Vendor: Network Appliance

Exam Code: NS0-156

Exam Name: Data ONTAP Cluster-Mode Administrator

Version: Demo

QUESTION 1
What are the three types of Vservers in clustered Data ONTAP 8.2? (choose all that apply)

A. System Vserver
B. Node Vserver
C. Admin Vserver
D. Data Vserver
E. Management Vserver
F. Cluster Vserver

Correct Answer: BCD
Explanation

Explanation/Reference:

QUESTION 2
What is the maximum number of nodes supported for clustered Data ONTAP 8.2 serving only NAS protocols?

A. 1
B. 2
C. 4
D. 6
E. 16
F. 24

Correct Answer: F
Explanation

Explanation/Reference:

QUESTION 3
In clustered Data ONTAP, which object exposes data to clients?

A. A high-available pair of storage controllers
B. An admin vserver
C. A node vserver
D. A data vserver

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 4
Which of the following shells are part of a Data ONTAP cluster? (choose all that apply)

A. Management
B. Admin
C. System
D. Node
E. Cluster

F. Advanced

Correct Answer: CDE
Explanation

Explanation/Reference:

QUESTION 5
Which of the following protocols can be used to obtain the clustered ONTAP 8.2 software image? (choose all that apply)

A. NFS
B. FTP
C. TFTP
D. HTTPS
E. HTTP
F. CIFS

Correct Answer: BCE
Explanation

Explanation/Reference:

QUESTION 6
What is the default shell for accessing clustered Data ONTAP?

A. Diagnostic
B. Node
C. Cluster
D. System
E. Admin

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 7
Which built-in user can access the system shell?

A. admin
B. root
C. diag
D. vserver-admin

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 8
What is the default cluster shell account?

A. root

B. administrator

C. user

D. admin

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 9
Which of the following privilege levels are found in clustered data ONTAP? (Choose all that apply)

A. admin

B. advanced

C. diagnostic

D. system

E. cluster

Correct Answer: ABC
Explanation

Explanation/Reference:

QUESTION 10
In clustered Data ONTAP, which prompt verifies that you are in the cluster shell if the cluster is named "netappu"?

A. netappu-01%

B. netappu-01>

C. netappu-01::>

D. netappu::>

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 11
In which shell can administrators natively run Data ONTAP 7-mode commands?

A. node shell

B. system shell

C. cluster shell

D. admin shell

E. diag shell

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 12
With regards to maintaining cluster quorum, epsilon functions as a:

A. Master node
B. Duplicated management database
C. Secondary node
D. Tie-breaker

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 13
Which of the following is true about the storage module?

A. Handles NAS and SAN Protocols
B. Serves data to clients
C. Manages WAFL, RAID and Storage
D. Manages V-servers

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 14
Which of the following statements is true about the cluster session manager? (Choose all that apply)

A. Handles networking, NFS, and CIFS
B. Provides a communication mechanism between any network module or SCSI module and any data module
C. Provides a reliable transport for SpinNP traffic
D. Is used regardless of whether the network module or SCSI module and data module are on the same node or different nodes

Correct Answer: BCD
Explanation

Explanation/Reference:

QUESTION 15
Which of the following statements is true about epsilon?

A. There is a specific epsilon for each replicated database unit
B. If the node with epsilon is rebooted, epsilon will automatically move to another available node
C. Epsilon can be moved manually
D. Epsilon cannot be moved manually

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 16
NAS clients see junctions as _____ in the parent volume.

A. Vservers

B. Nodes

C. Sub-Volumes

D. Directories

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 17
When a client goes through a junction, the client has entered:

A. A different Vserver

B. A different volume

C. A different junction

D. A different cluster

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 18
Select the following statements that are true about unplanned storage failover (SFO). (Choose all that apply)

A. The "down" system is entirely virtually hosted by the HA partner and appears to be "up".

B. The data LIFs are always migrated to the HA partner

C. The surviving partner assumes ownership of the failed partners aggregates

D. The volume location database (VLDB) is updated with the new location of the aggregates and volumes

Correct Answer: CD
Explanation

Explanation/Reference:

QUESTION 19
Which of the following statements is true about giveback with storage failover?

A. The surviving partner returns ownership of all the aggregates all at the same time to its partner node

B. The surviving partner returns ownership of the all the aggregates and the data LIFS to its partner

C. The surviving partner returns ownership of the root aggregate first followed by the other aggregates to its partner node

D. I/O only resumes when all aggregates are returned to the partner node

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 20
Junctions are used to join volumes to ...

A. Form a namespace

B. A node vserver

C. UNIX clients

D. CIFS clients

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 21
In clustered Data ONTAP 8.2, an aggregate by default is _____.

A. 32 bit, RAID DP, Snapshot reserve 0

B. 32 bit, RAID 4, Snapshot reserve 0

C. 64 bit, RAID 4, Snapshot reserve 0

D. 64 bit, RAID DP, Snapshot reserve 0

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 22
What is the minimum number of disks in a non-root aggregate with RAID-DP

A. 2

B. 3

C. 5

D. 8

E. 12

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 23
What is aggregate relocation (ARL)? Choose all that apply.

