (Choose two.)

A. All areas need to connect back to area 0.

B. The OSPF process number on each router should match.

C. NSSA areas should be used when an area cannot connect directly to area 0.

D. Stub areas should be connected together using virtual links.

E. ECMP may cause undesired results depending on the environment.

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 23
Which is the North American RIR for IPv4 addresses?

A. RIPE

B. ARIN

C. IANA

D. IEEE

E. APNIC

Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 24
An enterprise campus module is typically made up of four submodules, as described by the Cisco Enterprise Architecture Model. Which two submodules are part of this module? (Choose two.)

A. DMZ
B. enterprise branch
C. building distribution
D. server farm/data center
E. MAN

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 25
WAN backup over the Internet is often used to provide primary connection redundancy. Which is the most important consideration when passing corporate traffic over the public Internet?

A. security
B. static versus dynamic routing
C. bandwidth
D. QoS
E. latency

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 26
Which type of area should you use in an enterprise OSPF deployment if you want to prevent propagation of type 5 LSAs but still allow the redistribution of external routes?

A. stub

B. totally stubby

C. backbone

D. NSSA

E. virtual link

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 27
Which protocol is used for voice bearer traffic?

A. MGCP

B. RTP

C. SCCP

D. CDP

E. ICMP

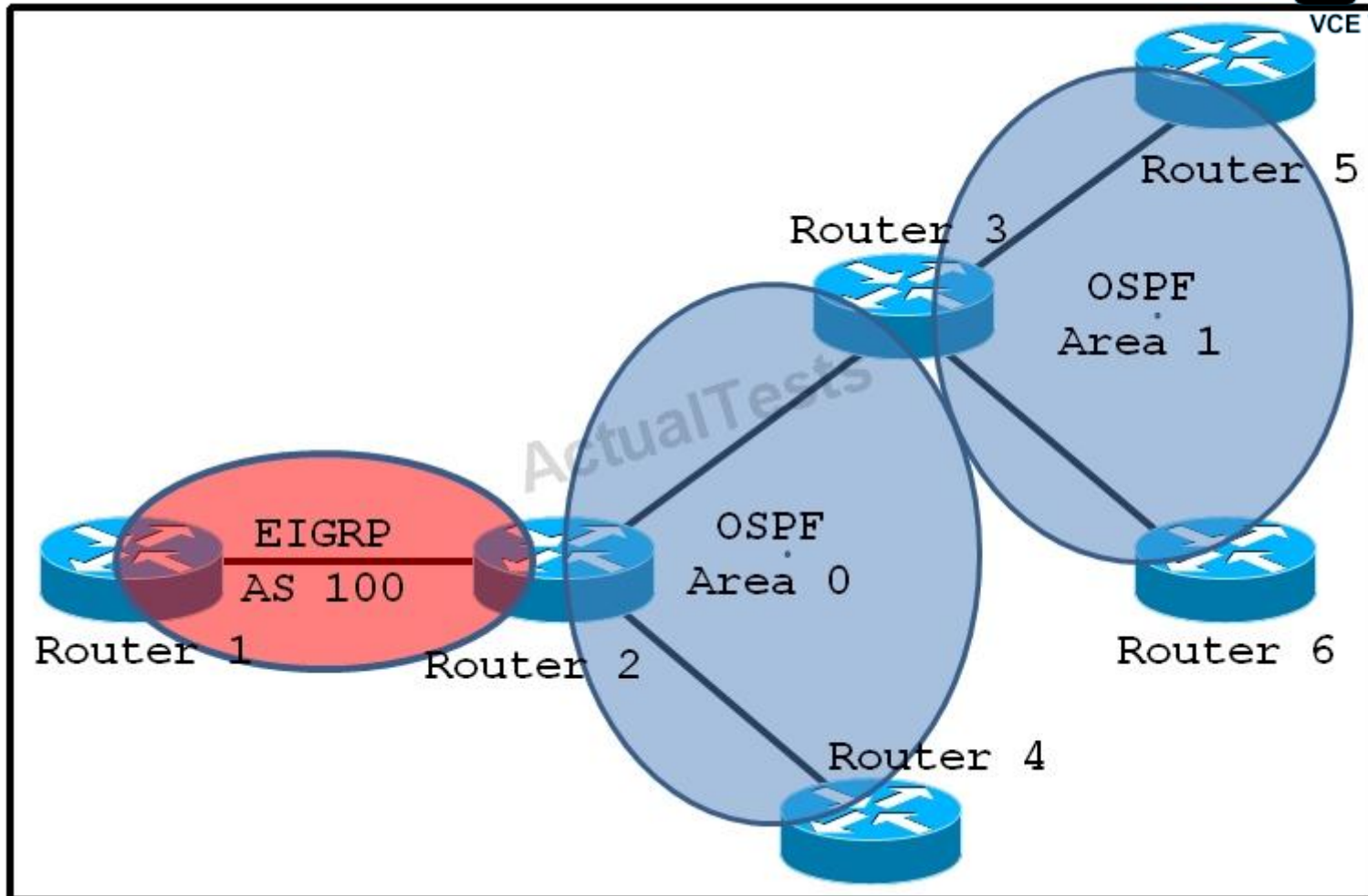**Correct Answer:** B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 28
Refer to the exhibit.

On which router should you configure redistribution?

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

Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 29
Which three Cisco technologies can you use to detect and mitigate threats? (Choose three.)

A. NetFlow
B. FWSM
C. ISE
D. VRRP
E. sFLOW

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 30
Which technology allows remote networks to be connected via site-to-site tunnels?

A. IPsec VPN
B. AnyConnect VPN
C. SSL VPN
D. EasyConnect VPN

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 31
Exam Which RFC defines the IPv6 standard?

A. RFC 1918
B. RFC 2338
C. RFC 2460
D. RFC 2740

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 32
What is the maximum RIPv2 hop count for a reachable route?

A. 13
B. 14
C. 15
D. 16

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 33
Which Cisco Wireless LAN Controller interface is used for out-of-band management?

A. service port
B. management port
C. controller port
D. virtual port

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 34
In which operation mode does the AP act as a dedicated sensor for location-based and intrusion detection services?

A. monitor mode
B. promiscuous mode
C. discovery mode
D. sniffer mode

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 35
Which HSRP parameters must match, to ensure proper functionality?

A. group parameters
B. priority parameters
C. preempt parameters
D. tracking parameters

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 36
What three primary sources of information are needed to perform a network audit? (Choose three.)

