Exam : 642-351

Title : Cisco Storage Networking Design Specialist

Ver : 02.20.2006

QUESTION 1
Which two design criteria require VLANs in a proposed solution? (Choose two)
A.security between departments
B.segmenting collision domains
C.segmenting broadcast domains
D.video steaming on the LAN
E.limited budget of the corporation
F.use ofmultivendorequipment

Answer: A, C

QUESTION 2
Which statement describes IPv6 address route summarization?
A.IPv6 address have to converted to IPv4 address to be summarized
B.Classless Inter Domain Routing (CIDR) for IPv6 automatically performs route summarization
C.IPv6 addresses cannot use route summarization
D.IPv6address havebuilt in route summarization based on Top Level Aggregators, Next Level Aggregators and Site Level Aggregators.
E.The routers in the IPv6 network use proprietary protocols to optimize summarization based on the size of their routing tables.

Answer: D

QUESTION 3
A converged voice and data network is designed to carry voice calls on-net as close a possible to the destination to reduce long distance charges. What are two reasons that aVoIPcall could go off earlier than designed? (Choose two)
A.The local voice gateway detects lack of bandwidth.
B.The destination routing is not configured on both local and remote gateways.
C.The local call manager server is too busy to process the call.
D.The telephone user dials access code.

Answer: A, D

QUESTION 4
A manufacturing company has decided to add a website to enhance sales. The web servers in the E-Commerce module must be accessible without compromising network security. Which two design recommendations can be made to meet their requirements? (Choose two)
A.Use intrusion detection on the E-Commerce server farm
B.Limit the number of incoming connections to the module
C.Place E-Commerce servers and application servers on isolated LANs (DMZs)
D.Move the E-Commerce servers to the WAN module to provide tight security.
E.Use private and public key encryption

Answer: A, C

QUESTION 5
A global corporation has 2,000,000+ host and 10,000+ routers in their internal network. They also have connectivity to the Internet and do high volumes of traffic with their business partners and the public at large. They have decided to start using IPv6. Which statement best describes a flexible IPv6 strategy for this corporation?
A.IPv6 hosts and IPv6 routers
B.dual stack hosts and dual stack routers
C.dual stack hosts and IPv4 routers
D.IPv4 hosts and IPv6 routers

Answer: B

QUESTION 6
A network that is running Voice over Frame Relay (VoFR) is experiencing delay and delay variation due to sterilization of packets of varying size. This condition is causing voice quality problems. Which solution can be added to the network at the sending end to reduce these problems?
A.dejetterbuffers
B.hardware digital signal processors
C.link fragmentation and interleaving
D.coding algorithm

Answer: C

QUESTION 7
An established network is experienceDoSattacks against a specific server in E-Commerce module. The operating system on the server has been upgraded and patched and allunnccdedservices have been tuned off, but the attacks are continuing. What action should be recommended to reduce these attacks?
A.Block all UDP traffic to the affected server by usingACLsat the firewall.
B.Add more servers running the same application as the affected server.
C.Block all TCP traffic to the affected server by usingACLsat the firewall.
D.Limit the correction rate to the affected server at the firewall.

Answer: D

QUESTION 8
Very large organizations hasreceived its IPv6 address range from their Internet Service Provider and intend to only use IPv6 address internally. They will access the Internet through port address translation (PAT). What is required for their Domain Name Servers, DNS?
A.They no longer need DNS servers
B.Their DNS servers need to support both IPv4 and IPv6 addresses
C.Their DNS servers need to support only IPv6 addresses
D.Their DNS servers need to support only IPv4 addresses
E.They need additional DNS servers in their network just for IPv6 addresses
F.There are no changes required to their DNS servers

Answer: B

QUESTION 9

RST Corporation is planning to upgrade its current network. The chief technology officer (CTO) has supplied a topology diagram and an IP addressing scheme of the current network during an interview. The company has been growing at about twenty percent per year and it has been difficult to maintain customer support at a satisfactory level. The RST board has met and directed the CTO to look into network improvements.

Which two items are most relevant in documentingRST'sbusiness requirements?

A.improved customer support
B.existing network topologies
C.IP addresses assigned by the ISP
D.projected growth
E.frequency of board meetings

Answer: A, D

QUESTION 10

In CiscoVoIPimplementation what is used on a router to associate physical voice ports with phone numbers?

A.automatically route selections
B.translation patterns
C.IP telephony
D.dialneers

Answer: D

QUESTION 11

What is the default encapsulation for synchronous serial interfaces on Cisco routers?

A.ATM
B.HDLC
C.PPTP
D.Frame Relay
E.GRE

Answer: B

QUESTION 12

How does Roles Based Access Control (RBAC) enhance manageability in an environment with VSANs?

A.limit operator errors by isolating user management domains within a large physical infrastructure
B.specifies port membership to a specific VSAN
C.configures security options for host ports that are assigned to a VSAN
D.configures VSAN membership for specific trunk ports

Answer: C

QUESTION 13

What is the impact of IPv6 on the BGP protocol?

A.There is a new version of BGP for IPv6
B.Host converts BGP to IS-IS for IPv6
C.Host converts BGP to IS-IS for IPv6
D.There is no change for BGP between Ipv4 and IPv6
E.BGP cannot be used with IPv6

Answer: A

QUESTION 14

An enterprise needs to connect networks at high data rates. The networks are located in different buildings with a clear line-of-sight.
Which technology is a solution for this need?

A.broadband fixed wireless
B.cellular wireless
C.wireless LAN
D.Mobile IP
E.ISDN

Answer: A

QUESTION 15

What is the benefit of using FCC in a Cisco storage network?

A.allows interoperability with other vendor features in a SAN fabric
B.provides congestion control in a storage array efficiently managing buffers
C.allows traffic to be switched between VSANs at a higher rate of speed
D.can be used to manage congestion in a multi-hop environment

Answer: B

QUESTION 16

What is the impact of IPv6 on the OSPF protocol?

A.Host converts OSPF to IS-IS for IPv6
B.Host converts OSPF to IS-IS for IPv6
C.There is no change for OSPF between Ipv4 and IPv6
D.OSPF can not be used with IPv6
E.There is a new version of OSPF for IPv6

Answer: E

QUESTION 17

Which two statements are characteristics of data link layer broadcasts? (Choose two)

A.Broadcasts are not forwarded by routers.
B.Broadcasts do not occur at Layer 3.

C.Broadcasts are restricted to port with active, end-user devices.
D.Broadcasts can be controlled with the use of VLANs.

Answer: A, D

QUESTION 18
A government agency data center that is used for tax processing is located in an earthquake fault zone. A backup data center, located 300 km away, is linked to the main center over an OC-3 connection. Which of the following provides the best solution to extend the SAN for business continuance and for support of their IP applications?
A.synchronous replication using FCIP
B.iSCSI
C.FCIP and asynchronous replication
D.Dark fiber connectivity and use of synchronous replication over FC

Answer: A

QUESTION 19
What three subsystem characteristics should be considered when designing a storage backup solution? (Choose three)
A.sustained tape write speed
B.robotics-equipped tape array
C.tape connectivity (i.e. SCSI bridge)
D.tape library capacity
E.tape subsystem mirrored cache size

Answer: A, B, E

QUESTION 20
Which command assigns an IP address to the management interface on a Catalyst 5000 switch?
A.interfacetty
B.ip address sc0
C.set interface sc0
D.set ip manage address

Answer: C

QUESTION 21
What are three benefits of storing consolidation?
A.reduced management cost through common management applications administered by fewer people
B.reduce bandwidth demands on the network
C.increase accessibility of corporate data
D.discontinued use of fibre channel
E.greater use of existing disk space

Answer: B, D, E

QUESTION 22
Refer to exhibit. A customer plans to add a tape backup system to its existing storage network. What location is most appropriate for this device?
A.A
B.A
C.C
D.D

Answer: C

QUESTION 23
Which type of cable connects two access-layer switches using a 10/100 Ethernet port on each?
A.Cat-5 UTP crossover cable
B.RJ-45 to DB-9 terminal cable
C.RJ-45 to RJ-45 rollover cable
D.RJ-45 to RJ-45 straight-through cable

Answer: A

QUESTION 24
What MDS 9000 feature provides more efficient SAN utilization by creating hardware-based isolation environments within a single physical SAN infrastructure?
A.VSAN
B.SPAN
C.Trunking
D.Port channel
E.Zones

Answer: B

QUESTION 25
While performing a backup, the tape drive has stopped spinning because of lack of data. What are two potential problems when this occurs? (Choose two)
A.A host has stopped transmitting
B.FC frames are being fragmented
C.The FC switch port cannot be negotiate the proper speed
D.Network congestion exists
E.SPAN was enabled the tape port

Answer: B, C

QUESTION 26
Which statement about Ethernet is true?
A.CSMA/CD technology is not used on switch ports.
B.Cabling for Fast Ethernet is limited to UTP and fiber optic.

C.Full-duplex operation increases Ethernet transmission speed.
D.Cabling distance should not exceed 328 meters between active devices.

Answer: B

QUESTION 27
Which statement is correct with regards to VSANs?
A.Multiple VSANs can be defined in each Zone
B.VSANs limit broadcast traffic
C.Standard zones cross VSAN boundaries
D.An F port can have membership in multiple VSANs

Answer: B

QUESTION 28
A customer has two data centers connected by dark fiber and also has a requirement for asynchronous data replication between the two data centers. If the data centers are 48 km apart, what is the most cost effective solution?
A.CWDM
B.IVR
C.SFPF
D.DWDM
E.Native TC

Answer: B

QUESTION 29
Which transmission method is most efficient when a host needs to send data to a specific group of clients?
A.unicast
B.webcast
C.multicast
D.broadcast

Answer: C

QUESTION 30
Which statement is correct regarding the MDS 9000 Series of products?
A.data encryption
B.IP routing
C.Fibre Channel switching
D.iSCSI routing

Answer: A

QUESTION 31
A customer has two data centers connected by dark fiber and also has a requirement for asynchronous

data replication between the two data centers. If the data centers are 8 km apart, what is the most cost effective solution?
A.CWDM
B.DWDM
C.Native FC
D.VSAN

Answer: A

QUESTION 32
How do IGMPv1 clients leave a multicast group?
A.without sending any notification
B.after sending an IGMP Leave message
C.by sending aunicastmessage to the router
D.by stopping the periodic heartbreak messages to the router

Answer: A

QUESTION 33
Which two methods or tools are used to verify a network design produced by network modeling tools, decision tables, and strategic analysis tools? (Choose two)
A.simulation and test tools
B.network management tools
C.a pilot or prototype network
D.redesign documentation

Answer: A, C

QUESTION 34
In order of for the two sites shown on the diagram to transfer a large amount of data in an efficient manager (utilizing available bandwidth), which three routing protocols could you deploy in the routers? (Choose three)
A.OSPF
B.EIGRP
C.RIPv2
D.RIPv1
E.IGRP
F.BGP

Answer: A, B, E

QUESTION 35
Which are default settings for IGMP on a catalyst 5000 switch?
A.IGMP snooping enabled and PIM enabled
B.IGMP snooping enabled and CGMP enabled
C.IGMP enabled and IGMP snooping disabled

D.IGMP snooping enabled and CGMP disabled
E.IGMP snooping disabled and CGMP disabled

Answer: E

QUESTION 36
What are three host characteristics that are crucial when planning a SAN design? (Choose three)
A.host operating system
B.data replication
C.application I/O throughout
D.type of file system
E.CUP and memory resources
F.multipathing

Answer: BDE

QUESTION 37
To reduce the bandwidth required for each voice call over a converged network, which codes Cisco recommended for WAN links?
A.G711
B.G723
C.G728
D.G729

Answer: D

QUESTION 38
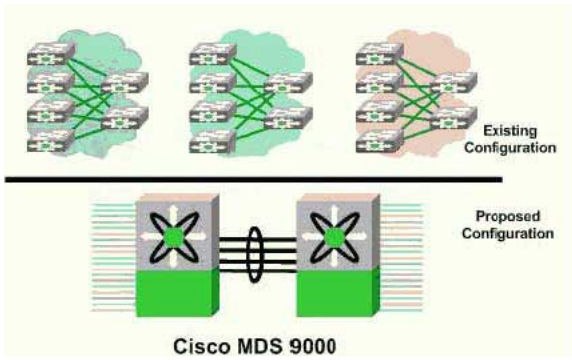Which multicast technology specifies a unique forwarding path between each member of a multicast group?
A.CGMP
B.VLANs
C.IGMP snooping
D.distribution trees

Answer: D

QUESTION 39
Exhibit

What topology allows the customer network, made up of several SAN islands, to be integrated into a single SAN topology, and still retain its existing functionality?
A.Core-Edge Topology
B.VSAN with Collapsed-Core Topology
C.VSAN with Core-Edge Topology
D.Single Large SAN Fabric

Answer: C

QUESTION 40
When designing a SAN, what is considered to be the most significant security threat?
A.Denial of Service attacks
B.Management Access
C.WWN Spoofing
D.FC_ID Spoofing
E.Host to storage data paths

Answer: D

QUESTION 41
Which statement about Root Path Cost is true?
A.It is the Path Cost of a particularRootPort.
B.It is the cost sent from theRootBridgeto allnon-Root bridges.
C.This value is the cumulative cost of all the links leading to theRootBridge.
D.This value is the cumulative cost of all links sent from theDesignatedPortof theRootBridge.

Answer: C

QUESTION 42
A small state college is planning to improve the performance of their campus network. Which information provided by the college is least relevant to new design?
A.location of wiring closets
B.number of users
C.applications used
D.speed of the network

Answer: A

QUESTION 43
Which two characteristics are affected by choice of codec when designing networks to carry IP telephony? (Choose two)
A.voice quality
B.silence packet handling
C.voice packet header size
D.bandwidth required for voice calls

Answer: A, D

QUESTION 44
What are two methods to maintain a consistent VLAN database in a VTP domain? (Choose two)
A.do not configure any switches as a VTP server
B.ensure that all switches not authorized to make changes are in client mode
C.always configure switches using VTP server mode when adding them to the existing network
D.allow only one VTP server in each domain so that adding and deleting VLANs can be centralized to one location

Answer: B, D

QUESTION 45
You are proposing a multi layer switching solution with multiple paths to a global organization. The proposal is to replace their current non-redundant network of routers. Which three benefits of multi layer switching would you emphasize when you present your proposed design to the organization's board of directors?
A.smaller broadcast domains
B.increased network availability
C.increased security due to VLAN functionality
D.increased network performance
E.fast convergence due to OSPF protocol use
F.increased throughput due to multiple paths

Answer: B, D, F

QUESTION 46
You have designed and implemented a SAFE network, but users still complain of isolatedDoSattacks directed at specific hosts in the e-commerce module. You have limited the connection rate at the Internet firewall, but the problem persists. What more can you do to reduce the effects of these attacks?
A.Ensure all relevant OS patches have been applied.
B.Block all UDP traffic to these servers at the Internet firewall
C.Block all TCP traffic to these servers at the Internet firewall
D.Move the affected servers to the DZM

Answer: A

QUESTION 47
Which two VTP modes can create and delete VLANs on their own switches? (Choose two)
A.Client
B.Server
C.Transparent
D.Pass-through

Answer: B, C

QUESTION 48
When designing an IP address scheme for inter-area connectivity, why is it important to segment each area into contiguous blocks of addresses?
A.control route cost
B.route aggregation
C.reduce address assignments
D.accommodate future move to IPv6

Answer: B

QUESTION 49
You've designed a converged network to carry voice calls on-net as close as possible to the destination to avoid long distance charges. Which two are reasons that aVoIPcall could go off-net earlier than designed? (Choose two)
A.remote voice gateway sending busy-back signal
B.destination routing not configured on local and remote gateways
C.call manager server is too busy to process the call
D.the telephone user dials an access code

Answer: A, D

QUESTION 50
Which two statements are true about the difference between an "On" trunking mode and a "Nonegotiate
" trunking mode? (Choose two)
A.A port configured with trunking modenonegotiatewill not send out DTP or DISL packets.
B.A port configured with trunking mode "On" will only form a trunk properly with a port configured with trunking mode on.
C.A port configured with trunking mode "On" will form a trunk properly with a port configured with any trunking modes except off.
D.A port configured with trunking modesnonegotiatewill only form a trunk properly with a port configured with trunking modenonegotiate.

Answer: A, C

QUESTION 51
You are documenting the existing network of a customer with a large installed Cisco network. You have prepared this list of the routers in use on the network.

435 Cisco model 2600 routers
129 Cisco model 3600 routers
10 Cisco model 7500 routers
Which two additional items of information would be most valuable to complete your documentation of these routers? (Choose two)
A.error statistics
B.power requirements
C.interface options
D.software revisions
E.management protocols

Answer: CD

QUESTION 52
Which two methods or tools are used to verify a network design produced by network modeling tools, decision tables, and strategic analysis tools? (Choose two)
A.simulation and test tools
B.network management tools
C.a pilot or prototype network
D.redesign documentation

Answer: A, C

QUESTION 53
Which two statements about the ISL protocol are true? (Choose two)
A.It can be used between Cisco and non-Cisco switch devices.
B.It calculates a new CRC field on top of the existing CRC field.
C.It adds 4 bytes of protocol-specific information to the original Ethernet frame.
D.It adds 30 bytes of protocol-specific information to the original Ethernet frame.

Answer: B, D

QUESTION 54
When collecting information about a customer's existing network, which two information sources will provide the most accurate data? (Choose two).
A.existing network topology diagram
B.customer interview
C.traffic analysis
D.configurations obtained from network equipment
E.customer-supplied server list

Answer: C, D

QUESTION 55
Which three terms describe the primary functions of the distribution layer of the campus network design hierarchy? (Choose three)

A.end-user connectivity
B.connects access devices to the core backbone
C.provides WAN connections
D.enforces security policies
E.provides QoS services
F.high speed transport

Answer: B, D, E

QUESTION 56
What are two benefits provided in VTP Version 2 but NOT in VTP Version 1? (Choose two)
A.supports Token Ring VLANs
B.allows VLAN consistency checks
C.saves VLAN configuration memory
D.reduces the amount of configuration necessary
E.allows active redundant links when used with spanning tree

Answer: A, B

QUESTION 57
A prototype network is used to test a proposed network redesign solution. Although the test seemed to be successful, network performance is unacceptable when implemented in the live network. What was wrong with the prototype network test?
A.The prototype should have been built on the live network.
B.The prototype failed to test for the proper characteristics.
C.The prototype network didn't match the live network exactly.
D.Different configuration parameters existed in the prototype network.

Answer: B

QUESTION 58
The diagram shows a standard layer 2 campus network design. Which numbered box represents the Core Layer?
A.#1
B.#2
C.#3
D.#4
E.#5

Answer: C

QUESTION 59
You must configure an Ethernet trunk to operate in ISL mode between two Cisco switches. Which two are required at each end of the link for the trunk to operate correctly? (Choose two)
A.An identical VTP mode
B.an identical speed/duplex

C.an identical trunk negotiation parameter
D.an identical trunk encapsulation parameter

Answer: B, D

QUESTION 60
What are two reasons to use a prototype network instead of a pilot network when testing a network redesign? (Choose two)
A.cheaper to implement
B.doesn't impact a live network
C.more modeling tools available
D.more accurate test results
E.more flexible test environment

Answer: B, E

QUESTION 61
The diagram shows a standard layer 2 campus network design. Which numbered box represents the Distribution Layer?
A.#1
B.#2
C.#3
D.#4

Answer: B

QUESTION 62
Which two statements are true about a trunk link? (Choose two)
A.IEEE 802.10 can be used for Ethernet trunk links.
B.A trunk link can be associated with a native VLAN.
C.A trunk link is a more efficient use of physical interfaces and cabling.
D.A trunk link bonds multiple physical interfaces to work as one logical interface.

Answer: B, C

QUESTION 63
Which two technologies reduce the amount of traffic generated by VoIP calls? (Choose two)
A.grade of service (GoS)
B.quality of service (QoS)
C.voice activation detection (VAD)
D.compressed real-time transport protocol (cRTP)
E.automatic route selection

Answer: C, D

QUESTION 64
Which multicast technology specifies a unique forwarding path between each member of a multicast group?
A.CGMP
B.VLANs
C.IGMP snooping
D.distribution trees

Answer: D

QUESTION 65
Which feature allows the previously blocked redundant path of a switch to begin forwarding once a link failure on the forwarding link is detected?
A.PortFast
B.UplinkFast
C.BackboneFast
D.SwitchlinkFast

Answer: B

QUESTION 66
Your customer wants to run voice traffic over the existing frame relay network, but isn't prepared to deploy IP telephones at this point. What networking hardware would you use to accommodate this request?
A.call manager
B.voice gatekeeper
C.voice gateway
D.Multi Control Unit (MCU)
E.Frame Relay Access Device (FRAD)

Answer: C

QUESTION 67
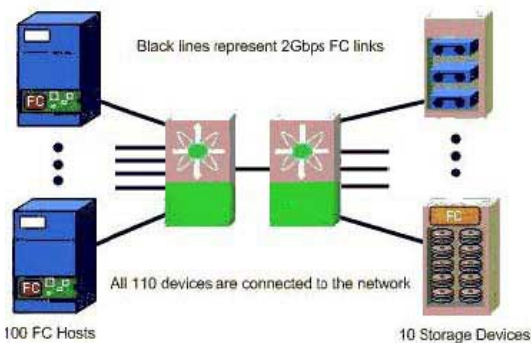
What are three Cisco value-added features that could be used to enhance the throughput of this FC network? (Choose three)
A.Port-Channel
B.VSAN

C.VOQ
D.FCC
E.RBAQ

Answer: B, C, E

QUESTION 68
Which four are user-configurable modes of EtherChannel withPAgP? (Choose four)
A.On
B.Off
C.Auto
D.Enable
E.Disable
F.Desirable

Answer: A, B, C, F

QUESTION 69
Which two Cisco router services perform network traffic analysis to assist in documenting a customer's existing network? (Choose two)
A.Netflow
B.CDP
C.MRTG
D.NetMon
E.SNMP MIB compiler

Answer: A, B

QUESTION 70
Exhibit
*** MISSING***
Refer to the exhibit. What protocol should be used to connect the storage networks at the two sites?
A.FCIP
B.FC
C.iSCSI
D.TCP/IP

Answer: C

QUESTION 71
Which two functions does enablingUplinkFaston a switch perform? (Choose two)
A.decreases theMaxAgetimer to expire agedBPDUs
B.increases the Port Cost of all local switch ports by 3,000
C.increases the bridge priority to ensure that it does not become theRootBridge
D.decreases the bridge table timer so old entries can be flushed at a faster rate

Answer: B, C

QUESTION 72
Which network analysis tool can produce a graph of traffic utilization on router interfaces?
A.NBAR
B.MRTG
C.NetFlow
D.Cisco NetProfiler

Answer: B

QUESTION 73
Which technology should be used to provide transparent low latency FC transport across a metropolitan area?
A.DWDM
B.FCIP
C.iSCSI
D.iFCP

Answer: B

QUESTION 74
Which three statements about the spanning-tree forward delay value are true? (Choose three)
A.Default values for the network are obtained from theRootBridge.
B.All switch ports must use the values learned from theRootBridge.
C.The delay can be abbreviated on a switch's slot port by setting the port fast feature.
D.The value signifies the amount of time the port spends transitioning from listening to learning mode.
E.The value signifies the amount of time the port spends transitioning from blocking to listening mode.

Answer: A, B, D

QUESTION 75
What is typically required to optimize performance on an MDS gigabit port?
A.enable credit-based TCP flow control
B.manually configure IP MTU size
C.manually configure TCP window size
D.enable fast-start congestion avoidance feature

Answer: C

QUESTION 76
What is Cisco's recommended best practice when designing a SAN fabric made up of bothFibreChannel and FICON attached devices?
A.Turn off Zoning for FICON ports
B.Use hard Zoning to secure FICON ports

C.Use soft Zoning to secure FICON hosts
D.Place all FICON hosts in a single VSAN

Answer: A

QUESTION 77
Which command shows the currentRootBridgefor VLAN 1 in a Catalyst 5000?
A.show span 1
B.showspantree
C.showbridgevlan1.
D.showspantreeroot bridge

Answer: B

QUESTION 78
What IETF standard target-discovery mechanism is used in iSCSI?
A.Service Location Protocol
B.Internet Storage Name Service
C.SendTargets
D.FC Name Service

Answer: A

QUESTION 79
What feature of the MDS 9000 Family would be most valuable in establishing a baseline of the traffic
load on an existing network prior to making changes?
A.SPAN
B.RSPAN
C.FC-SP
D.Performance Manager
E.AAA

Answer: C

QUESTION 80
How does a non-Root switch choose itsRootPort?
A.It chooses the port with the lowest cumulative Root Path Cost to theRootBridge.
B.It chooses the port with the highest cumulative Root Path Cost to theRootBridge.
C.The port receives an inferior BPDU from a neighboring switch on a shared LAN segment.
D.The port receives a BPDU announcing a higher Root Path Cost from a neighboring switch on a shared LAN
segment.

Answer: A

QUESTION 81
What does LUN mapping do?

A.assignsFCIDsto storage arrays
B.configures host membership in a VSAN
C.selectively allows one of multiple LUNs to be viewed by the host
D.ensures that hosts cannot access LUNs that belong to other hosts
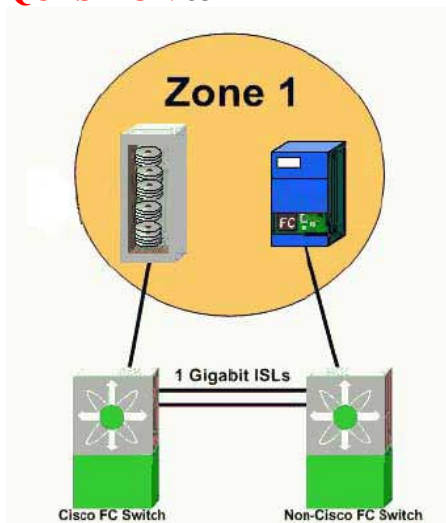
Answer: D

QUESTION 82

You manage a large Metropolitan Area Network spread out over 25 locations around the city.
Your CEO has decided to start producing a monthlywebcast
for all company employees to show the latest product and company news. You fear the effects on the performance of the network when all 10,000 employees connect to this audio/video steam. You determine that it is time to enable multicast on your network. Which two layer 2 features are available on Cisco switches to optimize the use of multicast on your network? (Choose two)
A.CGMP
B.IGMP Snooping
C.Express Forwarding
D.RGMP
E.SNMP

Answer: A, B

QUESTION 83

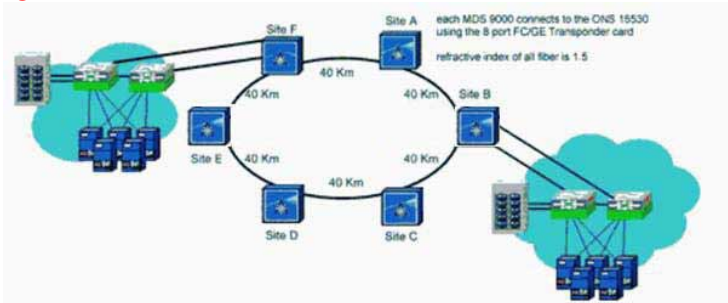

Refer to the exhibit
What port type should be used between switches to maximize performance?
A.B
B.E
C.F
D.NL
E.TE

Answer: C

QUESTION 84

In the diagram, two fabrics have been merged using the OSN 15530MultiserviceAggregationPlatform with optical splitter protection. If buffer to buffer credit spoofing is not employed, which credit setting on the MDS 9000 switches will maximize ISL throughput under all operating conditions?
A.12
B.16
C.40
D.90
E.180

Answer: D

QUESTION 85

What are three functions of an array controller? (Choose three)
A.Local and remote data replication
B.Fault prevention
C.Target binding
D.Virtual volume support
E.FCC

Answer: A, B, D

QUESTION 86

Which design topology will typically provide the lowest hop-count and least number of switches?
A.core-edge
B.collapsed core
C.cascade
D.ring
E.partial mesh

Answer: B

QUESTION 87

Which three Cisco value-added features eliminate Head-of-LineBlockingand are used to manage congestion within a switch? (Choose three)
A.VoQ
B.FCC

C.FSPF
D.Port-Channel
E.Inter-Switch Link

Answer: A, B, D

QUESTION 88
What are two MDS features that increase the efficiency of a multiple switchFibreChannel fabric?
(Choose two)
A.Port Channel
B.CDP
C.FCP
D.FCC
E.CUP

Answer: A, D

QUESTION 89
What are two characteristics of a mesh SAN topology? (Choose two)
A.Compensates for lower-density switches.
B.Increases overall port count of fabric while minimizing use ofISLs.
C.Limited scalability.
D.Fewer switches to manage.
E.Quicker convergence after a failure.

Answer: A, C

QUESTION 90
What are two benefits of implementing host-based replication? (Choose two)
A.Offers the greatest performance.
B.Reduces host CPU requirements.
C.Supports replication on both DAS and SAN.
D.Users existing network connectivity.
E.Host operating system independent.

Answer: C, D

QUESTION 91
Which three functions are provided byFibreChannel Host Bus Adapters (HBAs)? (Choose three)
A.Interfaces between the host computer bus and theFibreChannel network.
B.Extends the distance between a server and its storage.
C.Providesfibrechannel link speeds up to 1Gbps.
D.Reduces the load of the host CPU by managing block-level storage I/O transactions.
E.Automatically mirrors data onto two different disk sub-systems simultaneously.

Answer: A, B, D

QUESTION 92

What is a limitation of core-edge SAN designs?

A.Unpredictable failure recovery.

B.Inconsistent or unpredictable hop counts.

C.Inherent oversubscription introduced by the hierarchical design.

D.Difficult to scale and manage.

Answer: C

QUESTION 93

What is the principle cost advantage of a collapsed core SAN design compared to a core-edge design if each connects the same number of host and storage ports?

A.Fewer hops for a given exchange.

B.Fewer FSPF disruptions.

C.Fewer ISL connections.

D.Fewer Domains in the Domain List.

E.Fewer Directorclassswitches.

Answer: C

QUESTION 94

What are three benefits to the implementation of a collapsed core SAN design? (Choose three)

A.Fewer switches to manage.

B.Oversubscription can be managed by adding additional ISL ports.

C.Typically provides more available paths.

D.More flexible in terms of end device deployment.

E.Port density is greater than in a core-edge topology.

Answer: A, C, D

QUESTION 95

What technology minimizes the potential for service interruption on SAN extension links?
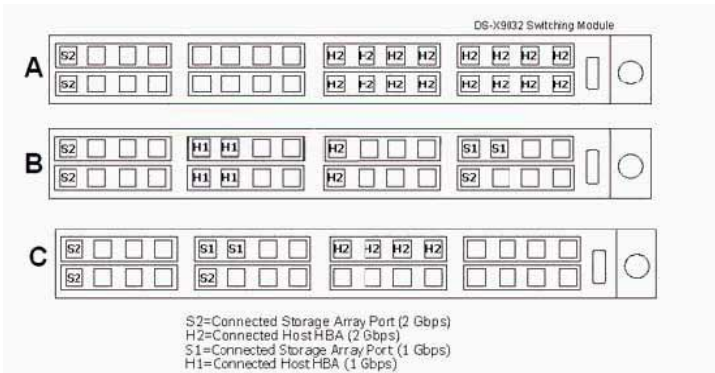
A.FCIP

B.VRRP

C.VSANsand IVR

D.Port Channeling

Answer: D

QUESTION 96

Exhibit

S2=Connected Storage Array Port (2 Gbps)
H2=Connected Host HBA (2 Gbps)
S1=Connected Storage Array Port (1 Gbps)
H1=Connected Host HBA (1 Gbps)

Refer to the exhibit.
What is the effective I/O bandwidth oversubscription ratio from host-to-disk of the following scenarios?
A.A=1:1, B=3:2:1, and C=8:1
B.A=3:2:1, B=8:1, and C=1:1
C.A=8:1, B=3:2:1, and C=1:1
D.A=1:1, B=8:1, and C=3:2:1
E.A=8:1, B=1:1, and C=3:2:1

Answer: A

QUESTION 97
A customer has two buildings connected by a single pair of single-mode fiber. The customer requires eight 2Gbpsfibrechannel connections between the buildings.
What is the most cost effective solution?
A.Install 14 strands of single-mode fiber between the buildings.
B.Install a Cisco CWDM OADM in each building.
C.Install a Cisco ONS15454 and use DWDM in each building.
D.Implement eightVSANsand use the existing fiber.
E.Install a wireless bridge between the buildings.

Answer:

Explanation: Pending. Send your suggestion tofeedback@ Certkiller .com

QUESTION 98
WhichFibreChannel SAN topology maximizes performance and expandability?
A.multi-point
B.point-to-point
C.arbitrated loop
D.switched fabric
E.star

Answer: D

QUESTION 99
A customer is concerned about the security of his SAN. He wants to prevent unauthorized hosts and

switches from connecting to the SAN fabric.

What technology should be enabled on the MDS 9000 SAN to accommodate this customer requirement?

A.DHCHAP
B.auto-learn
C.role-based authorization
D.zones
E.SSH

Answer: A

QUESTION 100

What are three key benefits of implementing a SAN using iSCSI? (Choose three)

A.Uses existing IP networking, monitoring, and management infrastructure.
B.Is more efficient than FC since it requires fewer encapsulations.
C.Maintains consistent performance over IP networks of varying distances.
D.Significant capital cost reduction by substituting iSCSI as a transport technology.
E.Extends existing FC SAN to IP connected hosts.

Answer: A, D, E

QUESTION 101

What two MDS 9000 features can be used where additional bandwidth is required between switches in an existing SAN? (Choose two)

A.ISL
B.FSPF
C.VSAN
D.Port Channel
E.Extended Fabric

Answer: A, D

QUESTION 102

What is required for implementing high availability in a host? (Choose two)

A.dual port array controller
B.multiple HBA ports
C.multi-path drivers
D.FSPF drivers
E.port channeling

Answer: B, C

QUESTION 103

What is the definition of fan-in ratio as it applies toSANs?

A.The ratio of host ports that need to access a single storage port.
B.The ratio of storage ports to a single host port.
C.The amount of aggregate port bandwidth in the path from storage port to host port.

D.The amount of aggregate bandwidth ofISLsin the path from host port to storage port.

Answer:

QUESTION 104
Which of the following solutions would be used to meet a business requirement for nearly instantaneous recovery from a disaster?
A.Business continuance
B.Host based replication
C.High speed tape backup
D.Disaster recovery
E.SAN consolidation

Answer: A

QUESTION 105
Which cost effective solution will provide for workgroup application continuance using asynchronous replication as well as NAS replication for a small environment?
A.DWDM
B.FC
C.FCIP
D.Iscsi

Answer: D

QUESTION 106
Which embedded Cisco MDS tool provides a view of protocol errors?
A.RSPAN
B.Traffic Analyzer
C.SPAN
D.Fabric Analyzer
E.Port Analyzer Adapter

Answer:

QUESTION 107
Given the following options, what is the correct solution for a customer with the requirement to mirror between two data centers that are nearly 200 km apart?
A.CWDM
B.DWDM
C.Native Fiber Channel
D.iSCSI

Answer: B

QUESTION 108
In a SCSI Command Descriptor Block (CDB), what is the function of the Logical Block Address field?
A.Differentiates multipleCDBswhen they are associated with a single command.
B.Identifies the first logical disk block that is referenced by the command.
C.Specifies the length of blocks in the requests.
D.Identifies the logical unit number associated with the data block.

Answer: B

QUESTION 109
Which of the following best describes the function that is implemented by iSCSIHBAs?
A.Offloads TCP error handling to hardware.
B.Offloads TCP flow control to hardware.
C.Offloads TCP error handling and flow control to hardware.
D.Offloads TCP flow control and iSCSI protocol processing to hardware.
E.Offloads TCP error handling and iSCSI protocol processing to hardware.

Answer: D

QUESTION 110
Which design approach provides the greatest protection against failures when designing for high availability?
A.Segment the SAN architecture by the use ofVSANs.
B.Use zoning to isolate applications in a consolidated SAN architecture.
C.Use appropriate MDS QoS mechanisms to guarantee that each application receives the necessary bandwidth.
D.Implement redundant fabrics across redundant physical infrastructures.

Answer: D

QUESTION 111
What effects does VSAN technology have on typical capacity planning for a storage network?
A.Because of the complete isolation ofVSANs, more ports are required in a VSAN environment than in a non-VSAN environment.
B.When capacity planning whereVSANswill be implemented, each VSAN must be capacity planned independently of all otherVSANs.
C.VSANsare over provisioned separately to provide for capacity growth.
D.Unused ports can easily be redeployed for other applications in otherVSANs.

Answer: D

QUESTION 112
What is the SPAN feature typically used for?
A.To extend a VSAN to another vendors switch.
B.To troubleshoot a network in a non-disruptive manner.
C.To concatenate ports between two switches into a SPAN of larger bandwidth.
D.To monitor traffic to the switch processor.

E.To concatenate multiple zones between FC switches.

Answer: B

QUESTION 113
Which threeFibreChannels witch features are unique to Cisco's MDS 9000 Series switches? (Choose three)
A.LUN Zoning
B.Read-Only Zones
C.Internet-Switch Link
D.FibreChannel Congestion Control
E.Remote Domain Loopback
F.FSPF

Answer: A, B, D

QUESTION 114
What three technologies provide advanced traffic engineering capabilities in an MDS 9000 environment? (Choose three)
A.Port Channel
B.Inter-VSAN Routing
C.EISL Trunking
D.QoS
E.Zoning

Answer: B, C, D

QUESTION 115
What are three key benefits of Cisco's collapsed-core switch configuration? (Choose three)
A.Ease of management.
B.Increased port channel utilization.
C.Reduction in equipment and installation cost.
D.Higher effective port count.
E.Reduction in total disk space requirements.

Answer: A, C, D

QUESTION 116
By centralizing and consolidating backup functions in a SAN environment, what is the expected achievable subsystem capacity utilization?
A.15-45%
B.45-60%
C.50-70%
D.70-90%
E.90-100%

Answer: D

QUESTION 117

Match the following SAN architectures to the characteristics that best describe each.

Core-Edge	Collapsed Core
Mesh	Fan-Out

Minimal growth (2-4 switches), used to increase storage subsystem host access	Place here
Fixed hop count, scalable, predictable failure recovery	Place here
Very slow reconvergence, very low effective port count	Place here
Minimizes ISL count, manageable oversubscription, most flexible in terms of end device deployment	Place here

Answer:

Explanation:
Fan-Out
Core-Edge
Mesh
Collapsed Core

QUESTION 118

Which topology requires the greatest increase in the number of ISL ports inorderto maintain a fixed hop count when a SAN is scaled?
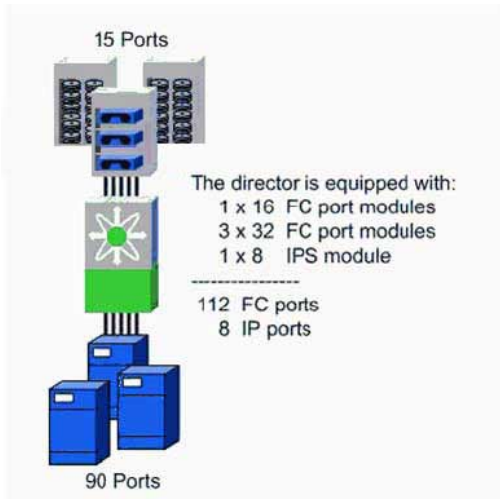A.core-edge
B.collapse core
C.partial mesh
D.ring

Answer: A

QUESTION 119
Exhibit

Refer to the exhibit. Given the fact that all connections are 2Gbpswith storage devices connected to 16-port modules and host connections terminating at 32-port modules, what is the impact of the oversubscription in this design?

A.No oversubscription exists in this design.

B.The 6:1 oversubscription of hosts will overrun the disk subsystems.

C.The 3:2:1 oversubscription of the 32-port host module will cause hosts to be overrun when retrieving data from the disk subsystems.

D.The design renders the host to disk subsystem oversubscription irrelevant.

Answer: D

QUESTION 120

What are three constraints on a core-edge SAN design when the edge devices are not Cisco MDS switches? (Choose three)

A.FCtraceroutecannot be used.

B.FSPF must be disabled.

C.FCC is not effective.

D.Number ofVSANsis limited when usinginteropmodes.

E.Trunking is not supported between the core and edge devices.

Answer: A, C, E

QUESTION 121

You have determined that expansion of a customer's SAN requires 32 ports for Storage Array connections, 4 ISL connections to the existing SAN, and 44 ports for HBA connection. Select the bill of materials that provides a well-designed SAN solution to meet these requirements at the lowest cost.

A.2 X MDS 9216
2 X 32 Port Standard FC Switching Module

A.2 X MDS 9506
2 X 16 Port Standard FC Switching Module
2 X 32 Port Standard FC Switching Module

A.2 X MDS 9120
2 X 9506

2 X 16 Port Standard FC Switching Module
A.2 X MDS 9506
4 X 16 Port Standard FC Switching Module
2 X 32 Port Standard FC Switching Module

Answer: A

QUESTION 122
A large credit card processing firm is adding a second data center to support business continuance.
What is the recommended solution for extending the SAN to the second data center if both data centers
are active?
A.Asynchronous replication using FCIP.
B.Dual homedservers,and IP connectivity using multiple paths.
C.iSCSIinstallation and a bridge the Ethernet network to theFibreChannel fabric.
D.Synchronous replication using DWDM.

Answer: D

QUESTION 123
Whatrequirement suggestthe use of NAS versus a SAN solution?
A.Primarily record level access
B.Primarily block level access
C.Primarily transaction level access
D.Primarily file level access

Answer: D

QUESTION 124
Which statement best defines storage consolidation?
A.Making an enterprise's total disks space highly available to the entire enterprise, often by placing it in a SAN.
B.Making an enterprise's disk space, servers, and tape libraries highly available to the entire enterprise, often by
placing them in a SAN.
C.Making an enterprise's total storage networking less costly by using iSCSI.
D.Making an enterprise's total disk space highly available by transferring copies of an enterprise's total storage
space to an offsite location.
E.Making an enterprise's total disk space highly available by connecting all of an enterprise's storage devices to
one (or two) large servers.

Answer:

Explanation: Pending. Send your suggestion tofeedback@ Certkiller .com

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QUESTION 125
Which feature of the MDS 9000 Series prevents head of line blocking in a SAN environment?
A.FCC
B.QOS

C.VSAN
D.VOQ

Answer: D

QUESTION 126
Match the Cisco Value Address feature to the potential issue it would most likely solve.

FCC	SAN islands	Place here
Fabric Manager Server	Distributed management	Place here
RBAG	Fabric login problems	Place here
YSAN	Network congestion	Place here
Port-Channel	Low network bandwidth	Place here
SPAN	Inconsistent view of network topology	Place here

Answer:

Explanation:
YSAN
RBAC
SPAN
FCC
Port-Channel
Fabric Manager Server

QUESTION 127
Which are three factors thatdeterminesthe ROI for a SAN? (Choose three)
A.Storage subsystem requirements
B.Administration costs
C.Application downtime
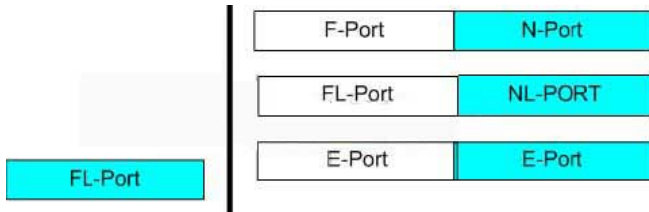D.Training
E.Disaster recovery

Answer: A, B, C

QUESTION 128
Connect theFibreChannelPorttype on the left with its correspondingFibreChannelPorttype on the right.
You will not use all options.

NL-PORT	F-Port	Place here
E-Port	FL-Port	Place here
N-Port	E-Port	Place here
FL-Port		

Answer:

F-Port	N-Port
FL-Port	NL-PORT
E-Port	E-Port

FL-Port

QUESTION 129
At which point can security on aFibreChannel SAN be implemented? (Choose three)
A.storage array
B.server
C.FibreChannel switch
D.GigENIC
E.SFP connector

Answer: A, B, C

QUESTION 130
What technology should a SAN design incorporate to minimize convergence time in the event of a link failure?
A.traffic engineering
B.FCC
C.FSPF
D.port channels

Answer: D

QUESTION 131
What low cost solution should be used to connect low throughput IP-based servers to an existingFibre Channel network?
A.Use FCIP to connect the server to the network at lower speeds.
B.Use the existing IP network with iSCSI.
C.Use FCP to automatically adjust transmission rates.
D.Use FCIP to allow host connections over an IP network.

Answer:

QUESTION 132
Match the following features with the characteristics that best define that feature.

FSPF	Quality of Service
Fiber Channel Congestion Control	Port Channel
VSANs	

Divides the physical infrastructure, isolating fabrics	Place here
Provides load balancing between equal-cost paths between domains	Place here
Treated as one ISL link	Place here
Selective host throttling by slowing rate of buffer credits (R_RDY)	Place here
Prioritizes traffic over congested links	Place here

Answer:

Divides the physical infrastructure, isolating fabrics	VSANs
Provides load balancing between equal-cost paths between domains	FSPF
Treated as one ISL link	Port Channel
Selective host throttling by slowing rate of buffer credits (R_RDY)	Fiber Channel Congestion Control
Prioritizes traffic over congested links	Quality of Service

QUESTION 133
A customer SAN design requires the use of existing non-Cisco storage switches in a core edge topology.
What must be considered when attaching an MDS 9000 switch as the core device in this network?
A.Trunking is supported between the core and edge switches.
B.Zoning cannot be used since the domain IDs are in different ranges.
C.FSPF cannot be used between the core and edge switches.
D.IfVSANsare implemented in the core, IVR cannot be used.

Answer: A

QUESTION 134
In the design if aniSCSIimplementation in conjunction with a Cisco MDS-based SAN, which technology
provides for diverse connections into multiple SAN switches and is used to provide automatic failover
using a single target IP address?
A.multipathing
B.EtherChannel
C.VRRP
D.OSPF

Answer: C

QUESTION 135
In addition to providing secure computer room access, what three MDS 9000 features can help enhance
physical security? (Choose three)
A.The placement of all unused FC ports in a VSAN set to "deny".

B.The placement of every host in its ownZoneSetthat includes its storage devices.
C.The use of the port security feature to bindpWWNsandsWWNsto specific ports.
D.The use of DH-CHAP authentication to ensure fabric level security.
E.The use of SSH to block access to all unused ports.

Answer: A, C, D

QUESTION 136
What is considered the optimal topology for deployment ofFibreChannelSANsusing Cisco MDS family products? (Choose two)
A.mesh
B.ring
C.core-edge
D.collapsed core
E.core-edge with VSAN

Answer: D, E

QUESTION 137
What are three array characteristics that are crucial when planning a SAN design? (Choose three)
A.fan-in ratio
B.connection speed
C.embedded cache controller
D.RAID level support
E.active/passive controller

Answer: B, C, E

QUESTION 138
With a synchronous remote mirror replication facility, write completion will be delayed by which of the following?
A.one round trip time
B.two round trip times
C.four round trip times
D.one round trip time per data block
E.one round trip time plus one round trip time per data block
F.two round trip times plus one round trip time per data block

Answer: B

QUESTION 139
A.To reduce networkinfrastucturerequirements
B.To increase data security
C.To enable port-channeling
D.To enable TCP/IP routing
E.To share SAN extension capability usingEISLs

Answer: A, B, E

QUESTION 140
What is the best mechanism to use to isolate backup traffic from other mission critical traffic?
A.VSANs
B.Zones
C.Trunking
D.Port channels

Answer: A

QUESTION 141
WhatFibreChannel port type links switches for fabric expansion?
A.N-Port
B.F-Port
C.E-Port
D.NL-Port

Answer: C

QUESTION 142
Certkiller .com has 80% of the total storage space directly connected to servers. The storage space needs are growing at 50% per year. Given these facts, which solution is recommended?
A.Increase in server capacity
B.Server consolidation
C.Storage expansion
D.SAN consolidation

Answer: C

QUESTION 143
What protocol provides backup and restore services in the NAS architecture?
A.DAFS
B.SRDF
C.HORC
D.CIFS
E.NDMP

Answer: E