# IBM

## Exam C4090-451

## IBM Midrange Storage Technical Support V3

**Version: 9.2**

**[ Total Questions:   150 ]**

**Topic 1, Volume A**

## Question No : 1  - (Topic 1)

Which N series software enables cost-effective, long-term retention of rapidly restorable disk-based backups?

**A.** SnapMirror
**B.** SnapRestore
**C.** SnapVault
**D.** SnapLock

**Answer: C**

Reference: http://www-03.ibm.com/systems/storage/network/software/ (see open system snapvault, second bullet)

## Question No : 2  - (Topic 1)

A customer currently has an EMC block storage system using flash drives and wants to replace the EMC With an IBM solution that has similar automated features.

Which IBM midrange solution and feature should the technical specialist recommend?

**A.** Storwize V7000 and Easy Tier
**B.** Storwize V7000 Unified and Active Cloud Engine
**C.** DS3524 and Dynamic Disk Pooling
**D.** SAN Volume Controller and Metro Mirror

**Answer: A**

## Question No : 3  - (Topic 1)

The Dynamic Disk Pool function in a DCS3700 requires what minimum number of disk drives?

**A.** 8
**B.** 10
**C.** 12
**D.** 24

**Answer: C**
Reference:
http://pic.dhe.ibm.com/infocenter/sonasic/sonas1ic/index.jsp?topic=%2Fcom.ibm.sonas.do
c%2Fdcs_configdcs37kstorage.html

**Question No : 4 - (Topic 1)**

What IBM N series software provides storage- enforced WORM and retention functionality
by using open file protocols such as CIFS and NFS?

**A.** SnapLock
**B.** SnapVault
**C.** SnapDrive
**D.** SnapMirror

**Answer: A**
Reference: ftp://ftp.software.ibm.com/storage/isv/NS3444-0.pdf (page 41, last para)

**Question No : 5 - (Topic 1)**

A customer's current backup solution uses NetBackup that is configured for "backup to
disk". The customer has custom batch files to copy the "backup to disk" data to a
NetBackup server at a secondary location. During a recent internal audit this solution failed
to meet reliability requirements. The audit results mandated that the customer replace
"backup to disk" with a tape solution while continuing to get the backup data to a second
site.

Which of the following tape solutions can replace "backup to disk" while providing data
replication to a second site?

**A.** TS7700
**B.** TS3200
**C.** TS3100
**D.** TS7620

**Answer: D**

## Question No : 6  - (Topic 1)

A hospital is looking for a file server on which to archive medical images. There are currently 100 TB of medical images and the archive is projected to grow at 15% per year. The hospital compliance department requires write locking (WORM) for some medical images and the hospital is looking to use compression and deduplication technologies to minimize the growth in physical disk space.

Which of the following devices meets the hospital's requirements?

**A.** Storwize V7000
**B.** Storwize V7000 Unified
**C.** DCS3700
**D.** N series 6000 filer

**Answer: D**

## Question No : 7  - (Topic 1)

What tool could be used with Easy Tier on a Storwize system to determine the amount of Solid State Disk that Easy Tier can utilize?

**A.** Disk Magic
**B.** Storage Tier Advisor Tool
**C.** Capacity Magic
**D.** Comprestimator

**Answer: B**
Reference: http://www-03.ibm.com/support/techdocs/atsmastr.nsf/c6192fb3a432612485256d970082de57/63273e3fb531f00b8625781c00268a69/$FILE/EasyTier%20for%20Oracle.pdf (page 22)

## Question No : 8  - (Topic 1)

A potential storage customer has a large VMware environment which is managed by a small staff TN are looking at the IBM DCS3700 series storage with Dynamic Disk Pools.

Which of the following would allow the VMware administrators ease of management for Dynamic Disk Pools?

**A.** IBM DS Series vCenter Plug-In
**B.** Tivoli Storage Productivity Center
**C.** Disk Magic
**D.** Tivoli Storage Manager

**Answer: A**

## Question No : 9  - (Topic 1)

The IBM TS3310 is a midrange LTO tape library.

What is the maximum number of LTO tape drives in a fully configured TS3310?

**A.** 22
**B.** 18
**C.** 12
**D.** 16

**Answer: B**

## Question No : 10  - (Topic 1)

A customer is looking for a storage solution with integrated Information Lifecycle Management (ILM). IT management requires that the ILM implementation be fully automated and transparent to the users.

Which storage solution meets these requirements?

**A.** TS3500 with LTFS
**B.** Storwize V3700
**C.** N6250
**D.** Storwize V7000 Unified

**Answer: D**

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**Question No : 11 - (Topic 1)**

An existing N series customer is running SnapMirror and SnapVault between production and their Disaster Recovery site. Production Sites A and B replicate to DR Site C using SnapMirror and SnapVault.

The customer is planning to add an additional N series to Production, and using SnapVault to backup to Site C, however the N series on Site C is near its currently configured limit for concurrent replication operations.

How would the customer increase the concurrent replication operations on the N series at Site C?

**A.** enable MultiStore functionality on the destination system
**B.** enable the NearStore functionality on the destination system
**C.** there is no way of increasing the concurrent replication operations on IBM N series
**D.** install additional HBAs and/or NICs on the destination system and configure via CLI

**Answer: B**

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**Question No : 12 - (Topic 1)**

A customer is looking to virtualize a storage system not listed on the interoperability matrix for the Storwize V7000.

What should the IBM technical specialist do on behalf of the customer to gain this support?

**A.** Submit a TeachXpress request
**B.** Submit a Support Line request
**C.** Submit a SCORE/RPQ request

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**Answer: C**

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## Question No : 13 - (Topic 1)

What type of data protection is used by the FlashSystem 810?

**A.** Disk Mirroring
**B.** Dynamic Disk Pooling
**C.** Variable Stripe RAID
**D.** RAID Dual Parity

**Answer: C**
Reference: http://www.ibm.com/common/ssi/cgi-
bin/ssialias?infotype=dd&subtype=ca&&htmlfid=897/ENUS113-046

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## Question No : 14 - (Topic 1)

A customer is implementing new Disaster Recovery policies in their data centers located
1000 km apart. A very important requirement is to be able to configure RPO in a range
from 5 minutes to hours.

What replication option can the customer use on their Storwize V7000?

**A.** Metro Mirror
**B.** Global Mirror
**C.** Global Mirror with Change Volumes
**D.** Volume Mirroring

**Answer: A**

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## Question No : 15 - (Topic 1)

Which of the following IBM products compares to EMC FAST technology?

**A.** FlashCopy
**B.** Easy Tier
**C.** Thin Provisioning
**D.** Real-time Compression

**Answer: B**
Reference:
http://public.dhe.ibm.com/common/ssi/ecm/en/tsl03098usen/TSL03098USEN.PDF (page 3)

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**Question No : 16  - (Topic 1)**

A customer is preparing a fibre channel attached Windows host system for Storwize V7000 Image mode migration.

Which of the following sets of items need to be evaluated and/or upgraded?

**A.** FC host bus adapter card firmware, driver, and multipathing software
**B.** SAS host bus adapter card firmware, driver, and multipathing software
**C.** Ethernet network interface card firmware, driver, and system BIOS
**D.** Operating system patches, system firmware, and -SCSI multipathing software

**Answer: A**

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**Question No : 17  - (Topic 1)**

The SAN Volume Controller can provide access to existing LUN data, block for block, on a multitude of storage arrays through which MDisk mode?

**A.** Image
**B.** Managed
**C.** Virtual
**D.** Unmanaged

**Answer: A**
Reference: http://en.wikipedia.org/wiki/IBM_SAN_Volume_Controller

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**Question No : 18 - (Topic 1)**

What tool would be used to ensure the proper number of disk drives and enclosures needed in a N6240 configuration for a 30 TB solution?

**A.** RMF
**B.** iostat
**C.** Disk Magic
**D.** Capacity Magic

**Answer: D**

**Question No : 19 - (Topic 1)**

On the TS3310 what does the capacity expansion feature provide?

**A.** An entire additional expansion unit
**B.** The full use of the current expansion unit only
**C.** The use of all current and future expansion units
**D.** The full use of the current expansion unit, and half of a future expansion unit

**Answer: D**

**Question No : 20 - (Topic 1)**

A customer is considering purchasing a PureFlex System and is concerned about compatibility with its existing Windows environment. Cisco SAN and the integrated storage system.

Which IBM tool is used to check system compatibility?

**A.** IBM Standalone Solutions Configuration Tool
**B.** IBM DS Power and Cooling Planning Tool
**C.** IBM System Storage Interoperability Center
**D.** IBM Systems Consolidation Evaluation Tool powered by Alinean

**Answer: C**

## Question No : 21 - (Topic 1)

What product characteristic of the IBM FlashSystem minimizes I/O bottlenecks?

**A.** IBM Variable Stripe RAID technology
**B.** Integrated spare flash
**C.** hot swappable flash modules
**D.** IBM MicroLatency

**Answer: D**
Reference: http://www.redbooks.ibm.com/abstracts/tips1041.html?Open

## Question No : 22 - (Topic 1)

What IBM Partnerworld website can a Business Partner access to select and use tools of a modeling nature (eg., Disk Magic, ProtecTIER. TCOnow! for Disk) for IBM storage solutions?

**A.** IBM STG Configurator Tools Portal
**B.** IBM Intellimagic Storage Tools Portal
**C.** IBM STG Storage Sales Accelerator Tools Portal
**D.** IBM Competitive Interoperation Center Portal

**Answer: C**

## Question No : 23 - (Topic 1)

A customer has a Storwize V7000 with internal disk drives and a virtualized DS5300 controller unit with two disk expansions. The customer is expanding their video surveillance archive storage capacity and is adding a DCS3700 with 120 disk drives, all drawers full.

How many licenses for external virtualization should the Storwize V7000 show in the management GUI after virtualization of the DCS3700?