A. existing documentation
B. new documentation
C. existing network management software
D. new network management tools
E. management personnel

F. technical personnel

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 37
Which three layers comprise the traditional hierarchical model? (Choose three.)

A. core layer
B. distribution layer
C. access layer
D. aggregation layer
E. network layer
F. Internet layer

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 38
Which first-hop redundancy protocol dynamically distributes client traffic between multiple routers?

A. HSRP
B. VRRP
C. GLBP
D. IGRP

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 39
Which three options are characteristics of data center evolution? (Choose three.)

A. consolidation
B. virtualization
C. automation
D. standardization
E. optimization
F. modulation

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 40
Which option is a benefit of the modular approach to network design?

A. higher availability
B. repeatable scalability
C. increased security
D. improved resiliency

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 41
Which statement describes the methodology that supports the Cisco Enterprise Architecture models?

A. It divides the network into functional network modules.
B. It divides the network into role-based network modules.
C. It divides the network into regional network modules.
D. It divides the network into operational network modules.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 42
Which design is the recommended geometric design for routed topologies?

A. linear
B. triangular
C. rectangular
D. circular

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 43
Which statement describes an advantage of the Layer 2 access model over the Layer 3 access model in the data center?

A. It enables NIC teaming.
B. It removes STP dependency.
C. It increases scalability.
D. It decreases convergence.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 44
Router A has three feasible successors to the 192.168.1.0/24 network, which are listed here:

Option 1 has a metric of 8123228.

Option 2 has a metric of 2195467.

Option 3 has a metric of 8803823.

The variance 4 command was issued on Router A. How many active entries does Router A have in its routing table for the 192.168.1.0/24 network?

A. 0
B. 1
C. 2
D. 3

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 45
Which two mechanisms are used by distance vector protocols to prevent routing loops? (Choose two.)

A. split horizon
B. route summarization
C. route poisoning
D. tuned timers

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 46
Which interior routing protocol has the most preferable administrative distance by default?

A. RIP
B. OSPF

C. EIGRP
D. BGP
E. IS-IS

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 47
What are the three modes of unicast reverse path forwarding? (Choose three.)

A. strict
B. loose
C. VRF
D. global
E. PIM
F. local

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 48
A network engineer has been asked to follow a top down design approach. What layer of the OSI model is used to start the design?

A. physical
B. network
C. transport
D. application

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 49
Where in the network hierarchy should network access control be performed?

A. backbone
B. core
C. access
D. distribution

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 50
What are two advantages of employing scalability when designing a campus network? (Choose two.)

A. reduces operational cost
B. higher port density
C. investment protection
D. consistent operation
E. improved fault tolerance

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 51
A network engineer is using the traditional switched hierarchical design. The client has asked to increase uplink utilization from the access layer to the distribution. How can the engineer attain this new requirement without adding new physical connections?

A. enable spanning-tree portfast
B. enable VSS at the distribution layer

C. increase the MTU size on the uplink interfaces

D. ensure the root bridge priority is equal on both distribution switches

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 52
Multicast has been enabled and configured in the Enterprise, and PIM Sparse-mode has been enabled on all VLANs. What feature is required to stop multicast traffic from being broadcasted on the access layer switches?

A. IGMP snooping

B. Multicast boundary filter

C. PIM dense-mode

D. Dynamic ARP inspection

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 53
What two SAN protocols will allow a customer to utilize 10GbE for SAN access? (Choose two.)

A. ISCSI

B. FCoE

C. SATA

D. Fiber Channel

E. AoE

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 54
Application servers require load balancing and security services. Where in the data center network should these services be provisioned?

A. core
B. aggregation
C. Layer 3 access
D. distribution

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 55
A data center is reaching its power and cooling capacity. What two virtualization technologies can address the problem by directly reducing the number of physical devices? (Choose two.)

A. virtual switching systems
B. virtual device contexts
C. virtual servers
D. virtual routing and forwarding
E. virtual port channels
F. virtual LANs

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 56
A dynamically routed private line and a statically routed IPsec tunnel connect two offices. What routing configuration prefers the IPsec tunnel only in the event of a private line failure?

A. floating static entry

B. EIGRP variance

C. bandwidth metric

D. OSPF maximum paths

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 57
When designing a new enterprise campus network, what topology should be used for maximum scalability?

A. flat

B. three-layer

C. star

D. partial mesh

E. full mesh

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 58
A spanning tree topology can be simplified by deploying what Cisco IOS technology in the distribution block?

A. VDC

B. vPC

C. Rapid PVST+

D. VSS

E. Flex Links

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 59
An organization is deciding what routing protocol to use throughout their network. What must be considered if routing is to be performed at the access layer?

A. reduced scalability of the network when introducing a large number of switch blocks into the routing table
B. centralized management of access control lists at the distribution layer
C. reliability when implementing routing over spanning-tree at the access layer
D. performance differences between core, distribution and access layer equipment

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 60
A routing protocol neighbor relationship has been established between two routers across the public Internet using GRE. What technology can be used to encrypt this communication channel?

A. access lists
B. IP security
C. context based access
D. intrusion prevention system

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 61
Which statement correctly describes queuing in environments supporting teleworkers?

A. CQ is for time-sensitive protocols.
B. Queuing occurs on the outbound interface.

C. Priority queuing guarantees some level of service to all traffic.
D. Hardware queues are configured for appropriate PQ, CQ, or WFQ.
E. WFQ is the Cisco IOS default on all WAN links regardless of speed.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 62
Which first-hop redundancy protocol dynamically distributes traffic across multiple gateways?

A. HSRP
B. GLBP
C. VRRP
D. IBGP

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 63
A network engineer must collect application-level information passing through a router. What two tools can provide this information? (Choose two.)

A. NBAR
B. CiscoWorks
C. SNMP collector
D. NetFlow collector
E. Syslog

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 64
What information should be utilized to identify network applications that are running on an existing network infrastructure?

A. customer information
B. existing documentation
C. traffic analysis
D. external feedback
E. user feedback

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 65
A design engineer must send management information messages across the public internet. What solution provides a secure and encrypted method for passing these messages?

A. SNMP v3
B. NetFlow v9
C. Syslog Traps
D. Secure Shell v2
E. SNMP v2

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 66
A network engineer is designing a solution that will monitor IP traffic through corporate routers with the ability to export the flows to a collection engine without using network probes. What technology meets this requirement?