A. Provides zero copy, non-disruptive relocation of (non-root) online SFO aggregates to a partner node

B. Provides zero copy, non-disruptive relocation of (root) online CFO aggregates to a partner node

C. Is utilized during planned events such as fast negotiated takeovers, controller hardware upgrades, and other maintenance operations

D. Is utilized during unplanned events such as controller failure

Correct Answer: AC
Explanation

Explanation/Reference:

QUESTION 24
Which of the following logical interfaces have failover and migration capabilities between nodes? (choose all that apply)

A. Data (FC, iSCSI)

B. Cluster management

C. Data (CIFS, NFS)
D. Node management
E. Cluster interconnect

Correct Answer: BC
Explanation

Explanation/Reference:

QUESTION 25
What is a LIF? (choose all that apply)

A. A logical interface connection
B. A logical inter-fabric connection
C. May be associated with a IP address
D. May be associated with a WWPN
E. May be associated with a interface group

Correct Answer: ACDE
Explanation

Explanation/Reference:

QUESTION 26
What are the roles that can be assigned to physical ports in clustered ONTAP? (choose all that apply)

A. Data
B. Cluster management
C. Cluster
D. Node-management
E. Intercluster

Correct Answer: ACDE
Explanation

Explanation/Reference:

QUESTION 27
Which of the following are types of failover groups? (Choose all that apply)

A. System defined
B. User defined
C. Next Available
D. Priority
E. Clusterwide

Correct Answer: ABE
Explanation

Explanation/Reference:

QUESTION 28
Which of the following statements are true about SAN LIFs? (choose all that apply)

A. SAN LIFs are either up or down
B. NAS and SAN protocols can share the same LIF
C. SAN LIFS can migrate or failover
D. SAN LIFs can be associated with more than one data vserver
E. NAS and SAN LIFs can share the same data port

Correct Answer: AE
Explanation

Explanation/Reference:

QUESTION 29
How many cluster nodes are supported by the CN1610 Interconnect Switch in 8.2?

A. 4
B. 8
C. 12
D. 16
E. 24

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 30
The Cisco Nexus 5010/5020 interconnect switches require _____ISL connections where the CN1610 requires _____ISL connections.

A. 4 ISL connections; 8 ISL connections
B. 8 ISL connections; 8 ISL connections
C. 8 ISL connections; 4 ISL connections
D. 4 ISL connections; 4 ISL connections

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 31
Which of the following types of LIFs can be assigned a user-defined failover group? (Choose all that apply)

A. Cluster LIF
B. Node-management LIF
C. Cluster management LIF
D. NAS Data LIF (NFS,CIFS)
E. SAN Data LIF (iSCSI, FC)

Correct Answer: BCD
Explanation

Explanation/Reference:

QUESTION 32

In clustered Data ONTAP, the NFS mount or the CIFS share path need to contain the following:

A. Vserver root volume
B. Absolute path of the volume
C. Aggregate name for the volume
D. Junction path for the volume

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 33
An export policy can determine access to volumes for which of the following protocols?

A. iSCSI and FC volumes
B. CIFS and NFS volumes
C. iSCSI, CIFS, NFS
D. NFS volumes only
E. CIFS volumes only

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 34
Which of the following statements is true about export policies?

A. Each data vserver can only have one assigned export policy
B. Each data volume can only have one assigned export policy
C. Each data volume can only have one assigned export rule
D. Access to a volume is determined by the export policies created within an export rule

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 35
Export policies and rules are stored in the ...

A. Vserver root volume for each data vserver
B. /etc/exports
C. M-host
D. management RDB
E. volume location RDB

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 36

In clustered ONTAP, what benefit does NFSv4.1 pNFS provide?

A. Reduces I/O traffic over the NVRAM connection in a HA pair
B. Reduces I/O traffic over the management network
C. Reduces I/O traffic over the network module
D. Reduces I/O traffic over the data module
E. Reduces I/O traffic over the cluster interconnect

Correct Answer: E
Explanation

Explanation/Reference:

QUESTION 37
Which clustered ONTAP objects are "owned" by a data Vserver? (choose all that apply)

A. Aggregates
B. Volumes
C. LUNs
D. Ports
E. LIFs
F. Shelves
G. Disks

Correct Answer: BCE
Explanation

Explanation/Reference:

QUESTION 38
Clustered Data ONTAP supports ALUA with which protocols?

A. FC only
B. FC and FCoE only
C. FC, FCoE and iSCSI only
D. FC, FCoE, iSCSI and NFS only

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 39
You create a Vserver for iSCSI LUNS. When you issue the Vserver iscsi show command it reports: "This table is currently empty". What do you need to do to see the IQN for the vserver?

A. Create an iSCSI LIF for the vserver
B. Create a LUN in a vserver volume
C. Enable the iSCSI protocol on the vserver
D. Generate an iqn for the Vserver with the make nodename command
E. License iSCSI on the vserver

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 40
Which SAN LIF fails over?

A. iSCSI LIFs only
B. FCoE LIFs only
C. iSCSI LIFs and FCoE LIFs only
D. FC LIFs only
E. None of the above

Correct Answer: E
Explanation

Explanation/Reference:

QUESTION 41
What must be configured on the igroup in a multi-pathed SAN environment in clustered Data ONTAP?

A. Asymmetric logical unit access
B. Symmetric logical unit access
C. Dynamic multi-path access
D. LIF multi-path access
E. LUN multi-path access

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 42
Which commands can be used to identify the target iqn name in clustered Data ONTAP? (Choose all that apply)

A. cluster iscsi show
B. cluster iscsi nodename
C. vserver iscsi nodename
D. vserver iscsi show
E. vserver iqn show

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 43
What command is used to show an iSCSI software initiator WWPN?

A. iSCSI show nodename
B. iscsiadm show WWPN
C. iscsiadm -m node
D. iSCSI does not use a WWPN

Correct Answer: D

Explanation

Explanation/Reference:

QUESTION 44
Which feature must be enabled on a FC switch when using the FC protocol with clustered Data ONTAP 8.1?

A. FL_Port ID Virtualization
B. N_Port ID Virtualization (NPIV)
C. FC over IP
D. FC over Ethernet
E. None of the above

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 45
The fcadmin config command...

A. Is a Clustershell command
B. Is a Nodeshell command
C. Is a Systemshell command
D. Must be run in the advanced mode

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 46
When storage failover (SFO) occurs and cluster mode SAN protocols are enabled on a data vserver:

A. ALUA determines that the HA partner is an active direct path
B. ALUA determines that the HA partner is an active indirect path
C. ALUA determines the best path for active optimize LUN access even if it requires use of the cluster interconnect
D. ALUA does not factor into the path selection during Storage Failover (SFO)

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 47
What is the maximum number of nodes supported for clustered ONTAP 8.2 serving both SAN and NAS protocols?

A. 1
B. 2
C. 4
D. 6
E. 8

F. 24

Correct Answer: E
Explanation

Explanation/Reference:

QUESTION 48
Which make up the replicated database (RDB) rings in a cluster? (choose all that apply)

A. protocol management daemon (protdb)
B. management application (mgmt)
C. administration (admdb)
D. volume location database (vldb)
E. virtual-interface manager (vifmgr)
F. logical-interface manager (lifmgr)
G. SAN management daemon (bcomd)

Correct Answer: BDEG
Explanation

Explanation/Reference:

QUESTION 49
When a cluster is in quorum, what portion of participating nodes are healthy?

A. Two thirds
B. Simple majority
C. Three quarters
D. Half

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 50
Which statement is true about a Flash Pool?

A. A 32-bit or 64-bit aggregate containing SSDs and HDDs
B. A 32-bit aggregate containing SSDs and HDDs
C. A 64-bit aggregate containing SSDs and HDDs
D. A 64-bit aggregate containing only SSDs

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 51
A volume named vs2_vol2 is created on the netappu-02 aggregate. The path in the vs2 namespace is /
vs2/ vol2. If the volume is moved to the netappu-01 aggregate, what is the path after the move?

A. /netappu-01/vs2/vs2_vol2

B. /vs2/vol2

C. /vol/vs2_vol2

D. /vol/vs2/vs2_vol2

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 52
Which clustered ONTAP objects are "owned" by a data Vserver? (choose all that apply)

A. Aggregates

B. Volumes

C. LUNs

D. Ports

E. LIFs

F. Shelves

G. Disks

Correct Answer: BCE
Explanation

Explanation/Reference:

QUESTION 53
How many cluster nodes are supported by the CN1610 Interconnect Switch in clustered ONTAP 8.2?

A. 4

B. 8

C. 12

D. 16

E. 24

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 54
What is the default shell for accessing clustered ONTAP?

A. SPshell

B. Nodeshell

C. Clustershell

D. Systemshell

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 55
What must be configured in clustered ONTAP 8.2 to support inter-cluster Snapmirror relationships?

(choose all that apply)

A. Cluster peering relationship
B. Intercluster port role
C. Junction path for the mirrored volume
D. Minimum transfer size
E. Vserver peering relationship

Correct Answer: AE
Explanation

Explanation/Reference:

QUESTION 56
Which versions of NFS are supported with clustered ONTAP 8.2 Vservers with FlexVol volumes?

A. NFSv3 only
B. NFSv2, NFSv3 and NFSv4
C. NFSv3, NFSv4 and NFSv4.1
D. NFSv2, NFSv3, NFSv4, NFSv4.1 and pNFS
E. NFSv3, NFSv4, NFSv4.1 and pNFS

Correct Answer: E
Explanation

Explanation/Reference:

QUESTION 57
Which protocols are supported with clustered ONTAP 8.2 Vservers with Infinite Volumes?

