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Exam Name: Nutanix Certified Professional - Multicloud Infrastructure v6.10

Exam A

QUESTION 1
An administrator wants to disable password-based SSH access for the nutanix user on a CVM to improve security.
What action should the administrator take?

A. Rename the nutanix user.
B. Block port 22 on the CVM firewall.
C. Enable Cluster Lockdown.
D. Delete the nutanix user.

Correct Answer: C
Section:
Explanation:
Enabling 'Cluster Lockdown' in Nutanix is the best security measure to prevent password-based SSH logins.
Option C (Enable Cluster Lockdown) is correct:
Cluster Lockdown disables password-based SSH and requires key-based authentication.
Option A (Rename the nutanix user) is incorrect:
The Nutanix user is a system account and cannot be renamed.
Option B (Block port 22) is incorrect:
This would prevent all SSH connections, including key-based logins, making administration difficult.
Option D (Delete the nutanix user) is incorrect:
The nutanix user is required for system operations and cannot be removed.
Nutanix Security Guide Implementing Cluster Lockdown
Nutanix KB Best Practices for SSH Security on CVMs

QUESTION 2
An administrator configured a remote site for Protection Domain replication, but network performance and stability are impacted.
How can the remote site configuration be adjusted to fix the issue?

A. Configure Network Address Translation (NAT) between the two Nutanix clusters.
B. Configure the Protection Domain with many-to-many replication.
C. Configure a Bandwidth Throttling Policy.
D. Configure the remote Cluster VIP as a proxy.

Correct Answer: C
Section:
Explanation:
Network performance issues during replication can be mitigated using Bandwidth Throttling to control traffic spikes.
Option C (Configure a Bandwidth Throttling Policy) is correct:
Bandwidth Throttling ensures that replication does not saturate the network, especially during peak usage hours.
This is particularly useful for low-bandwidth connections between remote sites.
Option A (Configure NAT) is incorrect:
NAT is not required for remote site replication between Nutanix clusters.
Option B (Many-to-Many Replication) is incorrect:
This does not directly address network performance and may increase traffic load.

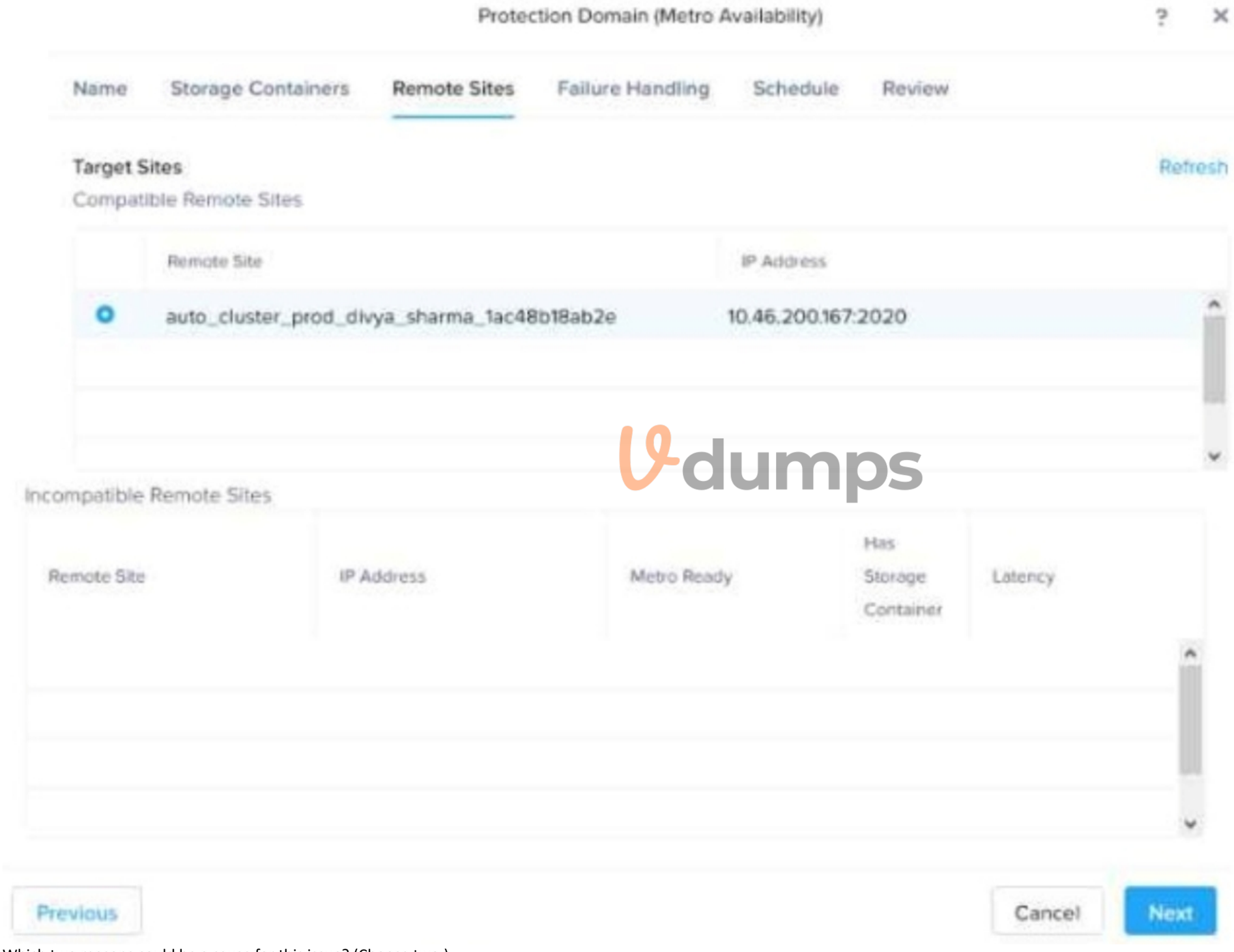
Option D (Remote Cluster VIP as Proxy) is incorrect:
VIP configurations help with load balancing but do not resolve bandwidth issues.
Nutanix Protection Policies Guide Bandwidth Throttling for Remote Site Replication
Nutanix KB Optimizing Network Performance for Disaster Recovery

QUESTION 3
An administrator needs to modify an AHV VM to support a large number of concurrent network connections. The VM has:
4 vCPUs
20 GB RAM
OS: Microsoft Windows Server 2022
Which modification can improve network performance for network I/O-intensive applications?

A. Add more vCPUs.
B. Enable AHV Turbo Technology.
C. Enable RSS VirtIO-Net Multi-Queue.
D. Add more RAM.

Correct Answer: C
Section:
Explanation:
Receive Side Scaling (RSS) VirtIO-Net Multi-Queue improves network performance by distributing network processing across multiple CPU cores.
Option C (Enable RSS VirtIO-Net Multi-Queue) is correct:
This setting reduces CPU bottlenecks by allowing multiple queues to handle network packets.
It is essential for high-throughput network applications.
Option A (Add more vCPUs) is incorrect:
CPU resources are important, but without enabling RSS, additional vCPUs will not optimize network traffic distribution.
Option B (Enable AHV Turbo Technology) is incorrect:
AHV Turbo improves disk I/O, not network I/O.
Option D (Add more RAM) is incorrect:
RAM does not directly impact network performance.
Nutanix AHV Best Practices Guide Optimizing Network Performance with RSS Multi-Queue
Nutanix KB Enabling Multi-Queue for High-Performance Applications

QUESTION 4
An administrator is trying to configure Metro Availability between Nutanix ESXi-based clusters. However, the Compatible Remote Sites screen does not list all required storage containers.



Which two reasons could be a cause for this issue? (Choose two.)

A. Source and destination hardware are from different vendors.
B. The remote site storage container has compression enabled.
C. The destination storage container is not empty.
D. Both storage containers must have the same name.

Correct Answer: C, D
Section:
Explanation:
Metro Availability in Nutanix requires that the primary and secondary storage containers be configured identically to ensure data replication consistency.
Option C (The destination storage container is not empty) is correct:
The remote storage container must be empty before Metro Availability can be enabled.
Existing data can cause conflicts and prevent it from appearing in the 'Compatible Remote Sites' list.
Option D (Both storage containers must have the same name) is correct:
Metro Availability requires that storage containers have identical names across clusters.
If names do not match, the storage container will not be listed as compatible.
Option A is incorrect: Metro Availability works regardless of hardware vendor differences.
Option B is incorrect: Compression does not affect compatibility but may impact performance.
Nutanix Metro Availability Deployment Guide
Nutanix Best Practices for Configuring Remote Sites for Metro Availability
Nutanix KB Troubleshooting Storage Container Issues in Metro Availability

QUESTION 5
Refer to Exhibit:

An administrator is looking at the memory cluster runway diagram as shown in exhibit, in Prism Central. The environment has three hosts with the following configuration:
CPU: 2x Intel Xeon Gold (8 cores, 2.6 GHz)
RAM: 256 GB per host
Storage: SSDs and HDDs
The Intelligent Operations feature has been active for one month, but no further configurations were applied.
What does the dotted red line mean?

A. It is the default trend analysis static threshold that can be manually set.
B. It is the maximum memory the administrator can assign to VMs.
C. It is the calculated memory oversubscription limit for currently running VMs.
D. It is the usable capacity based on cluster configuration options.

Correct Answer: D
Section:
Explanation:
he Prism Central Memory Cluster Runway Diagram provides insights into memory usage trends, predicting how long the cluster can sustain workloads before exhausting resources.

The solid blue area represents the actual memory consumption over time.
The dotted red line represents the effective memory capacity limit based on the cluster's current configuration.
Analyzing the Dotted Red Line
The dotted red line is labeled 'Effective Capacity: 503.22 GiB', which means:
It is the total usable memory capacity in the cluster after considering hypervisor overhead, redundancy settings, and failover capacity.
This value is not a hard limit but an indication of the available memory before potential performance issues occur.
Evaluating the Answer Choices
(A) It is the default trend analysis static threshold that can be manually set. (Incorrect)
The dotted red line is not a static threshold that an administrator can manually configure.
Trend analysis in Prism is dynamic and based on workload history and projections.
(B) It is the maximum memory the administrator can assign to VMs. (Incorrect)
Administrators can oversubscribe memory beyond the dotted red line if memory overcommitment is enabled.
However, oversubscribing memory beyond effective capacity may impact performance.
(C) It is the calculated memory oversubscription limit for currently running VMs. (Incorrect)
The dotted red line does not represent oversubscription limits.
Memory oversubscription depends on hypervisor memory ballooning, compression, and swapping mechanisms, which are not directly shown here.
(D) It is the usable capacity based on cluster configuration options. (Correct Answer)
The dotted red line (503.22 GiB) represents the actual usable memory available in the cluster after factoring in system overhead.
This value is determined by:
Total physical memory (256 GB per host 3 hosts = 768 GB)
Memory reserved for hypervisor and system processes
Cluster failover and redundancy settings
Intelligent Operations capacity analysis
Multicloud Infrastructure Reference & Best Practices
Prism Central's 'Runway' feature provides AI-driven trend analysis for memory, CPU, and storage capacity.
The effective capacity limit helps administrators make proactive scaling decisions before resources become critical.
To increase the memory runway, administrators can:
Optimize VM memory allocation.
Add more hosts to the cluster.
Enable memory deduplication and compression (if available).

QUESTION 6
An administrator receives complaints about VM performance.
After reviewing the VM's CPU Ready Time data, which step should the administrator take to diagnose the issue further?

A. Check the number of vCPUs assigned to each CVM.
B. Review host CPU utilization.
C. Assess cluster SSD capacity.
D. Enable VM memory oversubscription.

Correct Answer: B
Section:
Explanation:
CPU Ready Time indicates how long a VM waits for CPU resources due to contention.
Option B (Review host CPU utilization) is correct:
If CPU utilization is high, there may be excessive CPU overcommitment, leading to high CPU Ready Time.
Adding more hosts or reducing vCPU allocations may resolve the issue.
Option A (Check CVM vCPUs) is incorrect:
The Controller VM (CVM) does not directly impact application VM performance in this case.

Option C (Assess SSD capacity) is incorrect:
CPU Ready Time is unrelated to storage performance.
Option D (Enable VM memory oversubscription) is incorrect:
Memory oversubscription does not affect CPU contention.
Nutanix Prism Central Guide Troubleshooting VM Performance
Nutanix KB Identifying High CPU Ready Time and Solutions

QUESTION 7
Due to application requirements, an administrator needs to support a multicast configuration in an AHV cluster.
Which AHV feature can be used to optimize network traffic so that multicast traffic is only forwarded to the VMs that need to receive it?

A. LACP
B. UDP
C. IGMP Snooping
D. Network Segmentation

Correct Answer: C
Section:
Explanation:
Multicast traffic can generate unnecessary overhead if it is not properly managed. IGMP Snooping (Option C) ensures that multicast packets are only sent to VMs that have requested them, rather than broadcasting to all VMs.
Option C (IGMP Snooping) is correct:
It reduces unnecessary multicast traffic by ensuring that only subscribed VMs receive the packets.
It is supported natively in AHV networking.
Option A (LACP) is incorrect:
Link Aggregation Control Protocol (LACP) improves bandwidth and redundancy but does not control multicast traffic.
Option B (UDP) is incorrect:
UDP (User Datagram Protocol) is a transport protocol, not a network optimization feature.
Option D (Network Segmentation) is incorrect:
Segmentation (VLANs, VPCs) isolates networks but does not optimize multicast traffic specifically.
Nutanix AHV Networking Guide Enabling IGMP Snooping
Nutanix Bible Network Traffic Optimization in AHV
Nutanix KB Best Practices for Multicast Traffic in AHV

QUESTION 8
An administrator has been tasked with performing firmware upgrades for all Nutanix sites.
When attempting to perform firmware upgrades via Life Cycle Manager (LCM) at a remote site with a single-node cluster, no firmware updates are listed as available. The administrator confirmed that the currently installed firmware is several revisions behind.
Why are no firmware upgrades listed in LCM for this cluster?

A. Single-node clusters only support one-disk firmware upgrades.
B. LCM is not supported on single-node clusters.
C. LCM cannot perform firmware upgrades on single-node clusters.
D. LCM does not have connectivity to the internet.

Correct Answer: B
Section:
Explanation:
LCM (Life Cycle Manager) does not support automatic firmware upgrades for single-node clusters because firmware updates require cluster-wide operations, which are not possible with only one node.

Option B (LCM is not supported on single-node clusters) is correct:
Single-node clusters lack failover capability, making firmware upgrades unsafe without manual intervention.
Option A (Single-node clusters only support one-disk firmware upgrades) is incorrect:
This limitation does not apply to LCM as a whole.
Option C (LCM cannot perform firmware upgrades) is incorrect:
LCM can perform manual firmware upgrades, but automatic updates are not supported.
Option D (LCM lacks internet connectivity) is incorrect:
Even if the cluster is in a dark site (no internet), LCM can use local update bundles.
Nutanix LCM Guide Firmware Upgrade Considerations for Single-Node Clusters
Nutanix KB Why LCM Updates Are Not Available for Single-Node Deployments

QUESTION 9
An administrator is responsible for resource planning and needs to plan for resiliency of a 10-node RF3 cluster. The cluster has 100TB of storage.
How should the administrator plan for capacity in the event of future failures?

A. Set Reserve Storage Capacity (%) to 20.
B. Set Reserve Capacity for Failure to None.
C. Set Reserve Capacity for Failure to Auto Detect.
D. Set Reserve Memory Capacity (%) to 20.

Correct Answer: C
Section:
Explanation:
RF3 (Replication Factor 3) clusters require sufficient reserved capacity to tolerate failures without data loss.
Option C (Set Reserve Capacity for Failure to Auto Detect) is correct:
Auto Detect dynamically calculates the necessary reserved space based on cluster size and RF settings.
It ensures that enough storage remains available in case of a node failure.
Option A (Set Reserve Storage Capacity to 20%) is incorrect:
The required storage reservation depends on the number of nodes and RF level, not a fixed percentage.
Option B (Set Reserve Capacity for Failure to None) is incorrect:
Without reserved capacity, a node failure could lead to data unavailability.
Option D (Set Reserve Memory Capacity to 20%) is incorrect:
This setting applies to RAM, not storage resiliency.
Nutanix Bible Understanding Replication Factor (RF) and Failure Planning
Nutanix Prism Element Guide Configuring Reserve Capacity for Cluster Resiliency
Nutanix KB How to Plan Capacity for RF3 Clusters

QUESTION 10
An administrator migrated a physical MySQL database from a legacy 3-tier environment to a Nutanix cluster.
After migration, the administrator finds that at peak load, the number of IOPS is lower than expected, and latency is higher.
Which two steps should the administrator take to improve performance? (Choose two.)

A. Ensure that the SQL data vDisks are thick provisioned.
B. Create additional vDisks for SQL data.
C. Use LVM to stripe the SQL data across multiple vDisks.
D. Ensure that the SQL data vDisks are thin provisioned.

Correct Answer: B, C
Section:

Explanation:
For high-performance databases like MySQL, optimizing storage access is critical.
Option B (Create additional vDisks for SQL data) is correct:
Multiple vDisks allow better parallelism in Nutanix DSF (Distributed Storage Fabric), improving IOPS.
Option C (Use LVM to stripe SQL data across multiple vDisks) is correct:
Striping across multiple disks distributes the load, reducing latency.
Option A (Thick provisioned vDisks) is incorrect:
Nutanix always provisions vDisks thinly, and thick provisioning does not improve IOPS.
Option D (Thin provisioned vDisks) is incorrect:
All Nutanix vDisks are thin-provisioned by default.
Nutanix Bible Optimizing SQL Performance on Nutanix
Nutanix KB Best Practices for Running MySQL on Nutanix

QUESTION 11
After upgrading Prism Central from PC2022.1 to PC2024.1, an administrator is unable to log in with their IAM domain account.
What is the first troubleshooting step the administrator should take?

A. Ping the Domain Controller from the CVM.
B. Ensure port 9441 is open in the firewall.
C. Validate the trusted signing certificate of the organization.
D. Log in with a local admin account.

Correct Answer: D
Section:
Explanation:
After a Prism Central upgrade, IAM authentication settings may require reconfiguration.
Option D (Log in with a local admin account) is correct:
If IAM authentication fails, the local admin account must be used to check domain settings.
Option A (Ping the Domain Controller) is incorrect:
Network connectivity is important, but the issue is likely related to IAM settings, not network reachability.
Option B (Check firewall port 9441) is incorrect:
Port 9441 is used for SSO authentication, but port issues usually result in login delays, not complete failures.
Option C (Validate signing certificate) is incorrect:
While certificates can cause issues, local admin login should always work.
Nutanix KB Troubleshooting IAM Login Issues After a Prism Central Upgrade
Nutanix Documentation Managing User Authentication and IAM Integration

QUESTION 12
An administrator has successfully configured Metro Availability for a Protection Domain. However, after a few days, an NCC warning is raised:
'Following VMs are accessing data from remote clusters: VM-1 from remote cluster Remote-ML'
What is the first action an administrator must take to fix the issue?

A. Run the command: ncli pd list metro-avail=true | egrep 'Protection Domain Stretch Role' | grep 'ACTIVE'
B. Use must-affinity rules to avoid automated VM migration to the standby datastore.
C. Migrate the VM to its primary site and set appropriate rules for DRS and affinity.
D. Run the command: ncc health_checks metro_availability_checks data_locality_check --cvm_list=X.X.X.20

Correct Answer: C
Section:

Explanation:
Metro Availability requires that VMs always read data from their primary site to maintain optimal performance and prevent remote data access latency.
Option C (Migrate the VM to its primary site and set appropriate rules) is correct:
If a VM fails over to the secondary site but is still running in the primary site, it will read data remotely, causing high latency and performance issues.
The solution is to migrate the VM back to the primary site and configure DRS rules or host affinity settings to prevent unwanted movement.
Option A is incorrect:
The command lists active Metro Availability protection domains but does not resolve the issue.
Option B is incorrect:
Must-affinity rules can help, but they should be configured after migrating the VM back to the primary site.
Option D is incorrect:
Running NCC health checks will only diagnose the issue, not resolve it.
Nutanix Bible Metro Availability and Data Locality
Nutanix Best Practices VM Affinity Rules for Metro Availability
Nutanix KB Troubleshooting Remote Data Access in Metro Availability

QUESTION 13
An administrator is trying to delete a protected snapshot but is unable to do so.
What is the most likely cause?

A. There is an active recovery occurring at that time.
B. Ransomware has encrypted the snapshot.
C. There is an approval policy that was denied.
D. The snapshot has been corrupted.

Correct Answer: A
Section:
Explanation:
Snapshots that are part of an active recovery operation cannot be deleted until the process is completed or manually canceled.
Option A (Active recovery in progress) is correct:
Nutanix does not allow deletion of snapshots if they are being used in an ongoing recovery process.
The administrator should verify whether the snapshot is currently part of a Protection Domain or Disaster Recovery (DR) plan.
Option B (Ransomware encryption) is incorrect:
Nutanix snapshots are immutable by default and cannot be encrypted by external threats.
Option C (Approval policy denial) is incorrect:
Snapshot deletions do not require manual approval, unless controlled by an external workflow system.
Option D (Snapshot corruption) is incorrect:
Nutanix uses checksums to prevent corruption, so snapshots cannot be silently damaged.
Nutanix Protection Policies Snapshot Retention and Deletion
Nutanix Bible Backup & Disaster Recovery Mechanisms
Nutanix KB How to Delete a Snapshot Used in Recovery Plans

QUESTION 14
When expanding a cluster, what is required to automatically discover new nodes?

A. New nodes must have the same hypervisor version.
B. IPv6 multicast must be allowed on physical switches.
C. New nodes must have the same AOS version.
D. IPv4 multicast must be allowed on physical switches.

Correct Answer: D
Section:
Explanation:
Nutanix uses IPv4 multicast for automatic node discovery and cluster expansion.
Option D (IPv4 multicast must be allowed) is correct:
When adding new nodes, the Nutanix Cluster automatically detects them using IPv4 multicast traffic.
If multicast is blocked at the switch level, the new nodes will not be discovered automatically.
Option A (Hypervisor version must match) is incorrect:
While the hypervisor version should be compatible, it does not impact node discovery.
Option B (IPv6 multicast) is incorrect:
Nutanix does not use IPv6 multicast for cluster discovery.
Option C (AOS version must match) is incorrect:
Nodes can have slightly different AOS versions, but discovery still works as long as they are compatible.
Nutanix Best Practices Cluster Expansion & Auto-Discovery
Nutanix KB Why Nutanix Requires IPv4 Multicast for Node Discovery

QUESTION 15
In a scale-out Prism Central deployment, what additional functionality does configuring an FQDN instead of a Virtual IP provide?

A. Load balancing
B. Resiliency
C. Segmentation
D. SSL Certificate

Correct Answer: A
Section:
Explanation:
In a scale-out Prism Central deployment, using an FQDN (Fully Qualified Domain Name) enables load balancing across multiple Prism Central instances.
Option A (Load balancing) is correct:
When an FQDN is used, Nutanix automatically distributes traffic between multiple Prism Central nodes, improving performance.
Option B (Resiliency) is incorrect:
Resiliency is achieved through cluster redundancy, not by using an FQDN.
Option C (Segmentation) is incorrect:
Segmentation relates to network isolation rather than FQDN-based load balancing.
Option D (SSL Certificate) is incorrect:
SSL certificates can be applied to both FQDN and Virtual IP configurations.
Nutanix Prism Central Guide Configuring Scale-Out Deployment
Nutanix KB How FQDN Enhances Load Balancing in Scale-Out Prism Central

QUESTION 16
After adding new workloads, the Overall Runway is now below 365 days, but the scenario still shows the cluster is in good shape.
Why?

A. Because Storage Runway is still good.
B. Because new workloads are sustainable.
C. Because there are recommended resources.
D. Because the Target is 1 month.

Correct Answer: B

Section:
Explanation:
A cluster runway below 365 days does not necessarily indicate an issue if Intelligent Operations determines that workloads are sustainable.
Option B (Because new workloads are sustainable) is correct:
Nutanix analyzes resource trends and marks clusters as healthy if new workloads are within projected capacity.
Option A (Storage Runway is still good) is incorrect:
Storage is one component, but CPU and memory also affect runway calculations.
Option C (Recommended resources) is incorrect:
Recommendations help optimize capacity, but do not define cluster health.
Option D (Target is 1 month) is incorrect:
The scenario's target window does not impact the actual runway calculation.
Nutanix Prism Central Guide Capacity Planning & Runway Analysis
Nutanix KB Understanding Capacity Runway and Workload Sustainability

QUESTION 17
An administrator is configuring Protection Policies to replicate VMs to a Nutanix Cloud Cluster (NC2) over the internet.
To comply with security policies, how should data be protected during transmission?

A. Configure Data on a self-encrypting drive.
B. Configure VMs to use UEFI Secure Boot.
C. Enable Data-at-Rest Encryption.
D. Enable Data-in-Transit Encryption.

Correct Answer: D
Section:
Explanation:
Data-in-Transit Encryption ensures that replication traffic is encrypted while being sent over the internet.
Option D (Enable Data-in-Transit Encryption) is correct:
This encrypts replicated data between clusters, ensuring security against man-in-the-middle attacks.
Option A (Self-encrypting drive) is incorrect:
This protects data at rest, not during transmission.
Option B (UEFI Secure Boot) is incorrect:
Secure Boot prevents unauthorized OS modifications, but does not encrypt network traffic.
Option C (Data-at-Rest Encryption) is incorrect:
This encrypts stored data but does not secure replication traffic.
Nutanix Security Guide Configuring Data-in-Transit Encryption
Nutanix KB Protecting Replication Traffic Over Public Networks

QUESTION 18
Refer to Exhibit:

☐	[redacted]	The cluster is using password based ssh access for the cvm [redacted]	A6219	Info	false	false	Password-based remote login is enabled on the cluster. It is recommended to use key-based ssh access instead of password-based ssh access for better security.

An administrator sees the alert shown in the exhibit.
What should the administrator do to ensure the nutanix user can no longer SSH to a CVM using a password?

A. Rename the nutanix user.
B. Block port 22 on the CVM firewall.
C. Enable Cluster Lockdown.
D. Delete the nutanix user.

Correct Answer: C
Section:
Explanation:
Understanding the Exhibit & the Alert
The alert states:
'The cluster is using password-based SSH access for the CVM.'
'Password-based remote login is enabled on the cluster.'
'It is recommended to use key-based SSH access instead of password-based SSH access for better security.'
This means that the nutanix user can log in to Controller VMs (CVMs) using a password, which is a security risk.
Corrective Action: Enabling Cluster Lockdown
(C) Enable Cluster Lockdown. (Correct Answer)
Cluster Lockdown Mode restricts password-based SSH access and forces key-based authentication.
This prevents users from logging into CVMs using passwords, enhancing cluster security.
To enable Cluster Lockdown:
Go to Prism Central or Prism Element.
Navigate to Settings Security Cluster Lockdown.
Enable Cluster Lockdown Mode.
Evaluating the Other Answer Choices
(A) Rename the nutanix user. (Incorrect)
The nutanix user is a built-in system account required for cluster operations.
Renaming the user will not prevent SSH access via password.
(B) Block port 22 on the CVM firewall. (Incorrect)
Blocking port 22 (SSH) will completely disable SSH access, including key-based authentication.
This may break cluster management and troubleshooting operations.

(D) Delete the nutanix user. (Incorrect)
The nutanix user is a critical system account required for cluster functionality.
Deleting the account will cause serious issues with cluster management.
Multicloud Infrastructure Reference & Best Practices
Nutanix Security Best Practices:
Always use key-based SSH authentication instead of password-based logins.
Enable Cluster Lockdown Mode to enforce security policies.
Regularly audit user access to ensure security compliance.
Cluster Lockdown Benefits:
Prevents unauthorized SSH access via passwords.
Enforces public key authentication, reducing brute-force attack risks.
Strengthens CVM security against potential exploits.
Nutanix Security Guide Enabling Cluster Lockdown for SSH Security
Nutanix KB Securing SSH Access on Nutanix Clusters

QUESTION 19
A security team asks an administrator to set up port mirroring of a specific source VM to a target VM.
What must the administrator ensure for this configuration to be possible?

A. Source VM and Target VM are on the same VLAN.
B. Source VM and Target VM are on the same host.
C. Source VM and Target VM are on the same subnet.
D. Source VM and Target VM are on the same VPC.

Correct Answer: B
Section:
Explanation:
Port mirroring requires the source and target VMs to be on the same host to efficiently copy network traffic without additional routing overhead.
Option B (Source VM and Target VM are on the same host) is correct:
AHV's port mirroring only works within a single host because network packets are intercepted before leaving the hypervisor.
If the VMs are on different hosts, mirroring cannot be configured without additional network tools.
Option A (Same VLAN) is incorrect:
VLAN membership is not a requirement for port mirroring.
Option C (Same subnet) is incorrect:
Port mirroring happens at the virtual switch level, which does not require VMs to be in the same subnet.
Option D (Same VPC) is incorrect:
While VPCs provide network isolation, they do not control port mirroring availability.
Nutanix AHV Networking Guide Configuring Port Mirroring in AHV
Nutanix KB Port Mirroring Best Practices

QUESTION 20
What is required to create a category in Nutanix?

A. A name and a value
B. A policy and an entity
C. A service and a scope
D. A catalog and a template

Correct Answer: A

Section:
Explanation:
Categories in Nutanix are used to group resources and require only a name and a value for definition.
Option A (A name and a value) is correct:
Categories require a name (e.g., 'Production VMs') and a value (e.g., 'Tier 1').
These are then applied to VMs, storage, and other resources for policy-based management.
Option B (Policy and Entity) is incorrect:
Policies use categories but are not required to define a category.
Option C (Service and Scope) is incorrect:
Categories do not require services or a defined scope.
Option D (Catalog and Template) is incorrect:
These apply to self-service provisioning, not categories.
Nutanix Prism Central Guide Creating and Managing Categories
Nutanix KB Using Categories for RBAC and VM Grouping

QUESTION 21
An administrator wants to enable application discovery on a Nutanix cluster to monitor applications. A Prism Central instance is already configured with sufficient CPU and memory.
What other prerequisites must be met before enabling application discovery? (Choose two.)

A. Sufficient Prism Central VM resources
B. Internet connection
C. API key and key ID
D. Network controller is enabled

Correct Answer: A, B
Section:
Explanation:
Application discovery in Prism Central requires sufficient Prism Central resources and an active internet connection to retrieve application signatures.
Option A (Sufficient Prism Central VM resources) is correct:
Prism Central needs adequate CPU and memory to process application signatures and discovery data.
Option B (Internet connection) is correct:
Application discovery depends on Nutanix's cloud database to recognize application patterns.
Option C (API key and key ID) is incorrect:
API keys are not required for automatic application discovery.
Option D (Network controller enabled) is incorrect:
Application discovery does not depend on a network controller feature.
Nutanix Prism Central Guide Enabling and Using Application Discovery
Nutanix KB Requirements for Application Discovery in Prism Central

QUESTION 22
An administrator has been tasked with justifying why Nutanix Disaster Recovery was chosen for a multi-tier application spanning multiple business units.
What is the most efficient way to organize and manage the workloads?

A. Utilize a VM naming schema that allows sorting
B. Utilize Categories to organize VMs in Recovery Plans
C. Utilize a 1:10 ratio of Recovery Plan to VMs
D. Utilize RESTful APIs to script creation of Recovery Plans

Correct Answer: B

Section:
Explanation:
Nutanix Categories allow administrators to group related VMs, making Disaster Recovery (DR) planning easier.
Option B (Utilize Categories to organize VMs in Recovery Plans) is correct:
Categories help group VMs based on application tiers (e.g., database, middleware, web servers).
This ensures orderly failover while maintaining application dependencies.
Option A (Naming schema) is incorrect:
Naming conventions help, but they do not provide functional organization in recovery plans.
Option C (1:10 Recovery Plan to VMs) is incorrect:
The ratio depends on business requirements, not a fixed number.
Option D (RESTful APIs) is incorrect:
Automation is useful, but it does not replace proper VM grouping via categories.
Nutanix Disaster Recovery Guide Using Categories for DR Management
Nutanix KB Organizing VMs for Disaster Recovery Planning

QUESTION 23
An administrator is working with a network engineer to design the network architecture for a DR failover.
Because DNS is well-designed, the DR site will use a different subnet but retain the same last octet in the IP address.
What is the best way to achieve this?

A. Use a custom script to update the IP address after instantiation in DR.
B. Set up IPAM so the address is dynamically assigned during DR.
C. Manually log into VMs after the DR event and update the last octet.
D. Utilize Recovery Plan Offset-based IP mapping.

Correct Answer: D
Section:
Explanation:
Offset-based IP mapping in Nutanix Recovery Plans allows automatic subnet changes during DR failover.
Option D (Utilize Recovery Plan Offset-based IP mapping) is correct:
This method automatically adjusts the IP range while keeping the same last octet.
It eliminates the need for manual intervention after failover.
Option A (Custom script) is incorrect:
Scripting is an option, but Recovery Plan IP mapping is simpler and native to Nutanix.
Option B (Use IPAM) is incorrect:
IP Address Management (IPAM) is useful, but offset-based mapping provides more control.
Option C (Manually update IPs) is incorrect:
This would be time-consuming and error-prone.
Nutanix Disaster Recovery Guide Using Offset-Based IP Mapping
Nutanix KB Best Practices for Managing IP Addresses in DR

QUESTION 24
An administrator has been asked to calculate baseline Capacity Runway on a newly registered AHV cluster.
The cluster has been running for 16 days, but no runway projections are displayed.
Why are no Capacity Runway projections being displayed?

A. Capacity Planning requires at least 30 days of data.
B. Capacity Planning requires at least 21 days of data.
C. Capacity Planning requires at least 3 months of data.

D. Capacity Planning requires at least 6 months of data.

Correct Answer: B
Section:
Explanation:
Nutanix Prism Central requires at least 21 days of usage data to generate accurate Capacity Runway projections.
Option B (21 days) is correct:
Until 21 days of data is collected, no runway analysis is available.
Option A (30 days) is incorrect:
30 days is recommended for long-term accuracy, but not required for initial projections.
Option C (3 months) and Option D (6 months) are incorrect:
Extended data collection helps trend accuracy, but runway calculations begin after 21 days.
Nutanix Prism Central Guide Understanding Capacity Runway Calculations
Nutanix KB Why No Capacity Runway Data is Displayed for New Clusters

QUESTION 25
An administrator is configuring a replication schedule on multiple remote locations deployed using a single-node cluster. The goal is to achieve the lowest possible RPO (Recovery Point Objective).
How should the administrator configure the replication schedule?

A. Configure NearSync replication.
B. Configure a schedule for 16 minutes up to 59 minutes.
C. Configure Async replication.
D. Configure a schedule for 1 minute up to 15 minutes.

Correct Answer: D
Section:
Explanation:
Nutanix NearSync replication provides the lowest RPO (as low as 1 minute) and is the best option for minimizing data loss in DR scenarios.
Option D (Configure a schedule for 1 minute up to 15 minutes) is correct:
NearSync allows an RPO as low as 1 minute, providing near-continuous data protection.
This is ideal for mission-critical applications where minimal data loss is required.
Option A (Configure NearSync) is incorrect:
While NearSync is the best choice, just enabling it is not enough---the schedule must be set to 1-15 minutes.
Option B (16 to 59 minutes) is incorrect:
NearSync operates within a 1-15 minute range. If set above 15 minutes, it defaults to Async replication.
Option C (Async replication) is incorrect:
Async replication typically has an RPO of 1 hour or more, which does not meet the lowest RPO requirement.
Nutanix Protection Policies Guide NearSync vs. Async Replication
Nutanix Bible RPO and RTO in Disaster Recovery
Nutanix KB Configuring NearSync Replication for Single-Node Clusters

QUESTION 26
Which two URLs must be accessible from a Connected Site's Controller VMs to allow Life Cycle Manager (LCM) to download software updates?

A. download.nutanix.com
B. mynutanix.com
C. release-api.nutanix.com
D. portal.nutanix.com

Correct Answer: A, C
Section:
Explanation:
LCM (Life Cycle Manager) fetches software updates from Nutanix's repositories, requiring access to specific URLs.
Option A (download.nutanix.com) is correct:
This domain hosts all software update files for AOS, AHV, and other Nutanix components.
Option C (release-api.nutanix.com) is correct:
This domain is used for LCM to fetch update metadata and check for new versions.
Option B (mynutanix.com) is incorrect:
This domain is used for account management, not LCM updates.
Option D (portal.nutanix.com) is incorrect:
The Nutanix support portal is not used for automated LCM updates.
Nutanix LCM Guide Firewall Rules for LCM Connectivity
Nutanix KB Troubleshooting LCM Update Failures

QUESTION 27
An administrator needs to create a storage container for VM disks. The container must meet the following conditions:
10 GiB of the total allocated space must not be used by other containers.
The container must have a maximum storage capacity of 500 GiB.
What settings should the administrator configure while creating the storage container?

A. Set Advertised Capacity to 10 GiB and Reserved Capacity to 500 GiB.
B. Set Advertised Capacity to 10 GiB.
C. Set Reserved Capacity to 500 GiB.
D. Set Reserved Capacity to 10 GiB and Advertised Capacity to 500 GiB.

Correct Answer: D
Section:
Explanation:
Nutanix storage containers allow administrators to configure capacity reservations and advertised limits for better resource management.
Option D (Set Reserved Capacity to 10 GiB and Advertised Capacity to 500 GiB) is correct:
Reserved Capacity ensures that 10 GiB is always available for this container and not consumed by other containers.
Advertised Capacity defines a logical limit of 500 GiB to prevent over-allocation.
Option A is incorrect:
Advertised Capacity of 10 GiB is too low and does not match the requirement of a 500 GiB storage container.
Option B is incorrect:
Only setting Advertised Capacity does not guarantee Reserved Capacity, meaning other containers could consume the reserved space.
Option C is incorrect:
Setting only Reserved Capacity does not enforce an upper limit, which could lead to overprovisioning.
Nutanix Storage Management Guide Understanding Storage Container Settings
Nutanix KB Advertised vs. Reserved Capacity in Storage Containers

QUESTION 28
In a five-node cluster, an administrator noticed that three VMs are consuming too many resources on a single host.
Acropolis Dynamic Scheduling (ADS) is not able to migrate these VMs.
What is the most likely reason preventing ADS from migrating these VMs?

A. VMs use a Volume Group.
B. VMs use GPU pass-through.

C. VM-VM anti-affinity policy is set.
D. VMs use external Network Attached Storage.

Correct Answer: B
Section:
Explanation:
VMs using GPU pass-through cannot be live-migrated because they are directly tied to a physical GPU on a specific host.
Option B (VMs use GPU pass-through) is correct:
Pass-through devices (such as GPUs) are directly assigned to VMs, making migration impossible unless the VM is powered off first.
Option A (VMs use a Volume Group) is incorrect:
Volume Groups support live migration unless they are configured incorrectly.
Option C (VM-VM anti-affinity) is incorrect:
Anti-affinity rules prevent two specific VMs from running together, but do not prevent migration.
Option D (VMs use external NAS) is incorrect:
Using NAS does not block VM migration, as Nutanix supports shared storage across hosts.
Nutanix AHV Best Practices GPU Pass-through and VM Migration Limitations
Nutanix KB Why Can't I Live Migrate a VM with GPU Passthrough?

QUESTION 29
An administrator using a dark site deployment for LCM is attempting to upgrade to the latest BIOS.
After completing an inventory scan, the administrator does not see the expected BIOS version available for upgrade.
What is the most likely reason the latest BIOS is not shown?

A. AOS needs to be upgraded first.
B. The latest compatibility bundle has not been uploaded.
C. The BMC version needs to be upgraded first.
D. The dark site webserver is not accessible.

Correct Answer: B
Section:
Explanation:
In a dark site deployment, LCM does not automatically fetch updates from the internet. The administrator must manually upload compatibility bundles.
Option B (The latest compatibility bundle has not been uploaded) is correct:
The compatibility bundle contains firmware mappings, allowing LCM to detect the correct BIOS version.
Option A is incorrect:
AOS does not need to be upgraded first for a BIOS update.
Option C is incorrect:
The BMC firmware does not always need updating before BIOS updates.
Option D is incorrect:
In a dark site deployment, LCM does not rely on an internet connection, so webserver access is not required.
Nutanix LCM Guide Using Compatibility Bundles in Dark Sites
Nutanix KB Troubleshooting Firmware Updates in Dark Site Deployments

QUESTION 30
Which update in LCM can an administrator apply on a per-node basis?

A. AOS
B. BMC

C. NCC
D. AHV

Correct Answer: B
Section:
Explanation:
BMC (Baseboard Management Controller) updates can be applied per-node in Nutanix LCM, unlike AOS or AHV, which require cluster-wide upgrades.
Option B (BMC) is correct:
BMC firmware controls remote management and power cycling of individual nodes.
Updating BMC does not impact the entire cluster and can be done per node.
Option A (AOS) is incorrect:
AOS upgrades affect the entire cluster and require cluster-wide consistency.
Option C (NCC) is incorrect:
NCC updates apply across all nodes simultaneously, ensuring uniformity in checks.
Option D (AHV) is incorrect:
AHV updates require coordinated upgrades across hosts to maintain VM availability.
Nutanix LCM User Guide Per-Node Firmware Updates
Nutanix KB How to Upgrade BMC Using LCM

QUESTION 31
An administrator is experiencing storage performance issues on a Windows Server 2019 VM with the following configuration:
vCPU: 1
VRAM: 8 GB
vSCSI: VirtIO SCSI Controller
vDisk: 2 (100 GB, 250 GB)
vNIC: VirtIO Fast Ethernet
The AHV cluster is healthy, and other Windows VMs are performing well.
Which configuration change should be reviewed to enhance VM performance?

A. Add a second virtual storage controller (vSCSI).
B. Enable Balance-TCP on bridge (br0).
C. Increase Controller VM (CVM) resources.
D. Increase the VM's number of vCPUs.

Correct Answer: D
Section:
Explanation:
A single vCPU is likely causing a bottleneck, limiting the VM's ability to process I/O requests efficiently.
Option D (Increase the VM's number of vCPUs) is correct:
Windows requires sufficient CPU resources to handle disk and network operations.
Adding more vCPUs allows the VM to process more I/O operations simultaneously, improving performance.
Option A is incorrect:
Additional vSCSI controllers are only useful for very high disk I/O workloads.
Option B is incorrect:
Balance-TCP applies to network traffic, not storage performance.
Option C is incorrect:
CVM resources do not directly affect individual VM performance.
Nutanix AHV Performance Tuning Guide
Nutanix KB Optimizing Windows VM Performance on AHV

QUESTION 32
An administrator needs to perform an LCM upgrade on an AHV host with GPUs.
What additional step is required before upgrading the host?

A. Create an agent VM on each host that has GPU drivers installed.
B. Run LCM in dark site mode so it can update AHV independently.
C. Use Direct Uploads to upload appropriate driver bundles.
D. Update NCC to the latest version and re-run Inventory.

Correct Answer: C
Section:
Explanation:
Upgrading an AHV host with GPUs requires that the correct GPU drivers be manually uploaded to LCM, as GPU firmware is not updated automatically.
Option C (Use Direct Uploads to upload appropriate driver bundles) is correct:
LCM does not automatically fetch GPU drivers.
The administrator must download and manually upload the appropriate firmware bundle before upgrading.
Option A is incorrect:
Agent VMs are not required for GPU updates.
Option B is incorrect:
Running LCM in dark site mode does not impact GPU firmware updates.
Option D is incorrect:
Updating NCC is a best practice but does not resolve GPU driver issues.
Nutanix LCM Guide Manually Uploading GPU Firmware Bundles
Nutanix KB Updating AHV Hosts with GPUs

QUESTION 33
What is supported for creating a VM Template in Nutanix?

A. VM is protected by Protection Domain-based DR.
B. VM is an agent or a Prism Central VM.
C. VM has disks located on RF2 containers.
D. VM runs on the ESXi hypervisor.

Correct Answer: C
Section:
Explanation:
VM templates in Nutanix are supported only when the VM's disks reside on storage containers configured with Replication Factor 2 (RF2) or higher.
Option C (VM has disks on RF2 containers) is correct:
VM templates require a minimum RF2 for fault tolerance.
RF1 containers do not meet Nutanix best practices for VM templates.
Option A is incorrect:
VMs protected by Protection Domains can be cloned, but this is different from creating a VM template.
Option B is incorrect:
Agent VMs (e.g., Witness VMs) or Prism Central cannot be used as VM templates.
Option D is incorrect:
Nutanix VM templates are natively supported on AHV, not ESXi.
Nutanix VM Management Guide Creating and Managing VM Templates
Nutanix KB Storage Requirements for VM Templates