A. RMON

B. NetFlow
C. SNMP
D. Syslog
E. IP SLA

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 67
A network engineer is following the Cisco enterprise architecture model. Where are aggregation switches found?

A. Enterprise Campus
B. Enterprise Edge
C. SP Edge WAN
D. Remote Module

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 68
What two configurations are Cisco recommended best practices for user access interfaces? (Choose two.)

A. VTP transparent mode
B. BPDUguard
C. Root Guard
D. Portfast
E. Trunk mode

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 69
What Cisco product is designed to improve the performance of Windows file and exchange services in remote data centers?

A. Application Control Engine
B. Wide Area Application Services
C. Cisco Application Policy Infrastructure Controller
D. Cisco Prime Network Services Controller

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 70
What design feature should be considered when accessing resources from a remote data center over a WAN connection?

A. security
B. bandwidth
C. reliability
D. management

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 71
What two addresses are defined under RFC 1918? (Choose two.)

A. 19.22.37.1
B. 10.1.7.19
C. 127.0.0.1
D. 172.31.1.1

E. 239.15.12.1

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 72
What IPv4 addressing technique is used for proper address planning to reduce the number of entries in a routing table?

A. filtering
B. tunneling
C. summarization
D. translation
E. supernetting

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 73
What two components are used when creating an endpoint's modified EUI-64 format IPv6 address? (Choose two.)

A. IPv6 Prefix
B. 64-bit MAC address
C. 48-bit MAC address
D. IPv4 Address
E. Link Local Suffix

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 74
A network engineer requires that an OSPF ASBR must only flood external LSAs only within its own area. What OSPF area type should be configured?

A. Backbone Area
B. Totally Stub Area
C. Not So Stubby Area
D. Stub Area

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 75
What two factors should be considered when deploying an enterprise campus network? (Choose two.)

A. employees
B. geography
C. applications
D. administration
E. throughput

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 76
The spanning tree topology can be simplified by deploying what Cisco NX-OS technology in the distribution and access layer?

A. VDC
B. vPC
C. Rapid PVST+
D. VSS
E. Flex Links

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 77
What network technology consolidates network and storage traffic in the data center?

A. virtual storage-area network
B. unified fabric
C. unified computing system
D. virtual switching system

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 78
What type of topology supports WAN redundancy when a balance is required between cost, high availability, and performance?

A. partial meshed
B. full meshed
C. star
D. ring
E. hub-and-spoke
F. bus
G. point-to-point

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 79
What is the key limitation of using Internet circuits as a backup to a private enterprise WAN?

A. circuit bandwidth
B. prioritization
C. security
D. operational expense

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 80
A network design engineer is seeking a dynamic routing protocol that supports fast convergence in a Cisco environment. What protocol allows for this?

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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 81
What are two benefits of the bottom-up design approach? (Choose two.)

A. allows a quick response to a design request
B. facilitates design that is based on previous experience
C. requires little or no notation of actual organizational requirements for implementation
D. incorporates organizational requirements
E. provides a broader overview to the organization and the designer

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 82
Which network layer is the best fit for security features such as DAI and DHCP snooping?

A. campus core
B. enterprise edge
C. campus distribution
D. remote-access VPN
E. enterprise data center
F. campus access

Correct Answer: F
Section: (none)
Explanation

Explanation/Reference:

QUESTION 83
Directory services and electronic messaging are performed at which layer of the network?

A. core
B. application
C. distribution
D. network

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
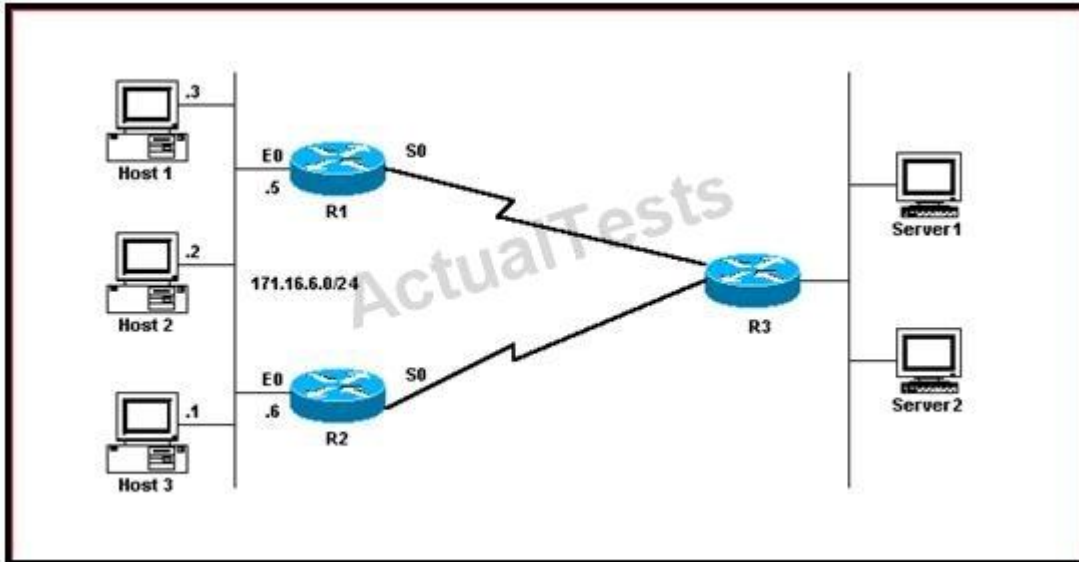
Which configuration can be used to implement FHRP protocol and load balancing at the same time?