A. NFSv3 only
B. NFSv3, NFSv4 and NFSv4.1
C. CIFS, NFSv4 and NFSv4.1
D. SMB 1.x, NFSv3, NFSv4.1 and pNFS

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 58
Which statement is true about CFO and SFO in clustered ONTAP?

A. CFO aggregates are given back first, then SFO aggregates are given back one at a time.
B. SFO aggregates are given back first, then CFO aggregates are given back one at a time.
C. All aggregates are given at the same time.
D. None, clustered ONTAP supports SFO aggregates only.

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 59

Which configurations are supported in clustered ONTAP 8.2? (choose all that apply)

A. Single-node clusters
B. Switchless 2-node clusters
C. Switchless 4-node clusters
D. 5-node clusters
E. 8-node clusters with NAS and SAN
F. 24-node clusters with NAS and SAN

Correct Answer: ABE
Explanation

Explanation/Reference:

QUESTION 60
What is the default system account?

A. root
B. naroot
C. administrator
D. admin

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 61
The root volume of a node in the cluster is called _____.

A. vs_root
B. mhost
C. vol0
D. rootvol

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 62
When creating a LIF for NFS or CIFS, what is the default failover policy?

A. Priority
B. Nextavail
C. Round robin
D. Disabled

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 63

Storage QOS maximum throughput limits can be defined in terms of:

A. IOPS only
B. MB/s only
C. IOPS or MB/s
D. IOPS and MB/s

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 64
The aggregate relocation feature allows an administrator to move a _____.

A. Data aggregate to any node
B. Root aggregate to any node
C. Data aggregate to the HA partner
D. Root aggregate to the HA partner

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 65
In clustered ONTAP 8.2, which statement is true about backup vaults?

A. Only work on qtrees
B. Work on all volumes
C. Only work on FlexVol volumes
D. Only work on Infinite volumes
E. None, clustered ONTAP doesn't support SnapVault

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 66
What is the supported speed and frame size on the cluster interconnect?

A. 1 Gb / 1500 mtu
B. 1 Gb / 9000 mtu
C. 10 Gb / 1500 mtu
D. 10 Gb / 9000 mtu
E. No specific requirements

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 67

What is considered a node in a clustered ONTAP?

A. An HA storage controller pair
B. A single storage controller
C. A data Vserver
D. A data port

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 68
A block from a Flash Pool read operation is initially marked as _____.

A. hot
B. warm
C. neutral
D. cold
E. evict

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 69
What is the maximum number of nodes supported for a cluster serving only NAS protocols?

A. 1
B. 2
C. 4
D. 8
E. 16
F. 24

Correct Answer: F
Explanation

Explanation/Reference:

QUESTION 70
Which statements are true of licensing in clustered ONTAP 8.2? (choose all that apply)

A. The base license is still required and is based on the node count
B. Licenses are node-locked
C. Length of license is 14 characters
D. Length of license is 28 characters
E. HA functionality doesn't require a license
F. HA functionality requires a license

Correct Answer: BDE
Explanation

Explanation/Reference:

QUESTION 71
The network interface show command output lists the value of "false" under the "Is Home" column. False signifies the LIF _____. (choose all that apply)

A. is disconnected
B. has failed over
C. is administratively disabled
D. has been migrated
E. is currently being migrated to home node

Correct Answer: BD
Explanation

Explanation/Reference:

QUESTION 72
What type of LIF is used to replicate between two clusters?

A. node
B. cluster
C. intercluster
D. cluster-mgmt
E. data

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 73
Which logical interfaces have failover and online migration capabilities in a different node? (choose all that apply)

A. Cluster
B. Cluster management
C. Data (FC, iSCSI)
D. Data (CIFS, NFS)
E. Node-management

Correct Answer: BD
Explanation

Explanation/Reference:

QUESTION 74
How many cluster ports per node are supported in clustered ONTAP 8.2?

A. One
B. Two
C. Three
D. Four

Correct Answer: B

QUESTION 75
Which privilege levels are found in clustered ONTAP? (choose all that apply)

A. single_user
B. admin
C. manage
D. advanced
E. diagnostic
F. backup

Correct Answer: BDE

QUESTION 76
Which commands can be used to create a data Vserver? (choose all that apply)

A. vserver configure
B. vserver setup
C. vserver set_up
D. vserver make
E. vserver create

Correct Answer: BE

QUESTION 77
Clustered ONTAP supports multi-tenancy using which feature?

A. Allow a unique login account (admin) for cluster administration purposes.
B. Allow a unique login account (vsadmin) for cluster administration purposes.
C. Allow a unique login account (admin) to each Vserver for administration purposes.
D. Allow a unique login account (vsadmin) to each Vserver for administration purposes.

Correct Answer: D

QUESTION 78
How many ISL ports are required between the cluster interconnect switches when using Cisco switches?

A. 2
B. 4
C. 6
D. 8
E. None; No ISLs are required

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 79
How many ISL ports are required between the cluster interconnect switches when using CN1610 switches?

A. 2
B. 4
C. 6
D. 8
E. None; No ISLs are required

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 80
Which are predefined roles for cluster administrators in clustered ONTAP 8.2? (choose all that apply)

A. admin
B. read only
C. vsadmin
D. vsadmin-backup
E. vsadmin-readonly
F. backup
G. vsadmin-autosupport
H. none

Correct Answer: ABH
Explanation

Explanation/Reference:

QUESTION 81
Clustered ONTAP 8.2 supports which quota types? (choose all that apply)

A. User
B. Volume
C. Group
D. Tree
E. None; clustered ONTAP doesn't support quotas.

Correct Answer: ABD
Explanation

Explanation/Reference:

QUESTION 82
FlexCache volumes in clustered ONTAP 8.2 _____.

A. Are fully provisioned
B. Can have Snapshot copies
C. Can be moved
D. Are sparsely-populated volumes

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 83
In clustered ONTAP, what object exposes data to clients?

A. A high-available pair
B. A virtual storage server (Vserver)
C. A virtual filer (vFiler)
D. A cluster

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 84
How do you create NFS export within clustered ONTAP?

A. Define an export policy and rules under the node Vserver
B. Define an export policy and rules under the admin Vserver
C. Define an export policy and rules under a data Vserver
D. Define an export policy under a data Vserver and rules under the admin Vserver

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 85
In which shell can administrators natively run Data ONTAP 7-Mode commands?

A. nodeshell
B. systemshell
C. clustershell
D. adminshell

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 86
What is the command to start recording the current CLI session into a file?

A. system cli record

B. system script record
C. system script start
D. system record start

Correct Answer: C
Explanation

Explanation/Reference:

QUESTION 87
The system image show command output lists the value of "true or false" under the "Is Current" column. The image marked "true" indicates the image:

A. Is currently booted
B. Is the latest version
C. Will used after a reboot
D. Has just been downloaded

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 88
Which statements are true regarding backup vaults in clustered ONTAP 8.2? (choose all that apply)

A. Data can only be restored to a qtree.
B. Backup vaults are at either a volume or qtree level.
C. Data can be restored to either the source volume or a new volume on the same or different clusters
D. Backup vaults are at the volume level only.
E. Compatible with 7-mode SnapVault.

Correct Answer: CD
Explanation

Explanation/Reference:

QUESTION 89
By default how many management ports are there per node?

A. One
B. Two
C. Three
D. Four

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 90
How do you organize volumes for data clients with an appropriate export policy?

A. Mount the required volumes in a namespace

B. Mount the required namespaces in a volume

C. Mount the required namespaces in an aggregate

D. Mount directories of a volume in a namespace

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 91
Which are the role types that can be assigned to ports in clustered ONTAP? (choose three)

A. Data

B. Cluster-management

C. Cluster

D. Node-management

Correct Answer: ACD
Explanation

Explanation/Reference:

QUESTION 92
Which term is used to highlight that a storage administrator can add more than 2 storage systems to a cluster?

A. Scale up

B. Scale horizontal

C. Scale vertical

D. Scale out

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 93
Which of the following statements are true in a SnapMirror Load-Sharing (LS) mirror relationship? (Choose two)

A. Client requests to write data are allowed if the user is admin

B. Client requests to write data are denied unless accessing the .admin share

C. Client requests to read data are only allowed if the mirror is up-to-date

D. Client requests to read data are redirected to the LS mirror destination volumes

Correct Answer: BD
Explanation

Explanation/Reference:

QUESTION 94
In clustered Data ONTAP, snapshots are scheduled by creating

A. A snapshot policy within the vserver that applies to all volumes in the vserver

B. A snapshot policy within the vserver that is applied at the volume level

C. A snapshot policy within the clustershell that can be used by every vserver but applied individually at the volume level
D. A snapshot policy within the clustershell that can be used by each vserver but applies to all volumes within the vserver

Correct Answer: CD
Explanation

Explanation/Reference:

QUESTION 95
Where can NDMP backups be performed?

A. Within the data Vserver
B. Within the cluster Vserver
C. From any node in the cluster
D. From the node that owns the volume

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 96
Which statement is true about establishing a SnapMirror relationship in clustered data ONTAP?

A. It sets up the relationship, but does not start the initial transfer
B. It sets up the relationship on the source node only
C. It sets up the relationship and starts the initial data transfer
D. It sets up the relationship and creates the destination volume

Correct Answer: A
Explanation

Explanation/Reference:
Explanation:
3rd bullet
https://library.netapp.com/ecmdocs/ECMP1196874/html/GUID-2B7FC913-4B02-43C9-865AFB7D44ADB40F.html

QUESTION 97
What must be configured to support inter-cluster Snapmirror relationships?

A. Cluster peer relationship
B. Intercluster port role
C. Junction path for the mirrored volume
D. Minimum transfer size

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 98
What communication link is necessary in order to establish an inter-cluster relationship?

A. The cluster interface on each node must be able to communicate with the intercluster interface on each node in the both the source and destination clusters
B. The cluster interface on the source cluster must be able to communicate with the cluster interface on the destination cluster
C. The intercluster interface on the source cluster must be able to communicate with the intercluster interface on the destination cluster
D. The intercluster interface on the source cluster must be able to communicate with the cluster interface on the destination cluster

Correct Answer: C
Explanation

Explanation/Reference:
Explanation:
https://library.netapp.com/ecm/ecm_download_file/ECMP1197114

QUESTION 99
Which of the following is true about a data protection (DP) mirror destination volume? (Choose all that apply)

A. Can be in the same vserver as the source
B. Can be in a different vserver as the source
C. Can be on a different cluster from the source
D. Can be on a Data ONTAP 7-mode system
E. Can be smaller than the source

Correct Answer: ABC
Explanation

Explanation/Reference:

QUESTION 100
In clustered Data ONTAP 8.2, which of the following commands will restore an entire volume

A. volume snapshot promote
B. volume snapshot restore
C. volume snapshot resync
D. None of the above, just use the .snapshot or ~snapshot directory to restore the entire volume

Correct Answer: B
Explanation

Explanation/Reference:

QUESTION 101
Which of the following statements are true about data protection mirrors? (Choose all that apply)

A. A data protection source volume supports up to 4 destination mirrored volumes
B. A data protection source volume supports up to 1 destination volume per node
C. A volume must be created before it can be used as a mirror destination
D. Creating a mirror relationship also creates the destination volume

Correct Answer: AC
Explanation

Explanation/Reference:

QUESTION 102
Which storage efficiency features are available in clustered Data ONTAP 8.2? (choose all that apply)

A. Thin provisioning
B. FlexClone
C. Deduplication
D. SnapVault
E. Compression
F. SyncMirror

Correct Answer: ABCE
Explanation

Explanation/Reference:

QUESTION 103
Which feature is NOT supported by clustered Data ONTAP 8.2?

A. Synchronous SnapMirror
B. Data Protection Mirrors
C. Load Sharing Mirrors
D. Non-disruptive upgrades

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 104
What are some of the benefits to customers when using clustered Data ONTAP? (Choose all that apply)

A. Scalability
B. Transparency
C. Flexibility
D. Non-disruptive operations

Correct Answer: ABCD
Explanation

Explanation/Reference:

QUESTION 105
Which user space utility is used to manage other applications in the user space?

A. secd
B. RDB
C. Notifyd
D. spmd

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 106
The vifMgr is out of quorum on the node that is the master for the vifMgr ring. Which of the following statements are true? (choose all that apply)

A. A new master will be elected for the vifMgr RDB unit
B. Epsilon will not be available in the cluster
C. Clients can access data through the LIFs on this node
D. A new LIF can be created for a data vserver

Correct Answer: AC
Explanation

Explanation/Reference:

QUESTION 107
If a customer has a 2-node cluster, which of the following must be enabled for storage failover (SFO) to function properly?

A. cluster ha modify configured true
B. cluster modify node eligibility true
C. storage failover modify -node enabled true
D. storage failover modify node -hwassist true

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 108
What are the LIF roles that can be assigned to ports in Data ONTAP Cluster-Mode? (Choose all that apply)

A. Data
B. Cluster management
C. Cluster
D. Node management
E. Intercluster

Correct Answer: ABCDE
Explanation

Explanation/Reference:

QUESTION 109
In clustered Data ONTAP, the NFS mount or the CIFS share path need to contain the following:

A. Vserver root volume
B. Absolute path of the volume
C. Aggregate name for the volume
D. Junction path name for the volume

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 110
Which of the following steps must be completed before a CIFS share can be active?

A. Configure name mapping
B. License both NFS and CIFS
C. Create a data LIF for the CIFS server on every node
D. Reboot the node containing the CIFS Vserver root volume

Correct Answer: A
Explanation

Explanation/Reference:

QUESTION 111
A volume is created named "new_acct" in a data vserver named vs2. A junction for this volume is created named "acct" from the root of vs2. This namespace will be mounted on a Linux host.

What is the path that the Linux host needs to mount?

A. /vs2/new_acct
B. /vs2/acct
C. /new_acct
D. /vol/vs2/new_acct
E. /acct

Correct Answer: E
Explanation

Explanation/Reference:

QUESTION 112
Which of the following are appropriate client specification for an export rule? (Choose all that apply)

A. 0.0.0.0/0
B. 192.168.5.0/24
C. .eng.netapp.com
D. \\vs_root\192.168.153.128

Correct Answer: ABC
Explanation

Explanation/Reference:

QUESTION 113
Which steps need to be completed when creating a CIFS share? (Choose all that apply)

A. Configure a share policy
B. Configure an export policy
C. Configure name mapping
D. Configure a snapshot policy
E. Create a junction path within the Vserver namespace

Correct Answer: BCE
Explanation

Explanation/Reference:

QUESTION 114
Which two devices support the NetApp Remote Support Agent (RSA)?

A. SP
B. RTC
C. RLM
D. ILO
E. BMC

Correct Answer: AC
Explanation

Explanation/Reference:

QUESTION 115
What are the characteristics of Snapmirror? (choose three)

A. Provides data protection for disaster recovery
B. If the source FlexVol volume is lost, clients can restore data from the secondary to primary storage
C. Can asynchronously copy the source FlexVol volume to a disaster recovery replica
D. If the source FlexVol volume is lost or destroyed, clients can connect to the mirror image of the source data

Correct Answer: ACD
Explanation

Explanation/Reference:

QUESTION 116
For NDMP to be aware of a vserver, what actions needs to be taken? (choose three)

A. Data management application
B. Cluster-aware backup
C. NDMP scope listed
D. NDMP service enabled

Correct Answer: ABD
Explanation

Explanation/Reference:

QUESTION 117
How does the NetApp Remote Support Agent (RSA) connect to NetApp support?

A. NetApp Support initiates a secure connection to the RSA
B. NetApp Support initiates a non-secure connection to the RSA
C. The RSA initiates a secure connection to NetApp Support
D. The RSA initiates a non-secure connection to NetApp Support

Correct Answer: C
Explanation

Explanation/Reference:
Explanation:
Remote Support Agent uses the following security measures:
· Connections are outbound only.
Connection between Remote Support Agent and Remote Support Enterprise is always initiated by Remote Support Agent. This ensures that there is only an outbound connection from your site to technical support. All communications are authenticated.
Communication between Remote Support Agent and Remote Support Enterprise is encrypted using 128-bit VeriSign signed Secure Socket Layer (SSL) certificates. Remote Support Agent retains a copy of the Remote Support Enterprise public certificate to ensure that communication occurs only with NetApp Support. If the authentication fails, the connection is broken and no data is sent.
NetApp Remote Support Agent (RSA) is supported on the RLM and SP modules. Link: https://library.netapp.com/ecm/ecm_download_file/ECMP1200041

QUESTION 118
Which two Data ONTAP Cluster-Mode clone technology can clone an individual LUN inside a volume without cloning the entire volume?

A. FlexClone
B. LUN Clone
C. Snap Clone
D. Vol Clone
E. Aggr Clone

Correct Answer: BD
Explanation

Explanation/Reference:
Explanation:
Data ONTAP locks any Snapshot copy used to back clone volumes until the clone is either split off or destroyed. Any disk blocks associated with the Snapshot copy volume will remain locked and will not be released for reuse until the Snapshot copy is deleted. Link: https://communities.netapp.com/docs/DOC-10323 https://library.netapp.com/ecm/ecm_download_file/ECMP1196906 Training material: Clustered_Data_ONTAP_82_Logical_Storage

QUESTION 119
Which statement is true about a SnapMirror destination vserver?

A. It must have a read-only Vserver root volume.
B. It must be in the same cluster as the source Vserver
C. It must be created with the same language type as the source Vserver.
D. It must have a different storage efficiency policy than the source Vserver.

Correct Answer: C
Explanation

Explanation/Reference:
Explanation:
Training material: Clustered_Data_ONTAP_82_Data_Protection_Guide How volume SnapMirror works with deduplication You can use volume SnapMirror to replicate a deduplicated volume regardless of size of the volume and logical data in the volume. When using volume SnapMirror with deduplication, you must consider the following information:
You can enable deduplication on the source system, the destination system, or both systems. The shared blocks are transferred only once. Therefore, deduplication also reduces the use of network bandwidth. When the volume SnapMirror relationship is broken, the default deduplication schedule is applied at the destination storage system. When configuring volume SnapMirror and deduplication, you should coordinate the deduplication scheduleand the volume SnapMirror schedule. You should start volume SnapMirror transfers of a deduplicated volume after the deduplication operation is complete. This schedule prevents the sending of undeduplicated data and additional temporary metadata files over the network. If the temporary metadata files in the source volume are locked in Snapshot copies, these files consume extra space in the source and destination volumes.

QUESTION 120
Which four features does Cluster-Mode support? (Choose four.)

A. data protection mirrors
B. load-sharing mirrors
C. NDMP tape backup
D. non-disruptive upgrades
E. synchronous SnapMirror

Correct Answer: ABCD
Explanation

Explanation/Reference:

QUESTION 121
With clustered Data ONTAP 8.2 or later, which SAN component will no longer be supported?

A. Windows Server 2012
B. vSphere 5.1
C. Veritas DMP
D. Red Hat Enterprise Linux 6.2
E. AIX 7.1

Correct Answer: D
Explanation

Explanation/Reference:
Explanation:
https://library.netapp.com/ecm/ecm_download_file/ECMP1196793

QUESTION 122
Which two Data ONTAP Cluster-Mode clone technologies will lock a Snapshot copy? (Choose two.)

A. FlexClone
B. LUN Clone
C. Snap Clone
D. Vol Clone
E. Aggr Clone

Correct Answer: AB
Explanation

Explanation/Reference:

QUESTION 123
What are the three types of resources supported by Logical interfaces? (Choose three.)

A. Cluster
B. Cluster-routes
C. Failover groups
D. Group-routes
E. Interface groups
F. Port
G. VLAN

H. VServer-routes

Correct Answer: EFG
Explanation

Explanation/Reference:
Explanation:
What LIFs are
A LIF (logical interface) is an IP address with associated characteristics, such as a role, a home port, a home node, a routing group, a list of ports to fail over to, and a firewall policy. You can configure LIFs on ports over which the cluster sends and receives communications over the network.
LIFs can be hosted on the following ports:
Physical ports that are not part of interface groups Interface groups
VLANs
Physical ports or interface groups that host VLANs While configuring SAN protocols such as FC on a LIF, it will be associated with a WWPN. https://library.netapp.com/ecm/ecm_download_file/ECMP1196907 page 32

QUESTION 124
Which NetApp Virtual Storage Tier component works aggregate-wide on a FAS controller?

A. Flash I/O
B. Flash Cache
C. Flash Accel
D. Flash Disk
E. Flash Pool

Correct Answer: B
Explanation

Explanation/Reference:
Explanation:
With two recent product additions to VST, NetApp now offers end-to-end Flash options spanning from the client application through the disk subsystem. Controller level. Storage controller based Flash--NetApp® Flash Cache--retains hot, random read data. (You can learn more about the algorithms used by Flash Cache and other details in a previous Tech OnTap® article.) Disk-subsystem level. NetApp Flash Pool technology uses a hybrid model with a combination of SSDs and HDDs in a NetApp aggregate. Hot random read data is cached and repetitive write data is automatically stored on SSDs.
Server level. NetApp Flash AccelTM technology extends VST into the server. It uses any server- side Flash device (PCI-e Flash card or SSD) as a local cache that off-loads I/O from networks and back-end storage to deliver optimum I/O efficiency to your busiest applications while freeing up server CPU and memory resources.
All three levels continue to offer the full advantages of VST, including:
Real-time promotion of hot data with high granularity. Hot data enters VST immediately, and its 4KB granularity means that it uses Flash-based media very efficiently. Easy to deploy and simple to manage. VST works with your existing data volumes and LUNs. It requires no complicated or disruptive changes to your storage environment. There is no need to set policies, thresholds, or time windows for data movement. Fully integrated. VST is fully integrated with the NetApp Unified Storage Architecture, which means that you can use it with any NAS or SAN storage protocol with no changes. Link: https://communities.netapp.com/docs/DOC-19016

QUESTION 125
Which statement is true about establishing a SnapMirror relationship?

A. It sets up the relationship on the source node only.
B. It sets up the relationship and starts the initial data transfer.
C. It sets up the relationship and creates the destination volume.
D. It sets up the relationship, but does not start the initial transfer.

Correct Answer: D
Explanation

QUESTION 126
One node of a 2-node cluster is shut down to replace a NIC. All RDB rings fall out of quorum. To diagnose the problem, what should the administrator do first?

A. disconnect and reconnect the InfiniBand cable
B. issue storage failover show from the clustershell
C. issue cluster ha show from the clustershell
D. verify that the cluster switch is functioning properly

Correct Answer: C
Explanation

QUESTION 127
When a pNFS client is connected on a LIF on node 1 of a 4-node clustered Data ONTAP pNFS 4.1 vServer, and node 2 performs a storage takeover (SFO) of node 1, and LIFs fail over to node 3, which statement is true?

A. This mount goes stale.
B. The client waits for node 1 to come back up.
C. The pNFS redirects access to a LIF on node 2.
D. The client accesses the virtual IP of the cluster which handles access to the data during the failure.

Correct Answer: C
Explanation

QUESTION 128
A data Vserver can contain which three elements? (Choose three.)

A. Aggregates
B. Data LIF
C. NAS volumes
D. Other Vservers
E. Ports
F. SAN LUNs
G. A Vfiler

Correct Answer: BEF
Explanation

Explanation/Reference:
Explanation:
Explanation: A virtual storage server (Vserver) contains data volumes and one or more LIFs through which it serves data to the clients. Starting with clustered Data ONTAP 8.1.1, a Vserver can either contain one or more FlexVol volumes, or a single Infinite Volume. A Vserver with FlexVol volumes can contain files and LUNs. It provides file-level data access by using NFS and CIFS protocols for the NAS clients, and block-level data access by using iSCSI, and Fibre Channel (FC) protocol (FCoE included) for SAN hosts. Link: