Exam :   S10-200

Title   :   Storage Networking Management/Administration

Ver   :   07-14-2008

QUESTION 1
When implementing security in a storage area network, which two are SNIA SSIF best practices? (Choose two)

A. Use a single LAN security tool for continuity.
B. Secure the management interface to the SAN.
C. Define zones containing the largest possible number of components, and use the same zone sets for different system loads.
D. Define zones containing the smallest possible number of components, and use different zone sets for different system loads.

Answer: B, D

QUESTION 2
Which three criteria are primary considerations when determining the need for a SAN deployment? (Choose three)

A. Storage Consolidation
B. Ensuring High Availability
C. Reducing Server CPU Cycles
D. Enabling cross platform LAN file access.
E. Reducing Network Congestion during Backups.

Answer: A, B, E

QUESTION 3
You have a SAN with four servers connected to and edge switch in a core edge configuration. Each server has an average requirement of 40MB/s. There is currently a single 2 Gb ISL between each edge switch and the core switch. Under which circumstance would you need to add a second ISL?

A. To provide a redundant path.
B. To balance the load and avoid congestion in the ISL.
C. As a dedicated control path between switches for FSPF updates.
D. As a dedicated high priority management path for selected servers.

Answer: A

QUESTION 4
A SAN architect is asked to implement an infrastructure for a production and test environment using Fibre Channel devices. Additionally, the customer would like the Fibre Channel device for production and the device for test to communicate over the IP network to remote hosts, but not to each other.
Which protocol should the architecture implement?

A. FCIP
B. iFCP
C. iSCSI
D. SCSI-FCP

Answer: B

QUESTION 5
Certkiller .com in the medical services industry is having performance issues with the database that maintains patient records. Recently the hospital expanded the SAN and added the fibre channel directors in a core topology which included moving the server from the core to the edge. After determining the TCP/IP network is functioning correctly with no over-utilization of network resources, the system administrator is attempting to determine what possible causes there are for the degradation.
What is a possible cause of the performance problem?

A. Link over-subscription.
B. Spindle latency on the internal boot disk.
C. Contention between the PC packets and the SCSI-3 encoded TCP/IP packets on the FCIP link.
D. Over-subscription of the ISL's between the edge Fibre Channel switches and the TCP/IP switches.

Answer: A

QUESTION 6
When planning to deploy a Fibre Channel infrastructure where data rates are expected to exceed 25MB/sec what is the preferred medium for local cabling requirements up to 500 meters?

A. 9/125 single-mode optical cables
B. 50/125 multi-mode optical cables
C. 62-5/125 multi-mode optical cables
D. 62.5/125 multi-mode copper cables

Answer: B

QUESTION 7
You are troubleshooting a communication problem between a host and a storage array. Both nodes are seen by the switch. The host can talk to the array port but has not assigned a target ID to it.
What is the most likely current scenario?

A. There have been no logins.
B. Both nodes have completed Fabric Logins but no Port or Process Logins.

C. Both nodes have completed Fabric and Port Logins but no Process Login
D. Both nodes have completed Fabric, Port, and Process Login, there is some other problem,

Answer: C

QUESTION 8
Certkiller .com wants to deploy a disaster recovery site 30 km away from the primary data center using a Fibre Channel link.
What is the key factor for maximizing performance of the link?

A. Cable type
B. Link control
C. Adequate buffer credits
D. Fibre Channel class of service

Answer: C

QUESTION 9
An administrator is creating a snapshot to backup a volume to tape. The snapshot will only be used for the backup.
Which process will provide the least impact to the production application?

A. COW snapshot mounted to a Tutor Server.
B. Split Mirror snapshot mounted to a Tutor Server.
C. COW snapshot mounted to the Application Server.
D. Split Mirror Snapshot mounted to the Application Server.

Answer: A

QUESTION 10
What is a disadvantage of over-subscription?

A. Increased host latency.
B. Increased cost of ISL Links.
C. Servers may be throttled down to link speed.
D. Decreases number of hosts that can use the ISL.

Answer: A

QUESTION 11
Which two technologies are used to provide Fibre Channel entity authentication?
(Choose two)

A. MD5
B. CHAP

C. FCAP
D. SHAP

Answer: B, C

QUESTION 12
Certkiller .com is replicating data to a remote data center. A host is needed at the
remote data center to provide application failover.
How can the company most efficiently keep the remote server consistent with the
local server? (Choose two)

A. Implement stretch clustering.
B. Replicate the boot, and all application disks.
C. Replicate the boot, swap and all application disks.
D. Implement stretch clustering while replicating the local boot disk.

Answer: A, B

QUESTION 13
When adding a new Fibre Channel switch to a fabric, which step should you take,
before connection, to maintain security of the production network?

A. Disable all ports
B. Change default password
C. Disable E_PORT functionality
D. Upgrade firmware using an isolated fabric

Answer: B

QUESTION 14
Certkiller .com needs to implement two Fabric SANs with high-performance
fault-tolerant disk access located 1500 km from its data center.
Which SAN component should an architect implement?

A. NAS filters
B. Fibre Channel switches
C. Fibre Channel to iSCSI bridges
D. Fibre Channel WAN connectivity

Answer: D

QUESTION 15
A fibre switch fails. A replacement switch has been delivered. Before plugging the
replacement switch into the SAN, which two actions should be taken? (Choose two)

A. Delete fabric records of the old switch.

B. Add the new switch to the current zone configuration.
C. Clear all zoning information on the replacement switch.
D. Change the Domain ID of the replacement switch to the Domain ID of the old switch.

Answer: C, D

QUESTION 16
Which HBA parameter can be configured using an HBA configuration tool?

A. zoning
B. RA_TOV
C. BC_TOV
D. Register for state change

Answer: D

QUESTION 17
An intruder has control of a server on the company SAN that uses software zoning.
The intruder has installed a modified HBA driver.
Which statement is true?

A. The intruder can access all Storage Ports in the SAN.
B. The intruder can access no Storage Ports in the SAN.
C. The intruder can access all Storage and Server Ports in the SAN.
D. The intruder can access only the ports to which the Host is zoned.

Answer: C

QUESTION 18
A server is experiencing performance problems. An application is being migrated to
a new server.
In a controlled environment, how would you migrate the application with the least
amount of downtime.

A. Shutdown the application, copy the data to the new server over the network, start the
application on the new server.
B. Shutdown the application, change zoning and LUNk masking information, start the
application on the new server.
C. Create a local replica, change zoning and LUN masking information, stop the
application, start the application on the new server.
D. Apply the zoning and LUN masking information for the new server, stop the
application, start the application on the new server, remove the zoning and LUN masking
information on the old server.

Answer: D

QUESTION 19

What is the limiting factor when determining how many hosts can be attached to the storage port of a storage array?

A. fan-in
B. FSPF
C. fan-out
D. hop count

Answer: A

QUESTION 20

Certkiller .com is replicating data using FCIP between two remote SANs. Before adding the FCIP SAN extension there are two fabrics in each location, four total. How many total fabrics will there be after extending the SAN?

A. 1
B. 2
C. 3
D. 4

Answer: B

QUESTION 21

Certkiller .com is synchronously replicating data between sites that are 100km apart. Which technology lets them achieve this goal with minimal impact to performance?

A. iSCSI
B. iFCP
C. FCIP
D. FCP over DWDM

Answer: D

QUESTION 22

Certkiller .com has determined a primary and secondary threat radius. The primary threat radius is 100km and the secondary threat radius is 500km. The company legally needs an exact copy of their data replicated to a remote site. They also want a replicate outside of the secondary threat radius.
What should they do?

A. Synchronously replicate their data to a facility 500 km away.
B. Asynchronously replicate their data to a facility 500 km away.
C. Asynchronously replicate their data to a facility a 100 km away and synchronously replicate their data to a second facility 500 km away.
D. Synchronously replicate their data to a facility a 100 km away and asynchronously

replicate their data to a second facility 500 km away.

Answer: D

QUESTION 23

Which SAN topology offers scalability with the lowest associated cost?

A. Ring
B. Mesh
C. Cascade
D. Core-Edge

Answer: C

QUESTION 24

When planning for a global storage area network, which three should be taken into consideration? (Choose three)

A. Network latency
B. Distance latency
C. Equipment latency
D. SCSI transmission latency
E. Repeater amperage latency

Answer: A, B, C

QUESTION 25

A Database Administrator (DBA) has created a logical volume using disks from three different arrays. The data from each array is synchronously replicated over a fibre channel link to one of three arrays in a remote location. There is a rolling disaster which caused the remote links between the arrays to fail at different times. The DBA is trying to start the volume at the remote site.
How must the volume be started?

A. It cannot be started, it is corrupt.
B. Just start the volume, it is auto correcting.
C. The volume must be rolled back in time to the first link failure.
D. The disks from each array can be used separately but not together.

Answer: A

QUESTION 26

Which fabric capacity management process should be reviewed annually for effectiveness and efficiency?

A. Fabric technology implementation is aligned with business requirements (time, cost

and functionality).
B. Validate backup and recovery tests and their impact on fabric infrastructure against recover time objectives.
C.
Check that the actual expenditures on fabric services and their departmental attribution match the predicted expenditures.
D. Frequency of fabric failures, including the number of switch, HBA, link, cable and driver failures and the number of users impacted.

Answer: A

QUESTION 27

Certkiller .com is installing a Fibre Channel storage area network for a small test and development lab. The lab contains two small Windows servers and a single ten disk storage subsystem. The customer desired to deploy a fully redundant SAN for this environment with minimal cost.
What is necessary to meet the customer's requirement for full redundancy of the SAN?

A. One director class fabric switch.
B. Two departmental fabric switches.
C. Ethernet connectivity to each component in the SAN.
D. At least one HBA in each server being attached to the SAN.

Answer: B

QUESTION 28

Certkiller .com's switch command line indicates that the status of port 4 is isolated.
What is the problem?

A. The device connected to port 4 is in the process of initialization.
B. The Domain ID does not match the one on the other end of the link.
C. R_A_TOV setting does not match the one on the other end of the link.
D. There is a long wave GBIC/SPF in the switch at port 4 and the fiber cabling to the connected server is incompatible.

Answer: C

QUESTION 29

What are two advantages of over-subscription? (Choose two)

A. Saves on ISL links.
B. Decreases host I/O latency.
C. Increases individual host throughput.
D. Increases the number of host that can use the ISL.

Answer: A, D

QUESTION 30
A four-way cluster is attached to two fabrics. Each member has two HBAs
connected to each fabric. Each fabric has to array connections. SCSI Queue Depth
for HBAs = 8 and Storage devices = 256 per port. Each cluster member is a primary
for one application.
All LUNs appear on all storage ports with workload equally distributed across all.
Each host has two dedicated HBAs for tape that can each see four independent LTO
II tape drives. All files are large and involve sequential I/O. Performance reporting
shows a large read pending at the host during multi-threaded backup.
What is the maximum value you should set for SCSI Queue Depth?

A. 16
B. 32
C. 64
D. 128

Answer: C

QUESTION 31
What are two advantages of WWN (soft) zoning over port (hard) zoning? (Choose
two)

A. Switch port can be grouped together to form a zone.
B. A device can be moved to another switch in the same Fabric without reconfiguring
zoning.
C. A device can be moved to another port on a switch following port failure without
reconfiguring zoning.
D. A Fibre Channel tape drive can be replaced with another unit that has a different
WWN without reconfiguring zoning.

Answer: B, C

QUESTION 32
Administrators must have switch management access outside of the data center.
Which two will help your properly configure security? (Choose two)

A. Use SSL and/or SSH.
B. Connect to the switches through the SAN.
C. Authenticated access through a firewall or secure router.
D. Have only one user name/password for all the administrators.

Answer: A, C

QUESTION 33
Certkiller .com is migrating data to an array from a new storage vendor. The application needs to be available 99.99% of the time during the migration.
Which two should the customer do? (Choose two)

A. Use device-based block virtualization to migrate the data between the arrays using a array-based remote replication software.
B. Use network-based block virtualization to migrate the data between the arrays using a meta data server.
C. Use host-based block virtualization to migrate the data between the arrays using a logical volume manager.
D. Use file/record layer virtualization to migrate the data between the arrays using clustering software.

Answer: B, C

QUESTION 34
Infrastructure parameters include a small core edge design with all peripherals (disk and tape) located in the core and all hosts connected to edge switches. Each host includes two HBAs, in fabric A and B respectively, with all disks visible on both fabrics and tape devices divided between fabrics.
The tape devices are single initiator zoned to LTO II tape drives. You are recovering a 200 GB journaling file system, 70% utilized; spread over eight mirrored spindles using a 32K stripe element. During recovery of one host, other hosts on the same edge report SCSI errors.
What is the most likely cause?

A. File size
B. Stripe width
C. ISL oversubscription
D. FC tape blocking factor

Answer: C

QUESTION 35
A production cluster is attached to redundant disk fabrics and a tape fabric. Each fabric is contained with a single switch. Each cluster member has access to 12 TBs of RAID 1 production storage and 12 TBs of RAID 0 local replica access through eight HBSa single initiator zoned to sixteen storage ports to one storage array. The tape fabric includes one (1) connection to each server and direct connections to ten LTO II tape drives. The standby cluster member performs multi-threaded backups using the local replica. All HBAs and ports are 200 MB.
If the recovery time is equal to backup time, where is the bottleneck?

A. Tape HBA
B. Disk HBAs

C. Tape drives
D. Array contention

Answer: A

QUESTION 36

Certkiller .com with eight SAN attached hosts has a storage array with only ten disk drives. The customer wishes to protect their data by using a RAID 1 protection scheme. Each server has a need to see three separate volumes for their final configuration.
What must be configured on the array to meet their storage allocation needs?

A. Multiple scsi targets to each mirror volume.
B. Separate logical units for each server volume.
C. Separate virtual paths for each mirror volume.
D. Multiple COW snapshots for each server volume.

Answer: B

QUESTION 37

A Solaris administrator responsible for backups is informed that the restore of data from the backup appeared to be corrupt. The backups had appeared successful, but the database administrator claims the data was restored is invalid.
Where can the administrator check to see if errors occurred during the backup or recovery process?

A. /etc/syslog
B. event viewer
C. /var/adm/messages
D. /usr/sbin/errorlog.log

Answer: D

QUESTION 38

Certkiller .com desired to implement several severs with the same operating system through a SAN to a storage array configured with a single LAN.
What is required for all servers to have concurrent access to the LUN?

A. NFS software
B. SAN/global file system
C. A switch with name zoning capabilities
D. Removal of the switch and connecting the servers directly to the RAID.

Answer: B

QUESTION 39
The SAN Management application server crashed and your SAN is having throughput problems.
Which protocol tool can you implement to collect information about attached SAN device throughput?

A. ICMP
B. POP3
C. SNMP
D. EDTOV

Answer: C

QUESTION 40
Where would you find the N_Port in a fabric?

A. On an inter-switch link
B. On the Fibre Channel HBA
C. On the Fibre Channel switch
D. On the Fibre Channel loop device

Answer: B

QUESTION 41
Certkiller .com has a SAN where servers and storage are distributed throughout the enterprise. Certkiller .com has implemented a SAN solution using a ring topology with two ISLs between each switch.
When compared to a mesh topology, which two options are valid for a ring topology? (Choose two)

A. Lower availability
B. Higher availability
C. Decrease I/O latency
D. Increased I/O latency

Answer: A, D

QUESTION 42
Which process occurs during a fabric merge?

A. Loop login communication
B. Subordinate switch negotiation
C. Fabric shortest path negotiation
D. iSNS name server communication

Answer: C

QUESTION 43
Which two processes occur during a fabric merge? (Choose two)

A. ISL trunking
B. Zone set passing
C. Name server distribution
D. Subordinate switch negotiation

Answer: B, C

QUESTION 44
Certkiller .com has a demanding application which currently uses two HBAs. They
will access the same LUNs on the same storage ports but they will add four HBAs to
the Host. This increased the fan-in ratio of the host.
What are two results of this charge? (Choose two)

A. Increase utilization of HBA.
B. Decrease utilization of HBA.
C. Increase utilization of storage ports.
D. Decrease utilization of storage ports.

Answer: B, C

QUESTION 45
You have an existing RAID system with 16 drives. The existing system was used to
provide volumes to six Windows systems on 2-gigabit links. You decide to add
another 16 drive tray to double the number of your raw hard drives in order to
support five new UNIX servers. The average server throughput is 20 MB/sec. The
RAID head is dual ported and configured active-passive.
What may occur?

A. The zoning on the switch will control the traffic flow to the RAID.
B. The added demands on the RAID system will saturate the active RAID port.
C. The RAID system will notice the extra requests and go active-active to support the
load.
D. The Windows systems will receive precedence as they were registered first on the
RAID.

Answer: B

QUESTION 46
Given the limitation of short wave fiber, which statement is true?

A. Short wave fiber can be used for MAN connections.
B. Short wave fiber can be used for WAN connections.

C. Short wave fiber connections are good to up to 10 km.
D. Short wave fiber connections are used for localized SANs.

Answer: D

QUESTION 47
Certkiller .com is merging remote SANs 200km apart. Cost is a major consideration,
not performance.
Which two solutions best fit their needs? (Choose two)

A. FCIP
B. iSCSI
C. iFCP
D. FCP over DWDM/SONET

Answer: A, C

QUESTION 48
You have a 64-bit PCI-X 100 MHz server. The burst rate of the PCI bus on this
serve ris 768 MB/s.
What is the minimum number of single ported 2-gigabit HBAs required to get the
maximum throughput?

A. Three
B. Four
C. Five
D. Six

Answer: B

QUESTION 49
A database is created in one volume group. The data files, meta data files, and
journaling logs are all on the same volume group. The database administrator
(DBA) has created a remote replicate of the volume group over a 100km FCP link.
The data base is recovered, tested and shutdown on a remote host.
What must the DBA do before restoring the database?

A. Do nothing.
B. Copy the original journaling logs to a safe location, so they can be used to recover the
database.
C. Copy the original meta data files to a safe location, so they can be used to recover the
database.
D. Copy the original journaling logs and meta data files to a safe location, so they can be
used to recover the database.

Answer: B

QUESTION 50

Certkiller .com implements stretch clustering in conjunction with a remote storage replication.

What is the process to failover the application to the remote site?

A. simply failover application
B. stop services on local host, split remote disks, failover application, failover cluster allas
C. stop services on local host, failover application, split remote disks, failover cluster allas
D. stop services on local host, failover cluster allas, failover application, split remote disks

Answer: B

QUESTION 51

What is the minimum length of fiber to use in a fabric?

A. 1 meter cable length
B. 2 meter cable length
C. 4 meter cable length
D. 10 meter cable length

Answer: B

QUESTION 52

A storage administrator creates a COW snapshot. Which two are true? (choose two)

A. It is available immediately
B. It is able to be mounted to an alternative host.
C. It contains a full copy of the production volume
D. It offloads snapshot I/O from the production volume.

Answer: A,B

QUESTION 53

Which HBA parameter can be configured using an HBA configuration tool?

A. zoning
B. RA_TOV
C. LUN UID
D. Fiber Channel payload size

Answer: D

QUESTION 54
Certkiller .com is designing a plan to replicate data between arrays that are in
separate remote fabric. They do not want to merge the fabrics but to simply connect
the two arrays using the existing Fiber Channel ports.
What is the most cost effective solution?

A. FCIP
B. IFCP
C. ISCSI
D. FCP over DWSM/SONET

Answer: B

QUESTION 55
Two servers are added to a SAN with redundant fabrics. Zoning information needs
to be changed. How can you safely change the zoning information?

A. Saving the current zoning configuration to disk, modify it and apply it to both fabric.
B. Modify the zoning configuration on one fabric, test it, and modify the zoning
information on the second fabric.
C. Modify the zoning configuration on one fabric, test it, copy the zoning information to
the second fabric and enable it.
D. Both fabrics must be changed at the same time, modify the zone configurations and
enable them within 10 seconds of each other.

Answer: B

QUESTION 56
A Solaris administrator responsible for backups is informed that the restore of data
from the backup appeared to be corrupt. The backups had appeared successful, but
the database administrator claims the data that was restored is invalid.
Where can the administrator check to see if errors occurred during the backup or
recovery process?

A. /etc/syslog
B. event viewer
C. /var/adm/messages
D. /usr/sbin/errorlog.log

Answer: C

QUESTION 57
You are setting up a remote replication over the SAN for disadter recovery.
Which two must you consider? (choose two)

A. Class of Service
B. Expected replication traffic
C. Location of principle switch
D. Distance between locations

Answer: B,D

QUESTION 58
What is the limiting factor when determining how many storage arrays can be attached to a single host?

A. fan-in
B. FSPF
C. Fan-out
D. Hop count

Answer: C

QUESTION 59
A cluster is experiencing performance problems. An application running in parallel mode is being migrated to a new cluster member. The cluster member is added, the application is installed, zoning and LUN masking changes are made, and the application is brought up on the new cluster member.
What is the minimum amount of down-time possible?

A. there is no down-time
B. the time takes to stop and start the application
C. the time it takes to reboot the new cluster member
D. the time it takes to stop, start and recover the application

Answer: A

QUESTION 60
Which two are best practices when implementing security in a storage area network? (Choose two)

A. Use separate credentials for infrastructure configuration functions
B. Use the same credentials for infrastructure configuration functions
C. Use rotating user Ids for storage network maintenance access, and enforce the use of strong passwords either by policy or by configuration.
D. Use dedicated user Ids for storage network maintenance access, and enforce the use of strong passwords either by policy or by configuration.

Answer: A,D

QUESTION 61
Certkiller .com has a demanding application which currently uses two HBAs. They
will access the same LUNs on the same storage ports but they will add four HBAs to
the Host. This increases the fan-in ratio of the host. What are two results of this
change?

A. increase utilization of HBA
B. Decrease utilization of HBA
C. Increase utilization of storage ports
D. Decrease utilization of storage ports

Answer: B,C

QUESTION 62
A four-way cluster is attached to two fabrics. Each member has two HBAs
connected to each fabric. Each fabric has two array connections. SCSI Queue Depth
for HBAs = 8 and Storage devices = 256 per port. Each cluster member is a primary
for one application.
All LUNs appear on all storage ports with workload equally distributed across all.
Each host has two dedicated HBAs for tape that can each see four independent LTO
II tape drives. All files are large and involve sequential I/O. Performance reporting
shows a large read pending at the host during multi-threaded backup.
What is the maximum value you should set for SCSI Queue Depth?

A. 16
B. 32
C. 64
D. 128

Answer: C

QUESTION 63
Certkiller .com has deployed redundant switched fabrics in an environment which
also includes non-HA, single-attached test servers. Anew project requires additional
connectivity for a new HA servers to be placed into production. There are not
enough ports available on one of the existing switches to complete an HA
deployment.
Which option would allow for the addition of the new hosts while maintaining a
redundant infrastructure?

A. Add a new switch to each redundant fabric.
B. Connect an IP storage router to the SAN and attach the new hosts via the IP network.
C. Add ISL's between the existing switches to leverage all available ports on the
switches.
D. Cascade the existing switches into a new director class switch and add the hosts to the
director.

Answer: A

QUESTION 64
Certkiller .com's switch command line indicates that the status of port 4 is isolated.
What is the problem?

A. The device connected to port 4 is in the process of initialization.
B. The Domain ID does not match the one on the other end of the link.
C. R_A_TOV setting does not match the one on the other end of the link
D. There is a long wave GBIC/SPF in the switch at port 4 and the fiber cabling to the
connected server is incompatible.

Answer: C

QUESTION 65
Certkiller .com is using FCIP to link two remote SANs. What are two benefits of
using FCIP as opposed to sending FCP data over a DWSM/SONET link? (Choose
two)

A. cost
B. performance
C. compatible with ISCSI
D. uses existing infrastructure

Answer: A,D

QUESTION 66
What is the first step when securing fiber switch management?

A. Cable the switches only to each other.
B. Connect to the switches through the SAN.
C. Put the switches on a separate Management LAN.
D. Put the switches on the company LAN and use SSL to communicate with the
switches.

Answer: C

QUESTION 67
Certkiller .com needs to replicate their data synchronously to a remote site 100km
away with the least performance impact to the production server. What are two
solutions? (Choose two)

A. use ISCSI
B. use direct fiber connection
C. use a Fiber Channel extender over IP to replicate the data

D. use a Fiber Channel extender with DWDM or Sonet; SONET over DWDM to
replicate the data

Answer: B,D

QUESTION 68
You have a SAN with twenty servers connected to an edge switch in a core edge
configuration. Each server has an average requirement of 20MB/s. There are
currently four 2Gb ISLs between each edge switch and the core switch.
Understanding over subscription advantages and disadvantages and being
conservative on port usage how many ISLs should there be?

A. 1
B. 2
C. 4
D. 6

Answer: B

QUESTION 69
You are a consultant to a six partner accounting firm. You are installing a small
SAN for them.
Which statement is true?

A. A firm this small does not need zoning
B. Software zoning is the easiest to manage.
C. They need the increased security of hardware zoning
D. There is a lower probability of application downtime with hardware zoning.

Answer: B

QUESTION 70
You are looking at a Fiber Channel trace log. The Class 2 communication session
between the imitator and target is taking much longer than you would have
expected. You suspect that there is a buffer credit starvation occurring.
Which login communication session would you analyze in the trace for the number
of buffer credits allocated between ports?

A. port login
B. loop login
C. fabric login
D. process login

Answer: A

QUESTION 71
Which two should be taken into consideration when planning a storage area
network? (Choose two)

A. encryption
B. redundancy
C. performance
D. arbitrated loop latency

Answer: B,C

QUESTION 72
A database is replicated to a remote site 500KM away. The database administrator
wants to replicate the database with no impact on the production volume and
minimal WAN bandwidth. The data files, meta data file, and journaling logs on all
on the different volume groups.
How should the database be replicated?

A. Synchronously replicate the data, meta data, and journaling log volume.
B. Asynchronously replicate the data, meta data, and journaling log volumes.
C. Use a database standby server at the remote site, replicate the journaling log volume,
periodically create local replicas at the remote site of the journaling log volume, apply
logs.
D. Use a database standby server at the remote site and replaced the data and journaling
logs volume, periodically create local replicas at the remote site of the journaling log and
meta data volume, apply meta data and logs.

Answer: C

QUESTION 73
What are two advantages of WWN zoning ? (choose two)

A. Switch ports can be grouped together to form a zone.
B. Devices can be moved to another switch in the same Fabric without reconfiguring
zoning.
C. A device can be moved to another port on a switch following switch port failure
without reconfiguring zining.
D. A Fiber Channel tape drive can be replaced with another unit that has a different
WWN without reconfiguring zoning.

Answer: B,C

QUESTION 74
What are distance considerations between long-wave and short wave fiber?

A. Long wave fiber can be used for MAN connections

B. Short wave fiber can be used for MAN connections.
C. Short wave fiber connections are good up to 10 km.
D. Long wave fiber connections are used for localized SANs.

Answer: A

QUESTION 75
Which three processes occur during a fabric merge? (choose three)

A. ISL trunking
B. Zone set passing
C. Principle switch negotiation.
D. Name server distribution
E. Subordinate switch negotiation

Answer: B,C,D

QUESTION 76
University IT provides shared Fiber Channel storage services. Disk, tapes and fabric core are located in the campus datacenter. Each college and department provides their own systems and staff. The systems are co-located in the campus datacenter under controlled physical access. Central IT provides fabric, storage and backup administration.
Which risk strategy is important in this Fiber Channel infrastructure?

A. secure shell
B. link encryption
C. port authentication
D. switch authentication

Answer: C

QUESTION 77
You have a SAN with a core-edge configuration and two core switches. Each edge switch has an ISL to each core switch. The storage array has two ports and a single link to each core switch. There is a single ISL between each core switch.
What is the result if the ISL between the core switches is removed?

A. It remains as a single fabric.
B. The fabric segments into two.
C. One of the storage ports is no longer available.
D. One of the core switches is disconnected from the fabric.

Answer: A

QUESTION 78
Certkiller .com has reconfigured new storage on their array.
Which three steps must they take to see the virtual disk? (Choose three)

A. re-scan the SCSI bus
B. enable array re-scanning
C. provide array LUN masking
D. zone the host to the array port
E. increase the HBA time out value

Answer: A,C,D

QUESTION 79
Which three criteria are primary considerations when determining the need for a
SAN deployment? (Choose three)

A. Storage Consolidation
B. Ensuring High Availability
C. Reducing Server CPU Cycles
D. Enabling cross platform LAN file access
E. Reducing Network Congestion during Backups

Answer: A.B.E

QUESTION 80
The SAN is having connection issues. Your assessment has shown that you need to
improve SAN availability.
Which three implementation options of a highly available Fiber Channel SAN
should you stress to management to achieve your goals and get your project
approved? (Choose three)

A. avoid single points-of-failure
B. implement higher speed ISL links
C. implement redundant fabrics
D. ensure that multiple paths to devices are available

Answer: A,C,D

QUESTION 81
Certkiller .com is replicating data using IFCP between two remote SANs. Before
adding the IFCP SAN extension there were two fabrics in each location, four total.
How many total fabrics will there be after extending the SAN?
A. 1
B. 2
C. 4
D. 8

Answer: C

QUESTION 82
What are two advantages of WWN (soft) zoning over port (hard) zonng? (Choose two)

A. Switch ports can be grouped together to form a zone.
B. A device can be moved to another switch in the same Fabric without reconfiguring zoning.
C. A device can be moved to another port on a switch following switch port failure without reconfiguring zoning.
D. A Fiber Channel tape drive can be replaced with another unit that has a different WWN without reconfiguring zoning.

Answer: B,C

QUESTION 83
During quarter-end batch processing at a large retail company it is noted that performance of the database applications drops significantly. The application runs on a server that is dual attached to SAN infrastructure with multi-pathing software to ensure high availability as well as provide load-balancing. The system administrator needs to determine if the problem resides within the server or within the SAN components.
Which two options indicate areas where the administrator can check to see if the issue is internal to the server? (Choose two)

A. Check the event and alarm log.
B. Check the integrity of the zoning.
C. Check the virtual paths and adapters.
D. Check the host subsection of the storage array event logs.

Answer: A,C

QUESTION 84
Certkiller .com needs to implement two separate fabrics with Fiber Channel devices communicating across the IP network.
Which protocol should the architect utilize?

A. FCIP
B. IFCP
C. ISCSI
D. SCSI-FCP

Answer: B

QUESTION 85
You have a 64-bit PCI-X 133 MHZ server. The burst rate of a 133 MHZ bus is 1064 MB/s.
What is the minimum number of single ported 2-gigabit HBAs required to get the maximum throughput?

A. two
B. three
C. six
D. four

Answer: C

QUESTION 86
Certkiller .com has been expanding its SAN physically throughout its campus headquarters. Distributed Servers throughout the enterprise access storage nodes that are also distributed.
What are two results? (Choose two)

A. increase in data access
B. decrease in data access
C. increase in SAN I/O latency
D. decrease in SAN I/O latency

Answer: A,C

QUESTION 87
Certkiller .com needs to implement two Fabric SANs with high performance fault-tolerant disk access located 1500 km from its data center.
Which SAN component should an architect implement?

A. NAS filter
B. Fiber Channel switches
C. Fiber Channel to ISCSI bridges
D. Fiber Channel WAN connectivity

Answer: D

QUESTION 88
A host is remotely replicating data over a Fiber Channel link using a host based logical volume manager (LVM) The host LVM is mirroring data between a local array using SCSI-FCP and a remote array using FCIP. The host is having read performance problems.
How should the LVM be configured?

A. Set volume read policy to round robin.

B. Set volume write policy to only write to the local mirror.
C. Set volume read policy to only read from the local mirror.
D. Set volume read policy to only read from the remote mirror.

Answer: C

QUESTION 89
What are two advantages to a fabric designed with over-subscription? (Choose two)

A. allows you to separate servers from storage
B. allows clustered servers in the same locality
C. enables you to reduce the number of ISL links
D. allows you to aggregate servers across the same ISL that are not running at link capacity.

Answer: C,D

QUESTION 90
A hacker has compromised the fabric by hijacking an administrative session, removing zones from the active zone set.
Which three countermeasures should you take to reduce this risk? (Choose three)

A. disable Telnet and enable secure shell
B. enable port authentication using DH-CHAP
C. integrate authentication and authorization
D. redirect logging to syslog of a protected system
E. enable storage access controls and link encryption

Answer: B,C,D

QUESTION 91
Where would you find the F_Port in a fabric?

A. On an inter-switch link
B. On the Fiber Channel HBA
C. On the Fiber Channel switch
D. On the Fiber Channel storage subsystem

Answer: C