A. R1
    Interface Ethernet0
    ip address 171.16.6.5 255.255.255.0
    standby 1 preempt
    standby 1 ip 171.16.6.100
    standby 1 track Serial0
    standby 2 preempt standby 2 ip 171.16.6.200
    standby 2 track serial 0
    standby 2 priority 95
    !
    !
    R2
    interface Ethernet0
    ip address 171.16.6.6 255.255.255.0
    standby 1 preempt
    standby 1 ip 171.16.6.100
    standby 1 track Serial0
    standby 1 priority 95
    standby 2 preempt
    standby 2 ip 171.16.6.200

    standby 2 track serial 0

B. R1
    Interface Ethernet0
    ip address 171.16.6.5 255.255.255.0
    standby 1 preempt standby 1 ip 171.16.6.100
    standby 1 track Serial0
    standby 1 priority 95 !
    !
    R2
    interface Ethernet0
    ip address 171.16.6.6 255.255.255.0
    standby 1 preempt standby 1 ip 171.16.6.100
    standby 1 track Serial0
    standby 1 priority 95

C. R1
    Interface Ethernet0
    ip address 171.16.6.5 255.255.255.0
    standby 1 preempt standby 1 ip 171.16.6.100
    standby 1 track Serial0
    standby 1 priority 95
    standby 2 preempt
    standby 2 ip 171.16.6.200
    standby 2 track serial 0
    standby 2 priority 95
    !
    !
    R2
    interface Ethernet0
    ip address 171.16.6.6 255.255.255.0
    standby 1 preempt
    standby 1 ip 171.16.6.100
    standby 1 track Serial0
    standby 2 preempt
    standby 2 ip 171.16.6.200
    standby 2 track serial 0

D. R1
    Interface Ethernet0
    ip address 171.16.6.5 255.255.255.0
    standby 1 preempt
    standby 1 ip 171.16.6.100
    standby 1 track Serial0
    standby 1 priority 95
    !

!
R2
interface Ethernet0 ip address 171.16.6.6 255.255.255.0
standby 1 preempt
standby 1 ip 171.16.6.100

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 85
Cisco FabricPath brings the benefits of routing protocols to Layer 2 network Ethernet environments. What are two advantages of using Cisco FabricPath technology? (Choose two.)

A. Cisco FabricPath provides MAC address scalability with conversational learning.
B. Loop mitigation is provided by the TTL field in the frame.
C. Cisco FabricPath technology is supported in all Cisco platforms and can replace legacy Ethernet in all campus networks.
D. Cisco FabricPath relies on OSPF to support Layer 2 forwarding between switches, which allows load balancing between redundant paths.
E. Cisco FabricPath is IETF-standard and is not used with Cisco products.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 86
A network design shows two routers that are directly connected to an Ethernet switch using optical connections. There is an OSPF adjacency between the routers. In this design, which solution ensures that interface-down detection is reported as quickly as possible to the IGP?

A. optimized OSPF SPF timers
B. Bidirectional Forwarding Detection
C. automatic protection switching
D. optimized OSPF LSA timers
E. Ethernet OAM CFM monitoring

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 87
Which statement is true about using a DNS server to discover a controller IP?

A. The AP sends a discovery request to the first controller on the list and then goes down the list chronologically until it receives a discovery response.
B. The AP sends a discovery request to the last controller on the list and then goes up the list chronologically until it receives a discovery response.
C. The AP sends a discovery request to all controllers on the list simultaneously.
D. Multiple controller IP addresses in a DNS response are not supported.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 88
Refer to the exhibit.

Frame Relay

S1/0.10

S2/0

HQ: 10.10.10.1 / T1 circuit

10.10.10.2 / T3 circuit
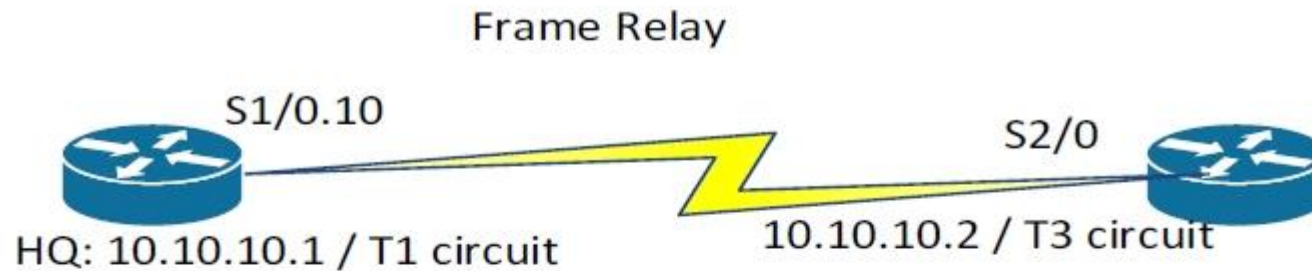
```
interface Serial1.10 point-to-point
ip address 10.10.10.1 255.255.255.0
no ip directed-broadcast
frame-relay interface-dlci 100
class myNet
!
map-class frame-relay mynet
frame-relay adaptive-shaping becn
frame-relay cir 1544000
frame-relay bc 8000
frame-relay be 8000
frame-relay mincir 16000
```

A network engineer at a technical call center receives a call from a customer complaining that only 56 kbps of data can be transferred over the T1 Frame Relay WAN circuit at a remote site. The engineer checks the Frame Relay switch and confirms that only 56 kbps is being transferred over the circuit. The engineer requests the router configuration of the customer headquarters site router. What is causing this issue to occur?

A. The wrong CIR is configured.

B. The BECN configuration is causing this issue.

C. The class name is spelled wrong under the interface.

D. The wrong DLCI number is assigned to the interface.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 89
Which option is an advanced congestion management mechanism?

A. weighted fair queuing

B. policing

C. payload compression

D. header compression

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 90
Which option is an example of physical device virtualization?

A. VSS

B. VPN

C. VRF

D. VLAN

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 91
A data center is being deployed, and one design requirement is to be able to readily scale server virtualization. Which IETF standard technology can provide this requirement?

A. Transparent Interconnection of Lots of Links

B. Cisco FabricPath

C. data center bridging

D. Cisco Unified Fabric

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 92
A company would like to distribute a VM hosting cluster between three data centers with the capability to move VMs between sites. The connectivity between data centers is IP only, and the new design should use the existing WAN. Which Layer 2 tunneling technology should be used?

A. VPLS

B. L2TPv3

C. OTV

D. AToM

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 93
In which two places is redundancy recommended in an enterprise campus network design? (Choose two.)

A. building distribution

B. campus core

C. building access
D. e-commerce
E. Internet connectivity

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 94
What are two purposes of route redundancy? (Choose two.)

A. minimize the effect of link failures
B. minimize the effect of internetworking device failures
C. minimize the convergence time of STP
D. load balance across redundant paths
E. save network costs

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 95
Which two statements are true regarding a hierarchical network? (Choose two.)

A. facilitates choosing the type of routing protocols to be used in the network
B. provides scalability without affecting other layers and functionality
C. provides better performance as network resources are efficiently utilized
D. limits redundancy at the distribution layer
E. complicates manageability because of the added security

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 96
Which two Cisco data center devices can participate in Cisco FabricPath? (Choose two.)

A. Cisco Nexus 5500 Series Switches
B. Cisco Nexus 1000V Series Switches
C. Cisco Nexus 7000 Series Switches
D. Cisco Nexus 4900 Series Switches
E. Cisco MDS 9500 Series Multilayer Directors

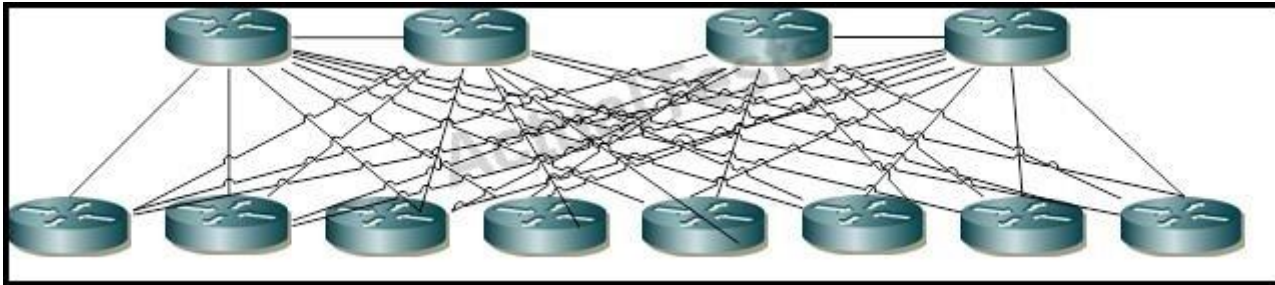**Correct Answer:** AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 97
Refer to the exhibit.

Assuming that a network will grow exponentially for the next 24 months, what is the main limitation that must be addressed?

A. scalability
B. serviceability
C. redundancy
D. resiliency

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 98
A network engineer is tasked with summarizing the routes to a remote site. What is the optimal route statement to connect to the 192.168.101.0/24 and 192.168.102.0/24 networks across the corporate WAN?

A. ip route 192.168.100.0 255.255.254.0 10.1.1.1
B. ip route 192.168.100.0 255.255.252.0 10.1.1.1
C. ip route 192.168.100.0 255.255.255.0 10.1.1.1
D. ip route 192.168.101.0 255.255.254.0 10.1.1.1

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 99
Refer to the exhibit.
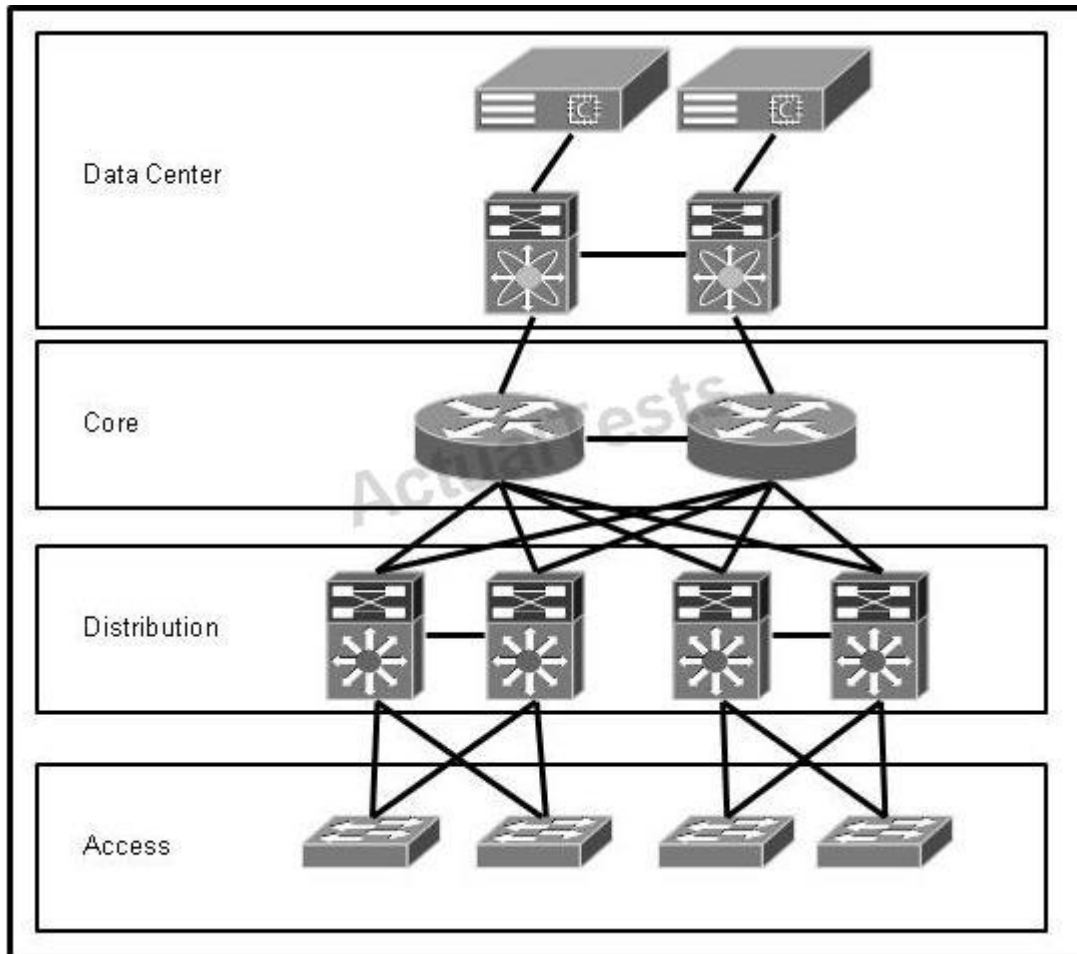
Where should routes in the routing table be aggregated or summarized?

A. in the core toward the data center
B. in the distribution toward the access
C. in the core toward the distribution
D. in the distribution toward the core

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 100
Which option is used by OSPF to reduce the flooding domain of database updates in a network?

A. hello packets
B. virtual links
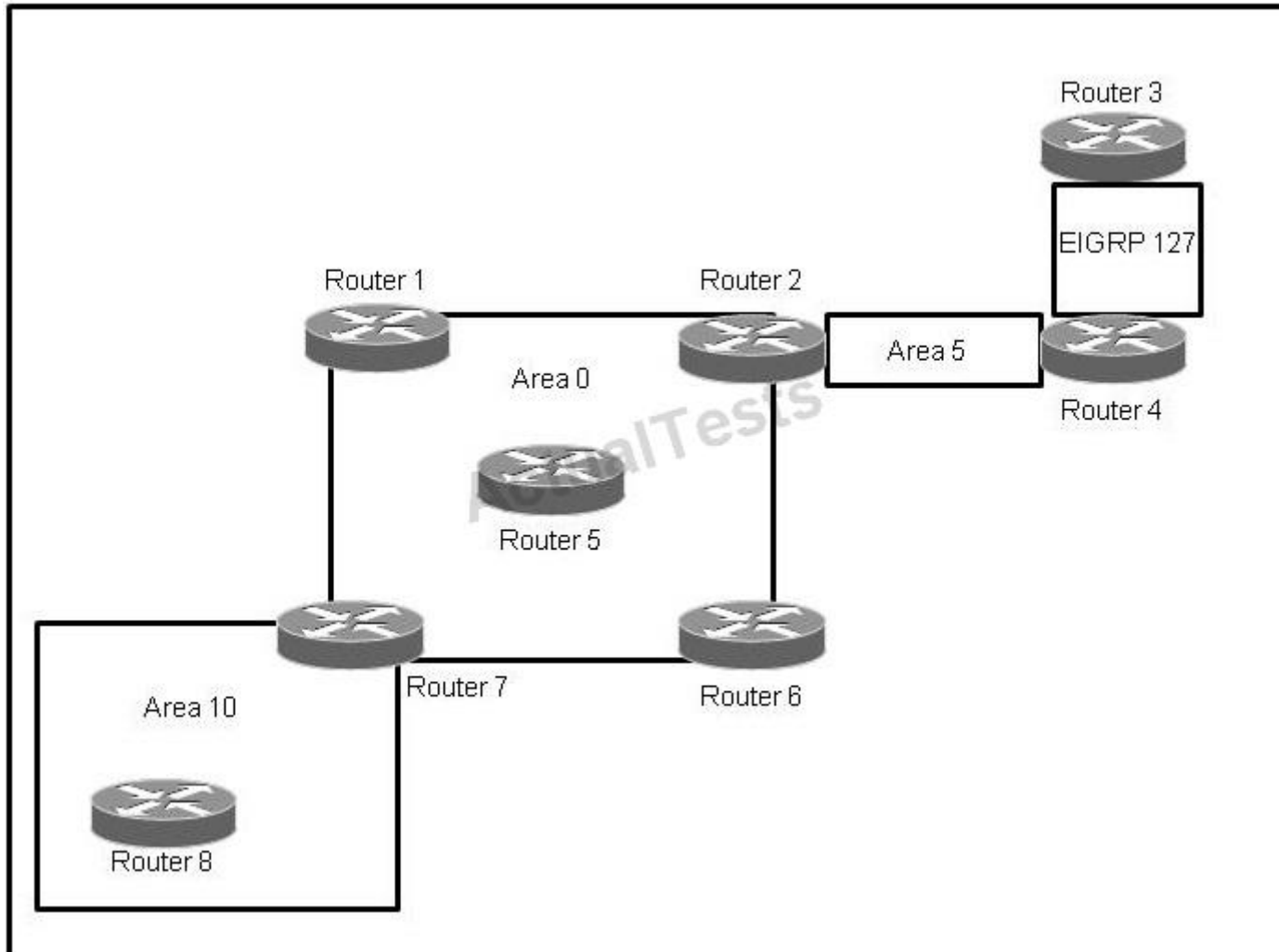C. interface cost
D. areas

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 101
Refer to the exhibit.

Which three OSPF routers are the only routers that may perform summarization with the current network layout? (Choose three.)

A. Router 2
B. Router 3
C. Router 4
D. Router 5
E. Router 7

F. Router 8

Correct Answer: ACE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 102
Which two options should be used to achieve fast convergence in an OSPF network? (Choose two.)

A. Bidirectional Forwarding Detection
B. fast hellos
C. LSA retransmission interval
D. SPF throttle timers
E. LSA group pacing

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 103
Refer to the exhibit.

Address/Mask	Next hop
19.46.0.0/16	Interface 0
19.47.0.0/16	Interface 1
19.52.43.0/24	Router 1
default	Router 2

Which next hop will the router select if given an IP packet with the destination address 19.48.254.3?

A. Router 2
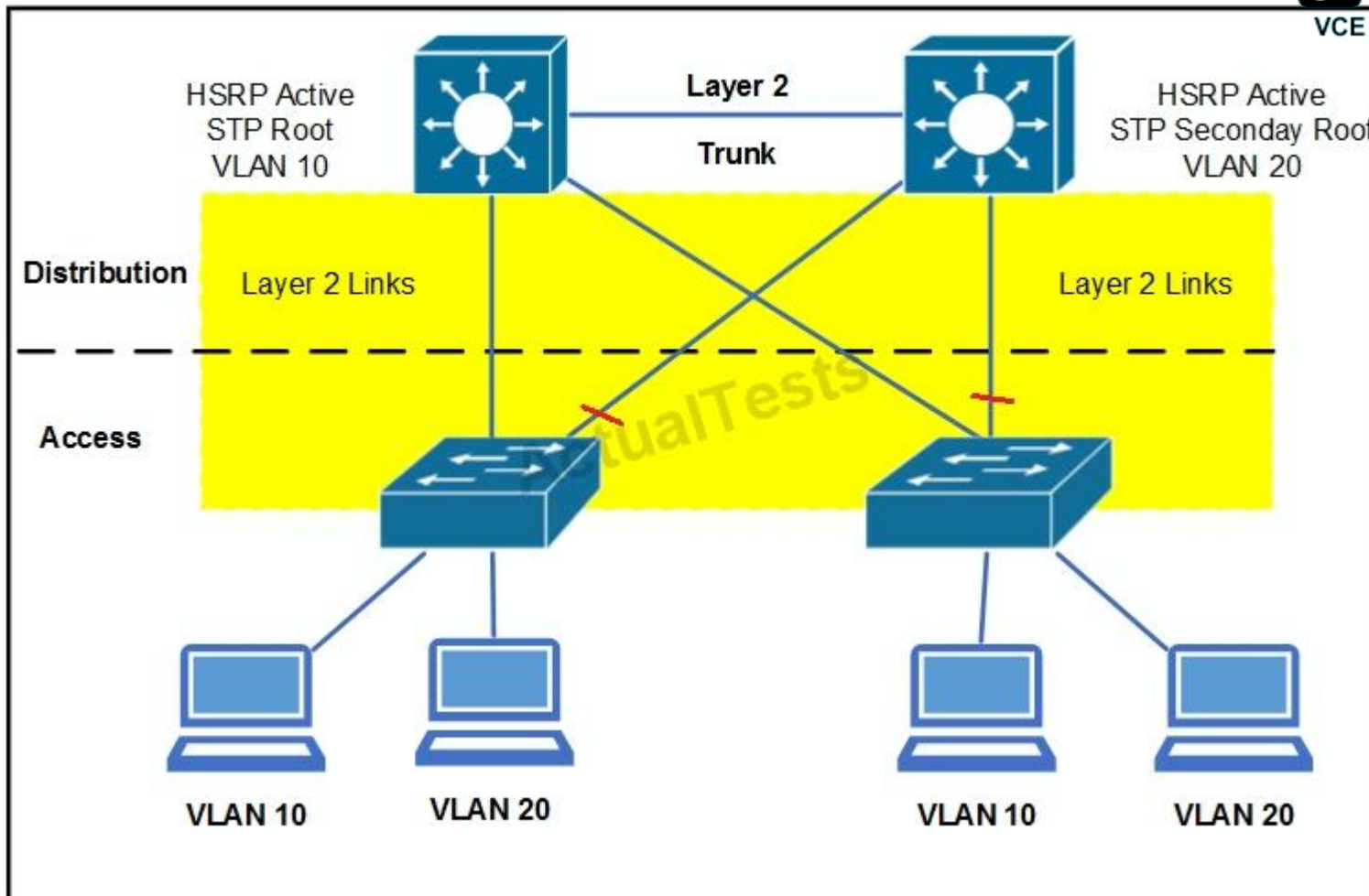B. Router 1
C. Interface 0
D. Interface 1

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 104
Refer to the exhibit.

In this suboptimal design of a homogeneous Cisco network, which version of spanning tree provides the fastest convergence?
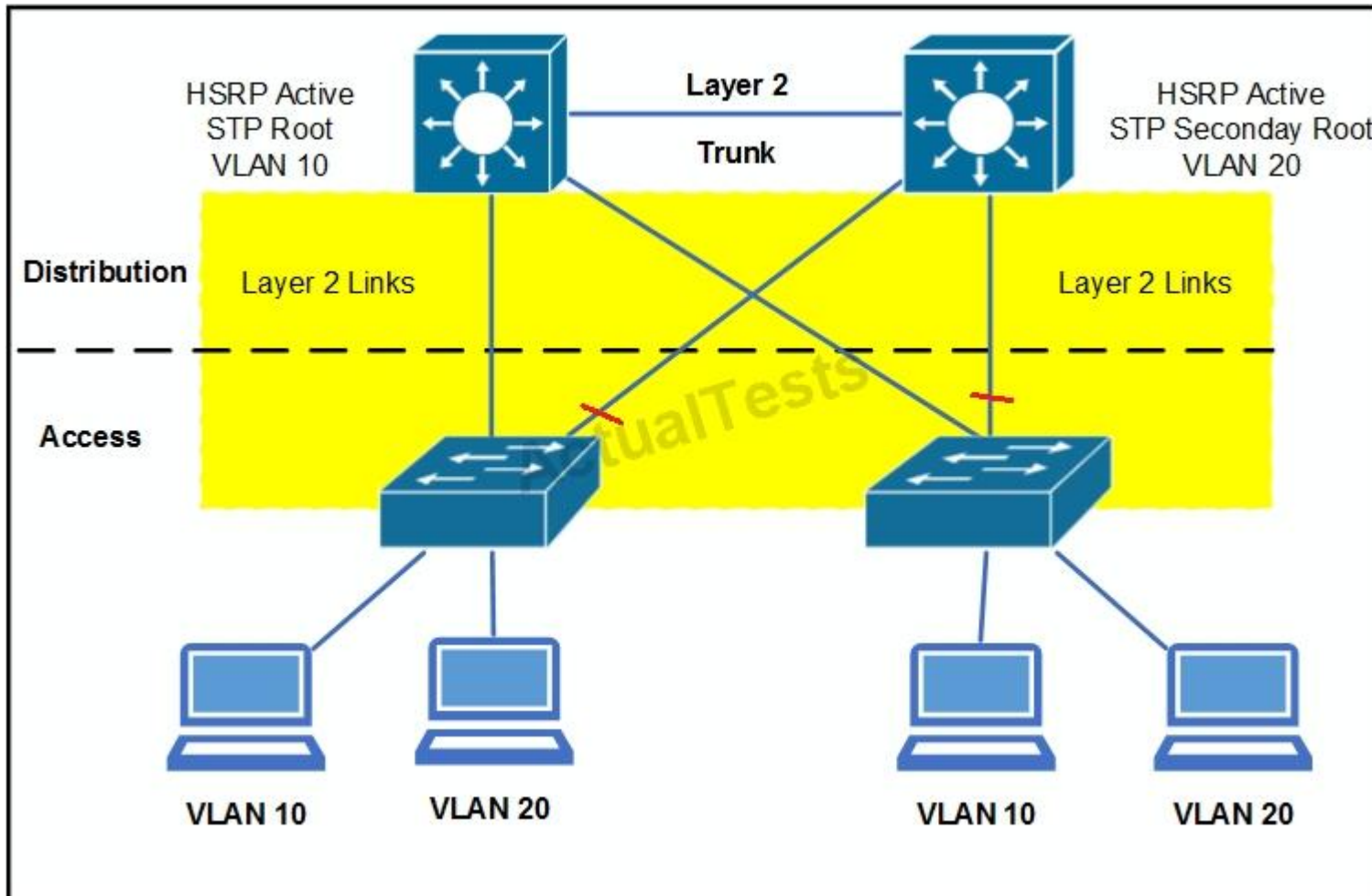
A. PVST+
B. CST
C. RPVST
D. VSTP
E. PVST

Correct Answer: C

Explanation/Reference:
Explanation:

QUESTION 105
Refer to the exhibit.

The red lines refer to STP blocked ports. What happens if the HSRP active moves to the right distribution, and the STP root remains on the left distribution?

A. The STP root becomes the gateway.

B. The interdistribution link is used for transit.

C. The HSRP standby becomes the gateway.

D. The interaccess link is used for transit.

E. Host traffic is unable to reach the HSRP active.

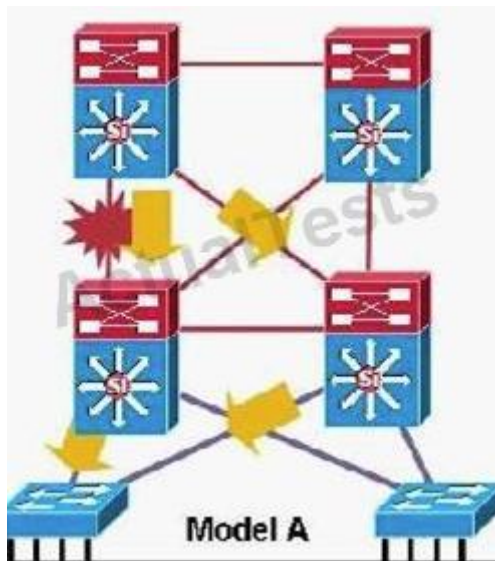**Correct Answer:** B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 106
Refer to the exhibit.

Model A

The organization is migrating away from FHRP. VSS has been implemented on a pair of Cisco Catalyst 6500 Series Switches. In order to avoid changes to end hosts, the default gateway is carried over to the SVI on the VSS. Why does the implementation plan require a four-hour wait after removing the FHRP configuration?

A. The VLAN interface MAC address and the FHRP MAC address are different. It takes four hours for the VLAN interface to come up.

B. The SVI IP address and the FHRP IP address are different. It takes four hours for the SVI to come up.

C. The VLAN interface MAC address and the FHRP MAC address are different. It takes four hours for the ARP cache to time out.
D. The VLAN interface IP address and the FHRP IP address are different. It takes four hours for the VLAN interface to come up.
E. The VLAN interface IP address and the FHRP IP address are different. It takes four hours for the ARP cache to time out.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 107
Which command is correct for creating a virtual interface on a Cisco wireless controller?

A. config create interface
B. tag interface
C. config interface address
D. untag interface

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 108
Which three series of Cisco wireless controllers support wireless Bidirectional Rate Limiting? (Choose three.)

A. Cisco 2500 Series Wireless Controllers
B. Cisco 5500 Series Wireless Controllers
C. Cisco 5700 Series Wireless Controllers
D. Cisco 7500 Series Wireless Controllers
E. Cisco 8500 Series Wireless Controllers
F. Cisco 7200 Series Wireless Controllers

Correct Answer: BDE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 109
Which option can use deep-packet examination to determine the specific nature of an attack?

A. network IPS
B. NetFlow collector
C. stateful firewall
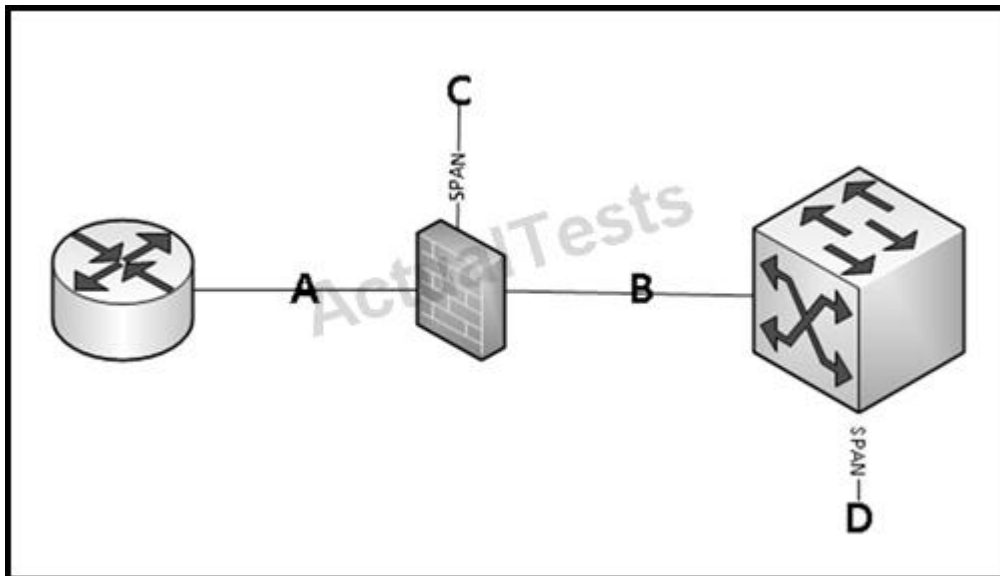D. syslog server

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 110
Refer to the exhibit.

Which location is best for placing a monitor-only IPS that has visibility into the most data center traffic?

A. inline before the firewall

B. inline after the firewall
C. passive off the firewall
D. passive off the internal switch

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 111
A remote user for a company must periodically connect to the company network to access internal resources using a company laptop with software that was preinstalled by the IT department. Which VPN method is used for connectivity?

A. DMVPN
B. SSL VPN
C. IPsec VPN
D. GET VPN

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 112
Which statement is true about the Cisco NAC Appliance?

A. recognizes users, their devices, and their roles in the network
B. does not offer audit and reporting features
C. must be placed inline with other network devices
D. does not recognize guest users

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 113
Which two Cisco products can be used in a data center to support OTV technology? (Choose two.)

A. Cisco Nexus 5500 Series Switches
B. Cisco Nexus 7000 Series Switches
C. Cisco ASR 1000 Series Routers
D. Cisco ASR 9000 Series Routers
E. Cisco Nexus 3000 Series Switches

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 114
Which IETF standard technology can be used with data center design to readily scale server virtualization?

A. Transparent Interconnection of Lots of Links
B. OTV
C. vPC
D. FCoE

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 115
Which three options are examples of network logical virtualization? (Choose three.)

A. virtual PortChannel
B. virtual machine
C. Virtual Device Context
D. Virtual Switching System

E. virtual device driver

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 116
Which type of structure consists of the addressing, routing protocols, QoS, and security components?

A. logical
B. physical
C. layered
D. virtual

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 117
What phase of Cisco's PPDIOO is the final test of the appropriateness of the design?

A. Operate
B. Optimize
C. Design
D. Implement

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 118
What phase of Cisco's PPDIOO includes the identification and resolution of issues prior to moving the entire network to production?

A. Optimize
B. Operate
C. Implementation
D. Design

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference: