Exam : VCP-310

Title : VMware Certified Professional on VI3

Ver : 10-14-08

QUESTION 1:

How does ESX Server 3.x differ from VMware Server 2?

A. ESX Server 3.x supports multiple processors in a virtual machine and VMware Server 2 does not.
B. ESX Server 3.x supports Intranet and application servers in a production environment and VMware Server 2 does not.
C. ESX Server 3.x manages the virtualization server application remotely through a web-based interface and VMware Server 2 does not.
D. ESX Server 3.x supports virtual switches with VLAN capabilities and VMware Server 2 does not.
E. ESX Server 3.x runs on top of Linux and VMware Server 2 does not.

Answer: D

Explanation: VMware Server does not support VLAN

QUESTION 2:

What are two reasons why Certkiller .com would choose to use VMware Server 2.x instead of using ESX Server 3.x? Select two.

A. ESX Server 3.x does not support the storage hardware the company wants to use.
B. The company wants to utilize NIC teaming for network path failover and load balancing.
C. The company wants to virtualize a large number of physical machines running legacy operating systems in their datacenter.
D. VMware Server 2.x is a lower-cost solution for departmental virtualization projects.
E. VM Server 2.x allows users to run the same number of virtual machines per CPU core as ESX Server 3.x does a the same performance levels at a lower cost.

Answer: A, D

Explanation:
Reference: http://www.vmware.com/products/server

QUESTION 3:

Which of the following most closely describes the purpose of ACE (the Assured Computing Environment)?

A. ACE helps desktop managers provision secure, standardized PC environments throughout the enterprise.
B. ACE enhances system security for ESX Server by providing firewall protection for

both virtual machines and the Service Console.
C. ACE enhances virtual infrastructure manageability by acting as a proxy between Virtual Center and the ESX and VMware Server systems under management.
D. ACE enhances reliability of the virtual infrastructure by providing hardware redundancy for ESX Server.

Answer: A

QUESTION 4:

All VMware virtualization products are based on the same underlying virtualization technology, but there are some differences among these products. Which one of the following statements is true?

A. VMware Server and VMware Workstation both provide tools for remote management of virtual machines.
B. Because it runs on the bare metal, ESX Server supports a narrower range of physical hardware than either Workstation or VMware Server.
C. ESX Server supports more types of guest operating system than Workstation or Vmware Server.
D. Only ESX Server allows virtual machines to be configured with multiple virtual CPUs.

Answer: B
ESX server doesn't need an underlying operating system such as Windows Server whereas VMware Server and Workstation need to be installed an underlying operating system. ESX is an operating system within itself. This means that is uses its own drivers for the server hardware. This also means that ESX Server supports a narrower range of physical hardware than either Workstation or VMware Server.

QUESTION 5:

64-bit CPUs are supported for VMotion in VirtualCenter 2.5

A. only when migrating 32-bit Guest OSes.
B. when migrating either 32-bit or 64-bit Guest OSes, so long as the Nx flag is hidden.
C. when migrating either 32-bit or 64-bit Guest OSes, regardless of CPU compatibility
D. when migrating either 32-bit or 64-bit Guest OSes, so long as the VMware CPU Compatibility Tool detects two compatible CPUs.

Answer: D

QUESTION 6:

What are two reasons why Certkiller .com would choose to use ESX Server 3.x instead of using VMware Server 2.0? (Choose two.)

A. VMware Server 2.0 does not support running virtual machines in a production environment.
B. ESX Server 3.x offers better resource management and better performance.
C. The company needs the ability to run dual-processor virtual machines.
D. ESX Server 3.x is a lower-cost solution for small software testing environments.
E. The company wants the ability to use VMotion.

Answer: B, E

Explanation: ESX Server offers better performance because it does not require an underlying operating system such as Windows Server.

QUESTION 7:

Which statement is true about the database used for VirtualCenter evaluations?

A. The VirtualCenter installer provides the option to automatically install and configure an MSDE database.
B. MS Access may be used as an evaluation database, but it must be upgraded before VirtualCenter is used in a production environment.
C. Evaluation licenses do not allow VirtualCenter to connect to a remote database.
D. The optional MSDE database can only be used if installed prior to running the VirtualCenter installer.

Answer: A

QUESTION 8:

Under which condition does VMware support VirtualCenter with SQL Server using Windows authentication?

A. as long as the SQL Server is installed on the same machine as VirtualCenter
B. as long as the SQL Server is running on a physical machine
C. as long as the connection between VirtualCenter and SQL Server is at least 1Gbps
D. as long as the SQL Server is part of the same Active Directory domain

Answer: D

QUESTION 9:

How does VMware Server 2.0 differ from ESX Server 3.x?

A. VMware Server 2.0 supports up to 64 GB of RAM and ESX Server 3.x does not.
B. VMware Server 2.0 enhances software development and testing and ESX Server 3.x does not.

C. VMware Server 2.0 supports desktop operating systems and ESX Server 3.x does not.
D. VMware Server 2.0 runs on a Linux host and ESX Server 3.x does not.
E. VMware Server 2.0 supports legacy operating systems and ESX Server 3.x does not.

Answer: D

QUESTION 10:

During the installation of ESX Server 3.5, you decide to manually define the partitioning scheme.
Which two are recommend minimum partition sizes? Select two.

A. /boot = 512 MB
B. Swap = 544 MB
C. / =2500 MB
D. /usr =2048MB
E. /etc =1500 MB
F. / =5 GB

Answer: B, F

Explanation: The minimum recommended Swap partition size is 544MB. The minimum recommended root partition size is 5GB for ESX Server 3.5. In previous versions of ESX server, the minimum recommended root partition size is 2560MB.
Ref: page 96 Installation Guide.

QUESTION 11:

If the ESX Server does not have access to shared storage, which two additional partitions are required to be created on local storage? Select two.

A. /user
B. VMkernel swap
C. Vmkcore
D. VMFS
E. /var

Answer: C, D

Explanation:
Installation & Upgrade Guide\ Datastore Partitioning: Required Partitions
C: A 100MB vmkcore partition is required for each ESX Server host. A vmkcore partition can be located on a local SCSI volume, a networkedSCSI volume, or a SAN. It cannot be located on a software iSCSI volume.
A vmkcore partition is used to store core dumps for debugging andtechnical support. Each ESX Server host must have a vmkcore partition of 100MB. Ifmultiple ESX Server

hosts share a SAN, configure a vmkcore partitionwith 100MB for each host.
Installation & Upgrade Guide\ Datastore Partitioning: Required Partitions
D: A VMFS partition is required. However, VMFS partitions do not needto be located on a local or boot drive. VMFS partitions can be locatedon a local SCSI volume, a networked SCSI volume, a SAN. A VMFSpartition is used to store virtual machine virtual disks. VMwarerecommends 4GB storage per virtual machine.
page 183-184 Installation and Upgrade Guide

QUESTION 12:

When installing ESX Server 3.x, which partition is required to store core dumps for debugging and for VMware technical support?

A. vmkcore
B. vmkdump
C. vmfscore
D. vmimages

Answer: A

Explanation:
Installation & Upgrade Guide\ Datastore Partitioning : Required Partitions
An ESX Server local boot volume requires three specific partitionsfor operation. In addition, a local or remote VMFS partition isrequired to store your virtual machines, and a vmkcore partition isrequired to provide core dumps for technical support.
page 184 Installation and Upgrade Guide

QUESTION 13:

Which statement is true about running an ESX Server virtual machine on a CIFS share?

A. ESX Server must be granted as a trusted member of the CIFS server.
B. ESX Server does not support datastore on CIFS
C. ESX Server requires gigabit Ethernet adapter in order for CIFS to be used as datastore.
D. ESX Server must be on the same LAN as the CIFS server.

Answer: B

QUESTION 14:

Hitting ESC when first powering on a VM in ESX Server 3.X

A. enters the boot order of the BIOS.
B. does nothing, as ESC is not a valid option.
C. directs the VM to directly boot from network.

D. enters the general BIOS options and is an alternative to hitting F12.

Answer: D

QUESTION 15:

What is a valid reason for choosing to boot from local storage rather than choosing to boot from SAN?

A. MSCS is not supported on boot from SAN.
B. There is no way to restrict sharing of boot LUNs between ESX Servers on boot from SAN.
C. RDM is not supported on boot from SAN.
D. VMotion is not supported on boot from SAN.

Answer: A

QUESTION 16:

A system administrator configures an ESX Server 3.X system to boot from SAN. Which technology is NOT supported when booting from SAN?

A. RDM
B. DRS
C. MSCS
D. VCB

Answer: C

QUESTION 17:

You have a Windows virtual machine (VM) that is experiencing poor application performance. You suspect the problem is a lack of available memory. You open Windows Task Manager and see that 30% of the memory within the VM is not currently being used.
What does this indicate and what should you do next?

A. The application problems are definitely due to a non-memory related problem. You should check your CPU utilization in Windows Task Manager.
B. The VM has memory available, however it may not actually have physical memory available. You should check for VMkernel swap activity on the ESX Server host.
C. The application problems are definitely due to a non-memory related problem. You should check your CPU affinity settings for this VM.
D. Windows Task Manager is not reading actual memory usage in the VM. You should run the Windows System Monitor to get a precise reading on memory usage.

Answer: B

QUESTION 18:

While attempting to start a virtual machine (VM), you get an error message stating that there is insufficient memory available.
What can you do to start the VM?

A. increase the memory limit of your VM
B. decrease the memory limit of your VM
C. increase the memory reservation of your VM
D. decrease the memory reservation of your VM

Answer: D

Explanation: This as per definition of Memory reservation. VI infrastructure guide p. 178-179.
The VM won't start because the amount of memory reserved for the VM is more than the amount of memory available on the host server. Therefore, you need to decrease the memory reservation of your VM.

QUESTION 19:

When a single virtual machine (VM) crashes, where does it leave a core dump file?

A. in a configurable VMFS volume
B. in the same directory as the VM's configuration file
C. in the service console's root directory
D. in a core dump partition

Answer: B

QUESTION 20:

When deploying an ESX Server into production, you discover you have three extra days in the schedule (an additional 72 hours before the ESX Server goes live).
Which preventive action would be the BEST use of this time?

A. checking the memory for bad memory cards
B. burning in the CPU
C. checking the disk surface for bad blocks
D. checking the network cards for speed and duplex mismatches

Answer: A

QUESTION 21:

Which problem is MOST likely to be due to bad physical memory?

A. slow performance
B. virtual machines not starting
C. VMkernel panics
D. Errors on virtual machines' virtual SCSI buses

Answer: C

QUESTION 22:

You work as an administrator at Certkiller .com. Your desktop PC, like all desktop PCs at the Certkiller office, has the Virtual Infrastructure Client application installed. Your PC cannot connect to a certain virtual machine (VM) on your ESX Server.
Which troubleshooting test would be LEAST helpful in determining the cause of this problem?

A. try to connect to a different VM
B. try to ping the IP address of a VM that is known to be up and working
C. try to ping the IP address of your service console
D. try to ping the DNS hostname of your service console

Answer: B

QUESTION 23:

You want to troubleshoot poor remote console performance for a virtual machine on an ESX Server.
Which is a possible cause of the problem?

A. The virtual NIC assigned to the virtual machine has a speed or duplex mismatch
B. The physical NIC assigned to the virtual machine port group has a speed or duplex mismatch
C. The virtual machine has an IP address conflict
D. To conserve memory, the ESX Server has initiated Transport Page Sharing.

Answer: B

Explanation:
A speed or duplex mismatch can cause poor performance to a VM.
Incorrect Answers:
A: A virtual NIC doesn't have speed or duplex settings.

C: An IP address conflict would disable network communication to the VM.
D: This would not affect network communication.

QUESTION 24:

You experience problems with a virtual machine which has been running stable for a long time.
What is the least likely source of the problem?

A. OS bug
B. VMware bug
C. VI misconfiguration

Answer: C

QUESTION 25:

Windows 2000 has been running without incident in a virtual machine (VM) for several months. This morning it blue-screens.
Which is the LEAST likely cause of the problem?

A. a VM misconfiguration
B. a software bug in Windows 2000
C. a software bug in the application
D. a service console misconfiguration

Answer: D

QUESTION 26:

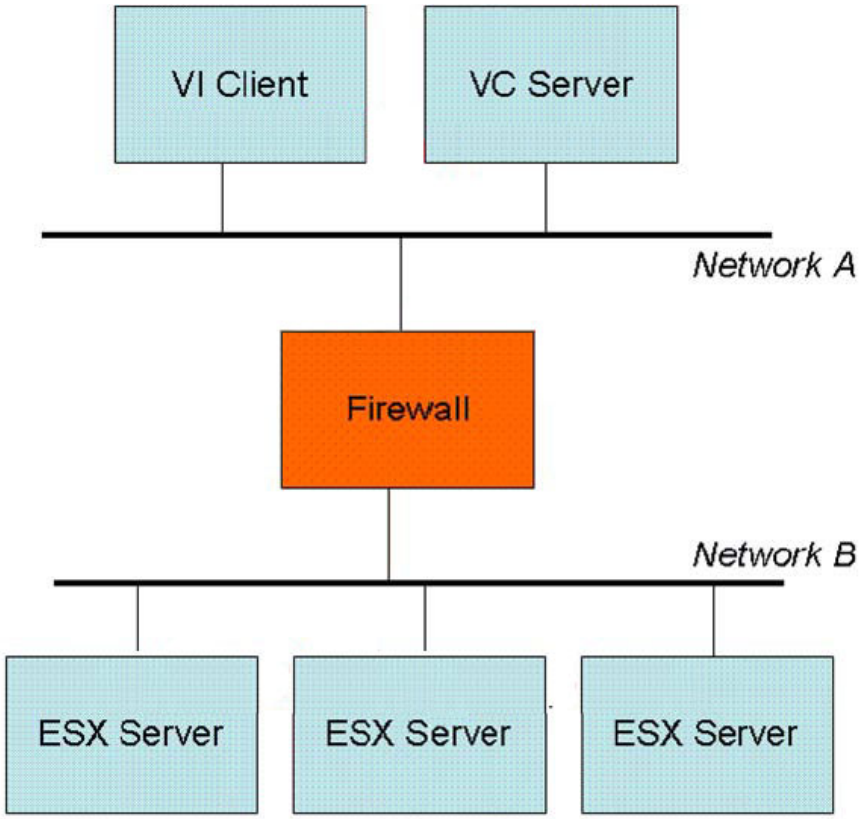
What is necessary to connect a running virtual machine (VM) to a newly created vSwitch VLAN inside an ESX Server?

A. install the proper network device inside the VM
B. power off the VM, connect it to the newly created VLAN, and power it back on again using the Virtual Infrastructure Client
C. install the appropriate VLAN tagging software inside the VM
D. connect to the newly created VLAN using the Virtual Infrastructure Client

Answer: D

QUESTION 27:

Exhibit:



Certkiller .com deploys a Virtual Infrastructure with 3 ESX hosts and VirtualCenter using host-based licensing. The VirtualCenter server and the Virtual Infrastructure Client are on network
A. The ESX Server hosts are on network B. There is a
firewall between networks A and B.
Which ports, at a minimum, need to be open on the firewall to allow full use of the Virtual Infrastructure Client?

A. Port 902 and 905
B. Ports 22, 80, and 902
C. Ports 902, 27000, and 27010
D. Ports 902 and 903
E. Ports 443 and 902

Answer: D

QUESTION 28:

What are the three available virtual switch connection types? (Choose three.)

A. virtual machine
B. vswif0
C. VMkernel
D. internal only

E. service console

Answer: A, C, E

QUESTION 29:

A physical Network device associated with a vSwitch is overloaded.
Which of the following actions can be taken to reduce the overload? Select three.

A. add the VMKernel TCP/IP networking stack
B. add an additional vmnic to the affected VSwitch
C. configure additional VLAN port groups on the same vSwitch
D. configure traffic shaping
E. move virtual machines from the affected vSwitch to other available vSwitches.

Answer: B, D, E
E: as other vSwitches can be configured with another physical NIC.
Not C: moving virtual machines to different port groups wouldn't make any difference as they would essentially use the same physical NIC on the vSwitch

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QUESTION 30:

Suppose you have 65 virtual machines configured on a single ESX Server. You want to provide outbound connectivity for all of them.
What is the minimum number of virtual switches you would need to support this configuration?

A. 1
B. 2
C. 3
D. 4
E. 5

Answer: A

Explanation: The default number of logical ports for a vSwitch is 56. However, avSwitch can be created with up to 1016 ports in ESX Server 3.X. Youcan connect one network adapter of a virtual machine to each port.Each uplink adapter associated with a vSwitch uses one port. Eachlogical port on the vSwitch is a member of a single port group. EachvSwitch can also have one or more port groups assigned to it.

QUESTION 31:

You work as an administrator at Certkiller .com. A Virtual machine (VM) named Certkiller A is connected to virtual switch A, and a VM Certkiller B is connected to

virtual switch B.
Which statement is true about the network between Certkiller A and Certkiller B?

A. Traffic between VM Certkiller A and VM Certkiller B flows through the physical NIC.
B. Traffic between VM Certkiller A and VM Certkiller B stays within ESX Server.
C. VM Certkiller A can communicate with VM Certkiller B if they have same security policies.
D. VM Certkiller A can communicate with VM Certkiller B if they have same port group policies.

Answer: A

QUESTION 32:

During ESX Server 3.X installation, selecting "Create a default network for virtual machines" will cause virtual machines to _____.

A. share a port group on VLAN 1
B. share an internal only virtual switch
C. share a network adapter with the service console
D. share a bond with all available network adapters

Answer: C

Explanation:
Quick Start Guide\Installing VMware Infrastructure Components:Installing ESX Server: Installing ESX Server
If you select Create a default network for virtual machines, yourvirtual machines will share a network adapter with the serviceconsole, which is not the recommended configuration for optimumsecurity.
page 35 Quick Start Guide

QUESTION 33:

Which two statements are true about virtual switches in ESX Server? Select two.

A. Virtual switches can be created with or without physical NICs.
B. Virtual switches cannot be created without physical NICs.
C. A VMotion port group must not be created on a virtual switch used for virtual machine traffic.
D. A service console port group can be created on a virtual switch used for virtual machine traffic.

Answer: A, D

QUESTION 34:

Which two statements are true about internal-only virtual switches? Select two.

A. They are required for virtual machines to use private IP addresses.
B. They disallow service console access to the virtual machines.
C. They allow a group of virtual machines to communicate only with each other.
D. They can contain multiple port groups.

Answer: C, D

QUESTION 35:

During ESX Server 3.X installation, selecting "Create a default network for virtual machines" will cause virtual machines to _____.

A. share a port group on VLAN 1
B. share an internal only virtual switch
C. share a network adapter with the service console which is the recommend configuration for optimum security
D. share a bond with all available network adapters
E. share a network adapter with the service console which is not the recommend configuration for optimum security

Answer: E

Explanation:
Quick Start Guide\Installing VMware Infrastructure Components:Installing ESX Server: Installing ESX Server
If you select Create a default network for virtual machines, yourvirtual machines will share a network adapter with the serviceconsole, which is not the recommended configuration for optimumsecurity. If you do not select this option, create a networkconnection for your virtual machines as described in ConfiguringNetwork Connections.
page 35 Quick Start Guide

QUESTION 36:

Which is a valid traffic shaping adjustment?

A. average bandwidth adjusted in Kbps.
B. average bandwidth adjusted in Mbps.
C. maximum bandwidth adjusted in Kbps.
D. maximum bandwidth adjusted in Mbps.
E. Burst bandwidth adjusted in Kbps

Answer: A

Explanation:
Only answer "Average bandwidth adjusted in Kbps" is correct. The other options in the configuration window are "Peak bandwidth" and "Burst size" which are not identical to any of the possible answers. This information can be found in the Server Configuration Guide, Page 56.

QUESTION 37:

What are the three configurable security policy exceptions for a virtual switch?
Select three.

A. promiscuous mode
B. traffic shaping
C. MAC address change
D. Spanning Tree Protocol
E. Forged transmits

Answer: A, C, E

Explanation:
Server Configuration Guide\Advanced Networking: Virtual SwitchConfiguration: Virtual Switch Policies
Promiscuous Mode: Reject
Placing a guest adapter in promiscuousmode has no effect on which frames are received by the adapter, Accept Placing a guest adapter in promiscuous mode causes it to detect allframes passed on the vSwitch that are allowed under the VLAN policyfor the port group that the adapter is connected to.
MAC Address Changes: Reject
If you set the MAC Address Changes toReject and the guest operating system changes the MAC address of theadapter to anything other than what is in the .vmx configuration file,all inbound frames will be dropped. If the Guest OS changes the MACaddress back to match the MAC address in the .vmx configuration file,inbound frames will be passed again, Accept Changing the MAC address from the Guest OS has the intended effect: frames to the new MACaddress are received.
Forged Transmits: Reject
Any outbound frame with a source MACaddress that is different from the one currently set on the adapterwill be dropped, Accept No filtering is performed and all outboundframes
page 54 Server Configuration Guide

QUESTION 38:

If 0 is selected for the VLAN ID of a port group, or the VLAN ID is left blank, the port group can see_____

A. 802.3 ad traffic
B. 802.1Q tagged traffic
C. 802.3 untagged traffic
D. 802.11 tagged traffic

Answer: C

Explanation:
ESX 3 Server Configuration guide - Pg. 29
If you are using a VLAN, in the VLAN ID field, enter a number between 1 and 4094.
If you are unsure what to enter, leave this field blank or ask your network administrator.
If you enter 0 or leave the field blank, the port group can see only untagged (non-VLAN) traffic. If you enter 4095, the port group can see traffic on any VLAN while leaving the VLAN tags intact.

QUESTION 39:

Which two statements are true about network traffic shaping? Select two.

A. The settings affect only inbound traffic.
B. The settings affect only outbound traffic.
C. The settings are defined on per port group basis.
D. The settings affect inbound traffic and outbound traffic.

Answer: B, C

Explanation:
ESX 3 Configuration Guide - Pg. 52
Traffic Shaping Policy
ESX Server 3 shapes traffic by establishing parameters for three outbound traffic characteristics: average bandwidth, burst size, and peak bandwidth. You can set values for these characteristics through the VI Client, establishing a traffic shaping policy for each port group.

QUESTION 40:

You are experiencing traffic overload on an Uplink network adapter.
Which three actions can be taken to reduce the overload? Select three.

A. configure traffic shaping to reduce contention
B. move virtual machines to other VLAN port groups on the same vSwitch
C. add NIC teaming to increase the available bandwidth
D. move virtual machines to other vSwitches to reduce contention

E. add the VMkernel TCP/IP networking stack to improve performance

Answer: A, C, D

Explanation:
D: as other vSwitches can be configured with another physical NIC.
Not B: moving virtual machines to different port groups wouldn't make any difference as they would essentially use the same physical NIC on the vSwitch

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QUESTION 41:

Which two statements are true about network traffic shaping? Select two.

A. The settings affect all vSwitch traffic.
B. The settings affect only traffic coming into the uplink adapter from the physical network.
C. The settings affect only traffic being sent out the uplink adapter to the physical network.
D. The settings are defined on a per-virtual machine basis.
E. The settings are defined on a per port group basis.

Answer: C, E

Explanation:
E: E" could be considered a correct answer because according to the VMWare Infrastructure 3:Install and Configure guide, "Traffic shaping may be defined at the virtual switch OR Port Group level. " The important distinction here is that they can be defined at this level, but they are APPLIED on a per-virtual machine basis or more directly, to the VM's virtual NIC's.

QUESTION 42:

When defining a NIC team (bond) in ESX Server, it is possible to designate some of the physical NICs that make up the bond as "standby" NICs. Which statement most accurately describes the purpose of a standby NIC?
A standby NIC:

A. is used only when network traffic exceeds the capacity of the rest of the team.
B. is used only in the case of the failure of other NICs in the team.
C. is not used as part of the team until activated by the administrator.
D. is used to implement traffic shaping for the rest of the team.

Answer: B

Explanation: A standby NIC will be used if another NIC in the team fails.

QUESTION 43:

Which three technologies does the VMkernel TCP/IP networking stack support? (Choose three.)

A. DFS
B. VMotion
C. NFS
D. CIFS
E. iSCSI

Answer: B, C, E

QUESTION 44:

What are two functions of zoning in SAN Fibre Switches? (Choose two.)

A. defines an Ethernet VLAN
B. defines which HBAs can access which Storage Processor
C. isolates traffic of a given zone from the other zones
D. provides Name Resolution Service on the SAN

Answer: B, C

QUESTION 45:

When traffic shaping is enabled, network traffic of a virtual machine is _____.

A. maintained at average bandwidth
B. limited to peak bandwidth if the network is congested
C. limited to spare bandwidth
D. always limited to peak bandwidth

Answer: D

QUESTION 46:

What is a requirement for enabling NIC teaming?

A. "Enable Teaming" should be checked on the virtual switch settings.
B. Physical NICs should be connected to different virtual switches.
C. All the physical NICs must be of the same type.
D. Virtual switch should have more than one uplink.

Answer: D

QUESTION 47:

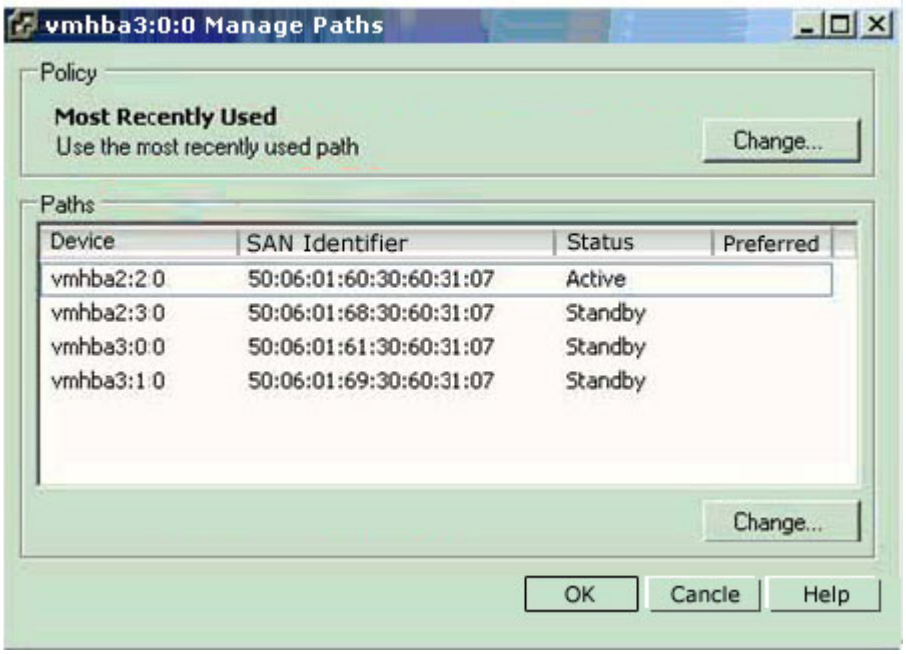
When configuring a vSwitch NIC teaming policy, what happens when the "Notify Switches" option is set to yes?

A. The virtual switch is notified when a virtual NIC location changes.
B. The physical switch is notified when a virtual NIC location changes.
C. The virtual switch is notified when the physical NIC link state changes.
D. The physical switch is notified when the virtual NIC link state changes.

Answer: B

QUESTION 48:

Exhibit:



You work as an administrator at Certkiller .com. In this scenario the server has not been modified from the default program.
Given the information shown in the exhibit, which three statements are true? Select three.

A. HBA Failover occurred
B. LUN has four paths
C. LUN is on an Active/Active array
D. Preferred Path is vmhba2:2:0
E. LUN is on an Active/Passive array.

Answer: A, B, E

Explanation:
Viewing the exhibit, in the blue bar at the top shows "vmhba3:0:0 Manage Paths".
This is the Preferred Path. Looking at the Status, vmhba3:0:0 shows Standby and vmhba2:2:0 shows Active. This is an indication that an HBA Failover occurred.

QUESTION 49:

Where is LUN masking configured? Select two.

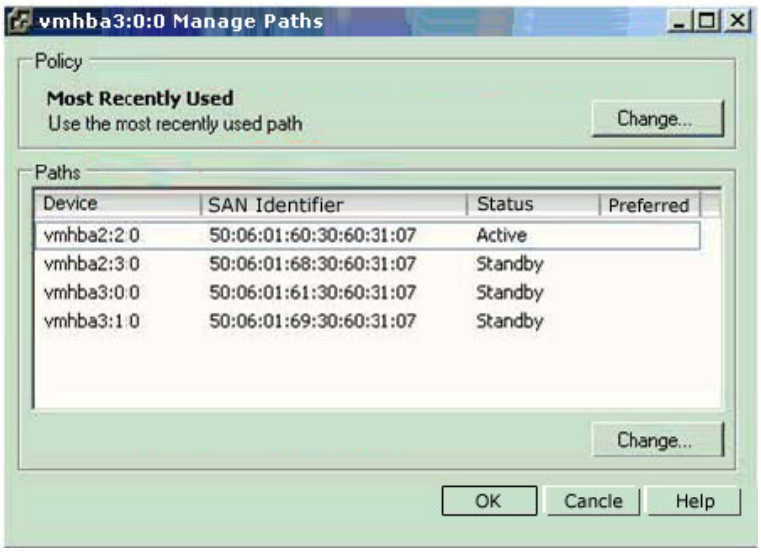
A. on the firewall
B. on the Fibre Switch
C. on the storage processor
D. on the Ethernet switch
E. on the host

Answer: C, E

Explanation: Per ESX SAN Configuration Guide.
page 29 SAN Configuration Guide

QUESTION 50:

Exhibit:



The exhibit shows paths of a SAN LUN.
What is the LUN number?

A. 0
B. 1
C. 2
D. 3
E. 4

F. There is no LUN number.

Answer: A

Explanation: vmhba adapter:target_ID:LUN:Partition
page 86 SAN Configuration Guide

QUESTION 51:

What are two functions of zoning in SAN Fibre Switches? (Choose two.)

A. isolates traffic of a given zone from the other zones
B. provides Name Resolution Service on the SAN
C. prevents/allows access to a given LUN
D. prevents/allows access to a given Storage Array

Answer: A, C

Explanation: Zoning in SAN allows and prevents access to given LUN not Storage Array.

QUESTION 52:

What are two possible storage multipatching policies that you can set on an ESX Server 3.X? Select two.

A. Most Recently used (MRU)
B. Open Shortest Path First (OSPF)
C. Persistent Binding
D. Fixed
E. Dynamic Load Balancing

Answer: A, D

Explanation: Per ESX SAN Configuration Guide.
page 94 SAN Configuration Guide

QUESTION 53:

What is the characteristic of a mapped SAN LUN set to Virtual Compatibility mode?

A. allows the guest OS to access the hardware directly
B. allows the virtual machine to use VMware snapshots
C. allows the use of SAN-aware applications within a virtual machine
D. allows the VMkernel to natively access NTFS data on the LUN

Answer: B

QUESTION 54:

ESX 3.x Server supports access to _____ LUNs during the initial installation process.

A. 8
B. 16
C. 32
D. 63
E. 64
F. 127
G. 128
H. 255
I. 256
J. 511
K. 512
L. 1024

Answer: G

Explanation: Although ESX Server supports up to 256 LUNs for operation, the installer supports a maximum of 128 LUNs. If you have more than 128 LUNs, connect them after the installation is complete.

QUESTION 55:

Certkiller .com decides to implement application clustering in virtual machines between ESX Servers using Microsoft Cluster Service.
Which storage solution is most appropriate for the quorum disk?

A. NFS
B. Fibre Channel SAN
C. iSCSI
D. local storage

Answer: B

QUESTION 56:

Which two are requirements when booting from SAN? (Choose two.)

A. SAN connections must be attached to a switch fabric topology.
B. Boot LUN must have an ID of 0.

C. The storage array must have correctly configured active/active controllers.
D. HBA BIOS for the Fibre Channel card must be enabled and correctly configured.

Answer: A, D

QUESTION 57:

What is the maximum virtual disk size on a VMFS-3 volume?

A. 250 GB
B. 512 GB
C. 1 TB
D. 2 TB
E. 2.6 TB
F. 3 TB
G. 3.6 TB
H. 4 TB
I. There is no maximum size.

Answer: D
Configuration Maximums for VMware Infrastructure 3

QUESTION 58:

During installation you manually create a local VMFS volume.
What is a possible purpose for this volume?

A. storage for service console log files
B. decentralized storage for all VMkernel swap activity
C. VMkernel swap files for locally configured virtual machines
D. Service console swap files for overcommitment of service console RAM

Answer: A

QUESTION 59:

Upgrading an ESX Server 2.x host's VMFS-2 volume to VMFS- 3, and then referencing the VMFS-3 volume from an ESX Server 3.X host:

A. will allow any VMs on the original VMFS-2 to be powered on.
B. will allow the ESX Server 3.X host to view the VMs in read-only mode.
C. will allow both the ESX Server 2.x and ESX Server 3.X hosts to view the VMs in read-only mode.
D. requires both the ESX Server 2.x and ESX Server 3.X hosts to be managed by VirtualCenter 2.0 in order to perform the upgrade of the VMFS-2 volume.

Answer: A

QUESTION 60:

What information must be specified when adding a mapped SAN LUN to a virtual machine (VM)? (Choose two.)

A. the compatibility mode
B. the location of the device driver for the LUN
C. the amount of space on the LUN to be made available to the VM
D. the virtual device node

Answer: A, D

QUESTION 61:

Which three statements are true about shared storage capabilities on NFS volumes supported by ESX Server? Select three.

A. You can configure ESX Server to boot from NFS mounted volumes
B. You can use VMotion
C. You can boot virtual machines stored on NFS mounted volumes.
D. You can create VMFS datastores on NFS mounted volumes.
E. You can create virtual machines on NFS mounted volumes.

Answer: B, C, E

Explanation:
ESX3.5 Configuration Guide Pg. 93
NFS Datastore
ESX Server 3 can access a designated NFS volume located on a NAS server, mount this volume, and use it for its storage needs. You can use NFS volumes to store and boot virtual machines in the same way you use VMFS datastores.
ESX Server 3 supports the following shared storage capabilities on NFS volumes:
* Use VMotion.
* Use VMware DRS and VMware HA.
* Mount ISO images, which are presented as CD?ROMs to virtual machines.
* Create virtual machine snapshots. See Basic System Administration at
Not D: NFS only support file level not block level. Only block level like FC and iScsi can create VMFS datastore. So, NFS does not allow to create VMFS datastore on NFS volumes.
www.vmware.com/support/pubs/.

QUESTION 62:

Virtual disks in VMFS-3 volumes can be a _____. Select two.

A. single file
B. set of files
C. single file with a quorum file
D. set of files accompanied by quorum files

Answer: A, B

Explanation:
A virtual disk can be a single file or it can be divided into 2GB chunks.
Incorrect Answers:
C: Quorum files are used in clusters. This would be specified as a separate virtual disk.
D: Quorum files are used in clusters. This would be specified as a separate virtual disk.

QUESTION 63:

What is the default virtual machine delegate user for NFS storage?

A. vpxuser
B. any user specified by the server administrator
C. root
D. nfs

Answer: C

QUESTION 64:

Before configuring NFS on ESX Server, what must be configured?

A. 802.3AD link aggregation
B. a VMotion and IP storage port
C. a VLAN trunk port
D. server licensing

Answer: B

QUESTION 65:

Which security technology does VMware iSCSI use?

A. CHAP
B. AES
C. RIP
D. IPSec
E. PAP

F. MSCHAPv2

Answer: A

Explanation:
page 113 Server Configuration Guide

QUESTION 66:

In which format does an iSCSI target ID appear?

A. iqn.<year-mo>.<reversed_domain_name>:<unique_name>
B. iscsi.<year-mo>.<forward_domain_name>:<unique_name>
C. iqn.<ip_address>.<reversed_domain_name>
D. iscsi.<organizational_unit>.<forward_domain_name>:<unique_name>

Answer: A

Explanation: page 112 Server Configuration Guide

QUESTION 67:

Which two discovery options does the Virtual Infrastructure Client offer when setting up the iSCSI initiator? Select two.

A. dynamic
B. static
C. adaptive
D. selective
E. non-selective

Answer: A, B

QUESTION 68:

What is the default port used by iSCSI on VMware Infrastructure?

A. 2049
B. 902
C. 27000
D. 443
E. 3260

Answer: E

QUESTION 69:

When setting up iSCSI on an ESX Server, which two virtual switch port types are required for communication? (Choose two.)

A. service console
B. VMkernel
C. TCP/IP
D. virtual machine
E. iSCSI

Answer: A, B

QUESTION 70:

Which statement is true about virtual machines (VMs) with SCSI Bus sharing set to virtual mode?

A. Virtual disks cannot be shared by other VMs.
B. Virtual disks must reside on a VMFS volume that is in shared mode.
C. Virtual disks can be shared by VMs on the same server.
D. Virtual disks can be shared by VMs on any server.

Answer: C

QUESTION 71:

In a VI 3 environment, iSCSI dynamic discovery... (Select two)

A. uses "send target" requests
B. uses "get target" requests
C. is the only discovery option available for iSCSI software initiators.
D. Is used along with static discovery on iSCSI software initiators.

Answer: A, C

Explanation:
ESX3.5 Configuration Guide - Pg. 110
Discovery Methods
To determine which storage resource on the network is available for access, the ESX Server 3 system uses these discovery methods:
* Dynamic discovery - Also known as Send Targets discovery. Each time the initiator contacts a specified iSCSI server, it sends the Send Targets request to the server. The server responds by providing a list of available targets to the initiator.
* Static Discovery - The initiator does not need to perform any discovery. The initiator in advance knows all targets it will be contacting and uses their IP

addresses and domain names to communicate with them.
The static discovery method is available only when the iSCSI storage is accessed through hardware initiators.
Not D: Static discovery only support hardware initiators not software initiators. So, the only dynamic discovery is software initiators.

QUESTION 72:

Certkiller .com wants to increase disk capacity for their ESX Server environment.
Management mandates that:
(1) VMotion must work in this environment.
(2) The existing LAN infrastructure must be used.
(3) The storage must support VMFS volumes.
Which storage option would best meet the company's objective?

A. SMB
B. NFS
C. iSCSI
D. SAN

Answer: C

QUESTION 73:

What is the minimum supported hardware requirement to run a VirtualCenter server?

A. 512 MB RAM unless running a database server on the same machine.
B. 2 GHz CPU
C. 150 MB free disk spsace
D. At least one Gigabit Ethernet adapter.

Answer: B

Explanation: The VirtualCenter Server hardware must meet the following requirements:
Processor - 2.0GHz or higher Intel or AMD x86 processor. Processor requirements can be larger if your database is run on the same hardware.
Memory - 2GB RAM minimum. RAM requirements can be larger if your database is run on the same hardware.
Disk storage - 560MB minimum, 2GB recommended. You must have 245MB free on the destination drive for installation of the program, and you must have 315MB free on the drive containing your %temp% directory.
Microsoft SQL Server 2005 Express disk requirements - The bundled database requires up to 2GB free disk space to decompress the installation archive. However, approximately 1.5GB of these files are deleted after the installation is

complete.
Networking - Gigabit recommended.
Ref: Installation Guide, page 17/18.

QUESTION 74:

What is the minimum supported hardware requirement to run a VirtualCenter server?

A. 512 MB RAM unless running a database server on the same machine.
B. 2 GHz CPU
C. 150 MB free disk spsace
D. Connectivity to the storage volume containing templates.

Answer: B

Explanation: 2 GHz CPU - The only correct answer according to VirtualCenter 2.0 User Manual.
page 22 Installation and Upgrade Guide

QUESTION 75:

You work as an administrator at Certkiller .com. Certkiller .com decides to use a license server for a newly installed Virtual Infrastructure. The infrastructure consists of one VirtualCenter server and two ESX Server hosts, each with two dual core CPUs. DRS, VMware HA and VMotion will be used on all hosts.
How many license files need to be installed on the license server?

A. 0
B. 1
C. 2
D. 3
E. 4
F. 5
G. 6
H. 7
I. 13
J. 25

Answer: B

Explanation: This is a Trick question. Although 17 separate licenses need to bepurchased from VMware (one for the VC server, and four for each of theother four categories), the key phrase is: "How many license files need to be installed on the license server". A license server onlyever has one license file.
Quick Start Guide:In license server-based licensing mode, a singlelicense file is stored

centrally on a license server, which makesthese licenses available to one or more hosts.
Installation & Upgrade Guide:
Server-based license files configured through the VI Client areplaced at the following location on the machine running the VMwarelicense server: C:\Program Files\VMware\VMware License Server\vmware.lic. To add new licenses, edit the license file and restart the VMware license server.
page 15 Quick Start Guide & page 51 of Installation and Upgrade Guide

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QUESTION 76:

How will MSDE be installed (when needed)?

A. during installation of ESX server
B. needs to be present before installation of ESX server
C. There is no such thing as MSDE.
D. After the installation of ESX server.
E. During the installation of Virtual Center.

Answer: E

Explanation:
MSDE (Microsoft SQL Server Desktop Engine) is a free version of the SQL Server database engine that can be used by Virtual Center and is installed during the installation of Virtual Center. MSDE is not recommended for production environments, it should be used just for testing purposes.
MSDE is not used by ESX server itself.

QUESTION 77:

Which statement is true about VirtualCenter and License Server?

A. VirtualCenter cannot be installed without an operational License Server online.
B. If deploying a License Server is not desirable, VirtualCenter can be installed using a host-based license file.
C. The License Server must be installed during VirtualCenter installation and must always run on the same server as VirtualCenter.
D. The License Server may be installed on a separate machine, but VirtualCenter requires a server-based license.

Answer: D

Explanation: Per VC User Manual. -
VirtualCenter server - Requires one license for each VirtualCenter Server.
VirtualCenter Server licenses are perpetual. A license key is requested the first time VirtualCenter client connects to the VirtualCenter server, not during installation.

QUESTION 78:

Certkiller .com wants to install Application Y in a virtualized environment. The underlying OS has to be Windows 2003 SP1. In a physical environment, the application and supporting software have very strict minimum hardware requirements.
Which requirement(s) would prohibit the use of this application inside a virtual machine?

A. a minimum of 4 available SCSI adapters
B. 4 CPUs and 4.5 GB RAM
C. 3 NICs and 3 SCSI adapters
D. a minimum disk size of 2 TB

Answer: C

QUESTION 79:

You work as an administrator at Certkiller .com. An ESX Server cluster has 15 servers, each with 4 CPUs running at 1 GHz. The Certkiller department runs 30 virtual machines (VMs), each with 4 virtual CPUs.
A requirement exists to ensure that no more than 50% of the CPU capacity of the cluster is in use by Certkiller at any one time. You decide to place the Certkiller VMs in a single resource pool.
How should you configure the CPU resource settings for the resource pool?

A. set shares to normal (4000)
B. deselect unlimited, set limit of 30000 MHz
C. select expandable reservation
D. deselect unlimited, set reservation of 4000, deselect expandable reservation

Answer: B

Explanation:
We have 15 servers, each with 4 CPUs running at 1GHz. 15 x 4 x 1 = 60 GHz or 60000 MHz. Therefore to use no more than 50 percent of this capacity, we need to set a limit of 30000 MHz (half of 60000 MHz).

QUESTION 80:

What must be done to allow customization of Windows virtual machines that are deployed from templates?

A. The location of the sysprep.exe must be specified in config.ini
B. Nothing needs to be done as the VirtualCenter installer automatically locates and install Sysprep components.

C. Sysprep must be downloaded from Microsoft and installed on the VirtualCenter server.
D. A sysprep.ini file must be created in a text editor and imported using the customization wizard.

Answer: C

Explanation:
Basic System Administration Guide\Installing the Microsoft Sysprep Tools
If you plan to customize a Windows guest operating system, you mustfirst install the Microsoft Sysprep tools on your VirtualCenter Servermachine.
page 345 Basic Administration Guide

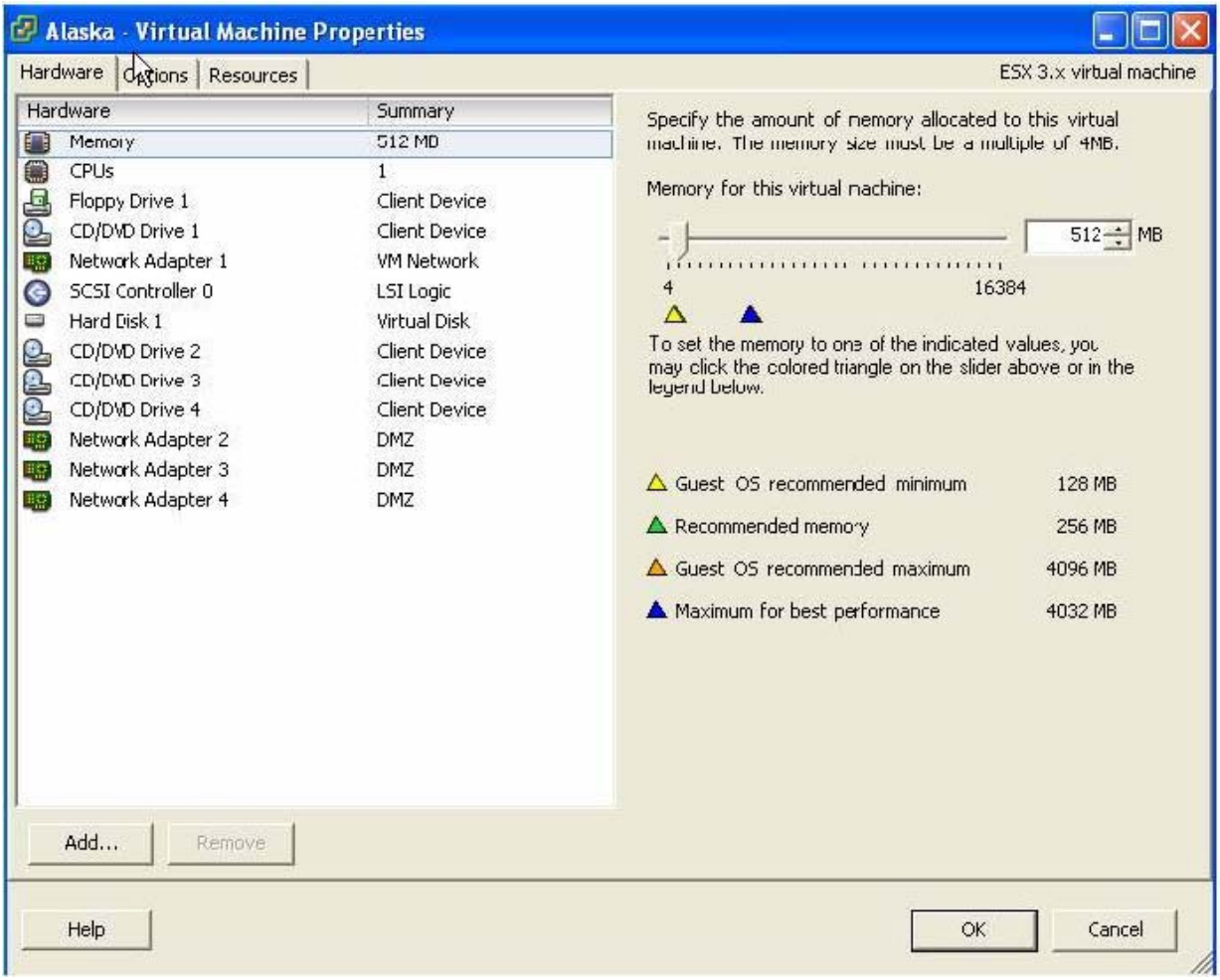
QUESTION 81:

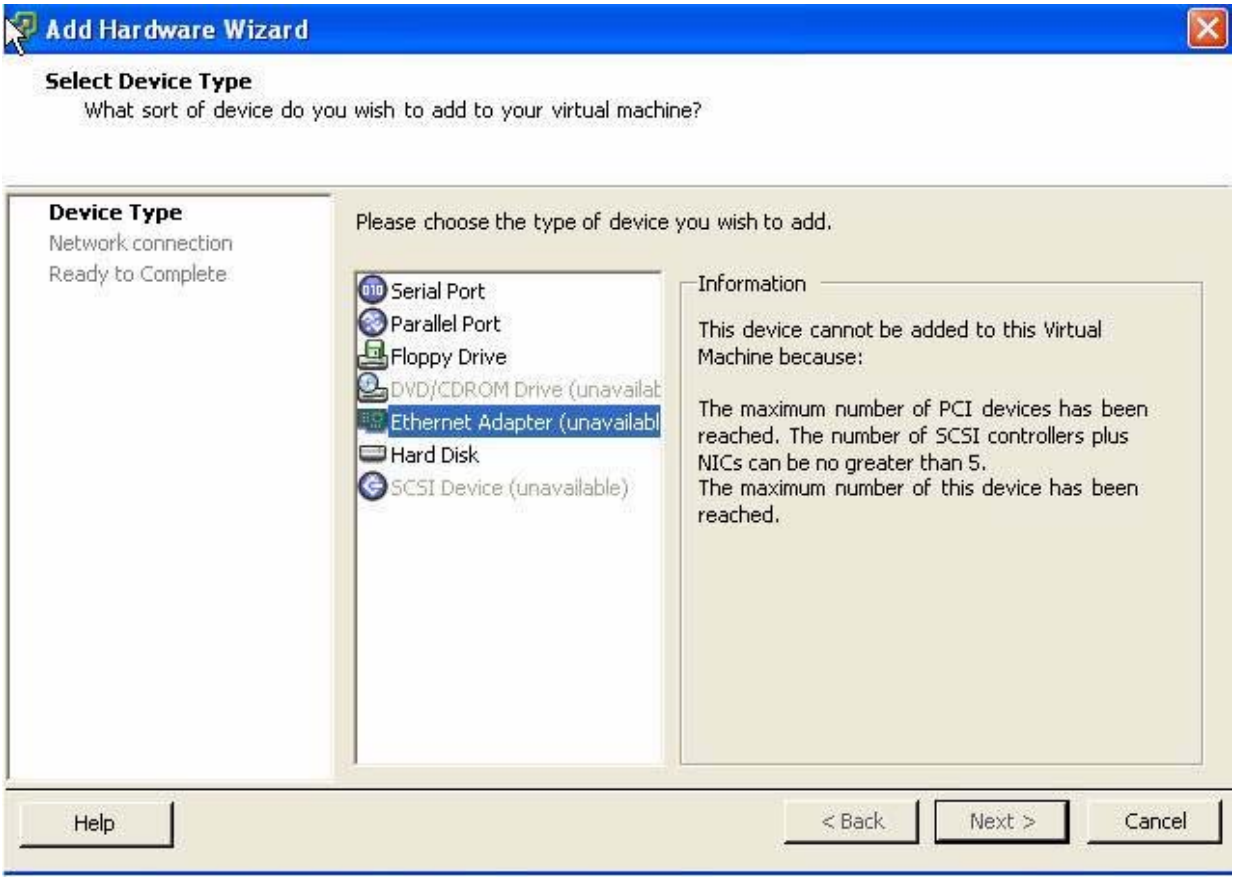
You work as an administrator at Certkiller .com. Certkiller .com wants to install Application Certkiller App in a virtualized environment. The underlying OS has to be Windows 2000 SP4. In a physical environment, the application and supporting software have very strict minimum hardware requirements.
Which requirement prohibits the use of the application inside a virtual machine?

A. 5 NICs
B. 8 GB RAM
C. 4 CD-ROM drives
D. 2 parallel ports

Answer: A

Explanation:
As you can tell from the picture below the correct answer is really A "5 NIC's". This picture shows 4 CD ROM devices and 4 Network Adapters. When you attempt to add the 5th network adapter you will notice the error in the next picture


Alaska - Virtual Machine Properties
Hardware
Options
Resources
ESX 3.x virtual machine
Hardware
Summary
Memory
512 MB
CPUs
1
Floppy Drive 1
Client Device
CD/DVD Drive 1
Client Device
Network Adapter 1
VM Network
SCSI Controller 0
LSI Logic
Hard Disk 1
Virtual Disk
CD/DVD Drive 2
Client Device
CD/DVD Drive 3
Client Device
CD/DVD Drive 4
Client Device
Network Adapter 2
DMZ
Network Adapter 3
DMZ
Network Adapter 4
DMZ
Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4MB.
Memory for this virtual machine:
512
MB
4
16384
To set the memory to one of the indicated values, you may click the colored triangle on the slider above or in the legend below.
Guest OS recommended minimum
128 MB
Recommended memory
256 MB
Guest OS recommended maximum
4096 MB
Maximum for best performance
4032 MB
Add...
Remove
Help
OK
Cancel



QUESTION 82:

You can perform a migration with VMotion on virtual machines with disks on _____.

A. Fibre Channel-SAN based datastores only
B. iSCSI and Fibre Channel SAN based datastores only
C. NAS and Fibre Channel SAN based datastores only
D. iSCSI, NAS and Fibre Channel SAN-based datastores

Answer: D

Explanation:
VMotion requires the datastore to be on shared storage accessible by all ESX servers in the cluster. The shared storage can be iSCSI, NAS or Fibre Channel SAN.

QUESTION 83:

What can prevent a successful migration with VMotion?

A. network cards located in different server slots
B. a physical CD-ROM that is connected from the virtual machine

C. different CPU clock speeds
D. one of the virtual disks that is a mapped SAN LUN

Answer: B

Explanation:
Basic System Administration Guide\Migrating Virtual Machines:Migration Wizard
Before you begin, disconnect any peripheral devices connected to thevirtual machine. If the virtual machine is using a physical device onthe source host, that device will not be accessible on the destinationhost. This is an incompatibility that will prevent use of VMotion. Forexample, if the virtual machine is reading from a CD-ROM drive on thesource host, it cannot access that drive from the destination host.
page 242 Basic Administration Guide

QUESTION 84:

Which two CPU characteristics must be identical for a successful migration with VMotion between ESX Servers? Select two

A. CPU clock speed
B. CPU cache size
C. SSE3 support
D. CPU stepping
E. CPU vendor

Answer: C, E

Explanation:
Basic System Administration Guide\Migrating Virtual Machines :Migration with VMotion : VMotion Requirements
Within the Intel P4 and AMD Opteron processor families, VMware placesa restriction between processors that do support the SSE3 instructionsand processors that do not support the SSE3 instructions because theyare application level instructions that bypass the virtualization layer, and could cause application instability if mismatched after a migration with VMotion.
Processor clock speeds and cache sizes, and the number of processorcores may vary, but processors must come from the same vendor class(Intel or AMD) and same processor family (P3, P4, or Intel core) to becompatible for migration with VMotion.
page 234 Basic Administration Guide

QUESTION 85:

For a successful migration with VMotion between ESX Servers, the servers must have _____.
(Choose three.)

A. access to same physical LANs
B. compatible CPUs
C. identical CPU stepping
D. identical clock speed
E. consistently labeled networks

Answer: A, B, E

QUESTION 86:

Which three VirtualCenter roles, by default, have permission to create an alarm?
Select three.

A. Virtual Machine Power User
B. Resource Pool Administrator
C. Virtual Machine Administrator
D. Datacenter Administrator
E. Alarm Administrator

Answer: B, C, D

Explanation:
page 256 Basic Administration Guide

QUESTION 87:

You work as an administrator at Certkiller .com. A Virtual Center login that worked correctly in the past is suddenly no longer working. It fails to authenticate with the previous login ID.
Assuming there are no network problems and that all servers are up and running, where is the problem located?

A. in the user's account properties in Active Directory
B. in the VirtualCenter database's security tables.
C. In the VirtualCenter management server's security functionality
D. In the Virtual Infrastructure client's security configurations settings
E. In the VirtualCenter management agent on the host

Answer: A

Explanation:
VirtualCenter uses Active Directory authentication. If a user can no longer log in, there is likely to be something wrong with the user account in Active Directory.
Reference: Page 478 of Virtual Center Users Guide

QUESTION 88:

Which three System Roles are ESX Server pre-defined? Select three.

A. Administrator
B. Virtual Machine Administrator
C. Read Only
D. No Access
E. Virtual Machine User

Answer: A, C, D

Explanation:
Reference: Admin Guide Page 255
System Roles- System roles are permanent and the privileges associated with these roles cannot be changed
Sample Roles- Sample roles are provided for convenience as guidelines and suggestions. These roles can be modified or removed.
.
Note:
No Access User is a System Role
Read Only User is a System Role
Administrator is a System Role
Virtual Machine Administrator is a Sample Role
Virtual Machine User is a Sample Role
All 5 of these Roles are ESX Server Predefined Roles!!!

QUESTION 89:

You work as an administrator at Certkiller .com. On an ESX Server managed by VirtualCenter, you create a new user and assign this user Administrator Privileges. Which privileges will that user have on the ESX Server cluster in which this server resides?

A. Administrator
B. Virtual Machine Administrator
C. Cluster User
D. None

Answer: A

Explanation: Basic System Administration Guide\Managing Users, Groups, Permissions,and Roles\Roles
Administrator: All privileges for all objects. Add, remove, and setaccess rights and privileges for all the VirtualCenter users and allthe virtual objects in the VMware Infrastructure environment. This isthe default role for all members of the Administrators

group.
page 254 Basic Administration Guide

QUESTION 90:

You are assigned Administrator privileges on an ESX Server Cluster. You are unable to connect the Virtual Infrastructure Client to the ESX Server directly.
What is a possible cause of this problem?

A. You need Administrator privileges on the server and all of its resource pools.
B. Administrators are not allowed to log in to ESX Servers.
C. User names and permissions are not propagated from VirtualCenter to ESX Servers.
D. You still have a Virtual Infrastructure Client connected to the VirtualCenter server.

Answer: C

QUESTION 91:

A manager directs an employee to log into Virtual Infrastructure (VI) Web Access to use an accounting application that runs inside the virtual machine (VM) named finance on the ESX Server named esx1.company.com.
What procedure should the employee follow to perform this task?

A. use the current version of Mozilla Firefox to access https://esx1.company.com/ui/, log in, and select the finance VM
B. use Internet Explorer 6 to access https://esx1.company.com/ui/finance.vm
C. use Internet Explorer 5.5 or higher to open the URL https://esx1.company.com/ and follow the VM Access Wizard
D. use the VI Client to access the ESX Server and open a Remote Console window (Web Access is only for system administration of the ESX Server)

Answer: A

QUESTION 92:

In order to power on and operate a Windows XP virtual machine (VM), an end user must be able to send the key combination "control-alt-delete" to log into the OS.
Which statement is true about using Virtual Infrastructure (VI) Web Access with a Windows XP VM?

A. This VM can only be used from a Windows client because Linux clients cannot send "control-alt-delete."
B. VI Web Access is only intended for system administration of ESX Servers, but does allow end users to download and install the VI Client to manage Windows XP VMs.
C. VI Web Access can be used to operate this VM from any supported Windows or Linux client.

D. A Linux client can access the VM, but first a "control-alt-insert" command must be sent from the VI Client.

Answer: B

QUESTION 93:

What is true about the installation of Virtual Infrastructure (VI) Web Access?

A. It is always installed on VirtualCenter and optional on ESX Server.
B. It is always installed on ESX Server and Virtual Center.
C. It is always installed on ESX Server and optional on VirtualCenter.
D. It is optional on both ESX Server and VirtualCenter.

Answer: C

Explanation:
Virtual Infrastructure Web Access, Administrator's Guide, Page 17
Installing Virtual Infrastructure Web Access
VI Web Access is automatically installed when ESX Server is installed. On VirtualCenter Server, VI Web Access can be installed from the VirtualCenter Server Windows setup package.

QUESTION 94:

Which statement is true about the installation of Virtual Infrastructure Web Access?

A. It is always installed on ESX Server and VirtualCenter.
B. It is always installed on ESX Server and is optional on VirtualCenter.
C. It is always installed on VirtualCenter and is optional on ESX Server.
D. It is optional on both ESX Server and VirtualCenter.

Answer: B

Explanation:
Virtual Infrastructure Web Access, Administrator's Guide, Page 17
Installing Virtual Infrastructure Web Access
VI Web Access is automatically installed when ESX Server is installed. On VirtualCenter Server, VI Web Access can be installed from the VirtualCenter Server Windows setup package.

QUESTION 95:

Suppose you attempt to use Web Access to reach an individual ESX host but receive a "host not found" error. Which of the following is LEAST likely to be the cause of

the problem?

A. The Apache Tomcat server is not currently running on the host.
B. The server is not currently powered on.
C. The Service Console's IP address has recently been changed.
D. Your VI Client has not been configured to allow you to use the Web Access facility.

Answer: D

Explanation: You don't need the VI Client to use Web access to an ESX server. You would use a Web browser.

QUESTION 96:

Virtual Infrastructure Web Access can be used to perform which three tasks? (Choose three.)

A. access the Remote Console of the virtual machine
B. change the virtual hardware configuration of a virtual machine
C. add a virtual machine to a DRS cluster
D. add a virtual switch to the Virtual Infrastructure
E. view an inventory of the virtual machines in the Virtual Infrastructure

Answer: A, B, E

QUESTION 97:

What is the purpose of resource shares?

A. to set guaranteed maximum resource usage
B. to set guaranteed minimum resource usage
C. to prioritize resources when total resources are scarce
D. to prevent starting virtual machines when resources are scarce

Answer: C

Explanation:
Resource shares are used to determine how resources are shared between VMs is the VMs are competing for the same resources.

QUESTION 98:

Which three attributes can you specify when creating a resource pool for CPU or Memory? Select three

A. Reservation

B. Limited
C. Number of shares
D. Limit
E. Maximum bandwidth

Answer: A, C, D

QUESTION 99:

What is a valid reason NOT to set CPU affinity on a single VM?

A. Setting CPU affinity will monopolize a CPU making it unusable for other VMs on the server.
B. A virtual machine with CPU affinity might not receive all of it's reserved CPU resources.
C. CPU affinity settings are ignored when using VMotion.
D. CPU affinity can only be set on hyper threaded systems.

Answer: C

Explanation:
ESX3.5 Resource Management Guide - Pg. 127
Potential Issues with Affinity Virtual machine affinity assigns each virtual machine to processors in the specified affinity set. Before using affinity, consider the following issues:
* For multiprocessor systems, ESX Server systems perform automatic load balancing. Avoid manual specification of virtual machine affinity to improve the scheduler's ability to balance load across processors.
* Affinity can interfere with the ESX Server host's ability to meet the reservation and shares specified for a virtual machine.
* Because CPU admission control does not consider affinity, a virtual machine with manual affinity settings might not always receive its full reservation.
Virtual machines that do not have manual affinity settings are not adversely affected by virtual machines with manual affinity settings.
* When you move a virtual machine from one host to another, affinity might no longer apply because the new host might have a different number of processors.
* The NUMA scheduler might not be able to manage a virtual machine that's already assigned to certain processors using affinity. See Chapter 10, "Using NUMA Systems with ESX Server," on page 151 for additional information on using NUMA with ESX Server hosts.
* Affinity can affect an ESX Server host's ability to schedule virtual machines on multicore or hyperthreaded processors to take full advantage of resources shared on such processors.

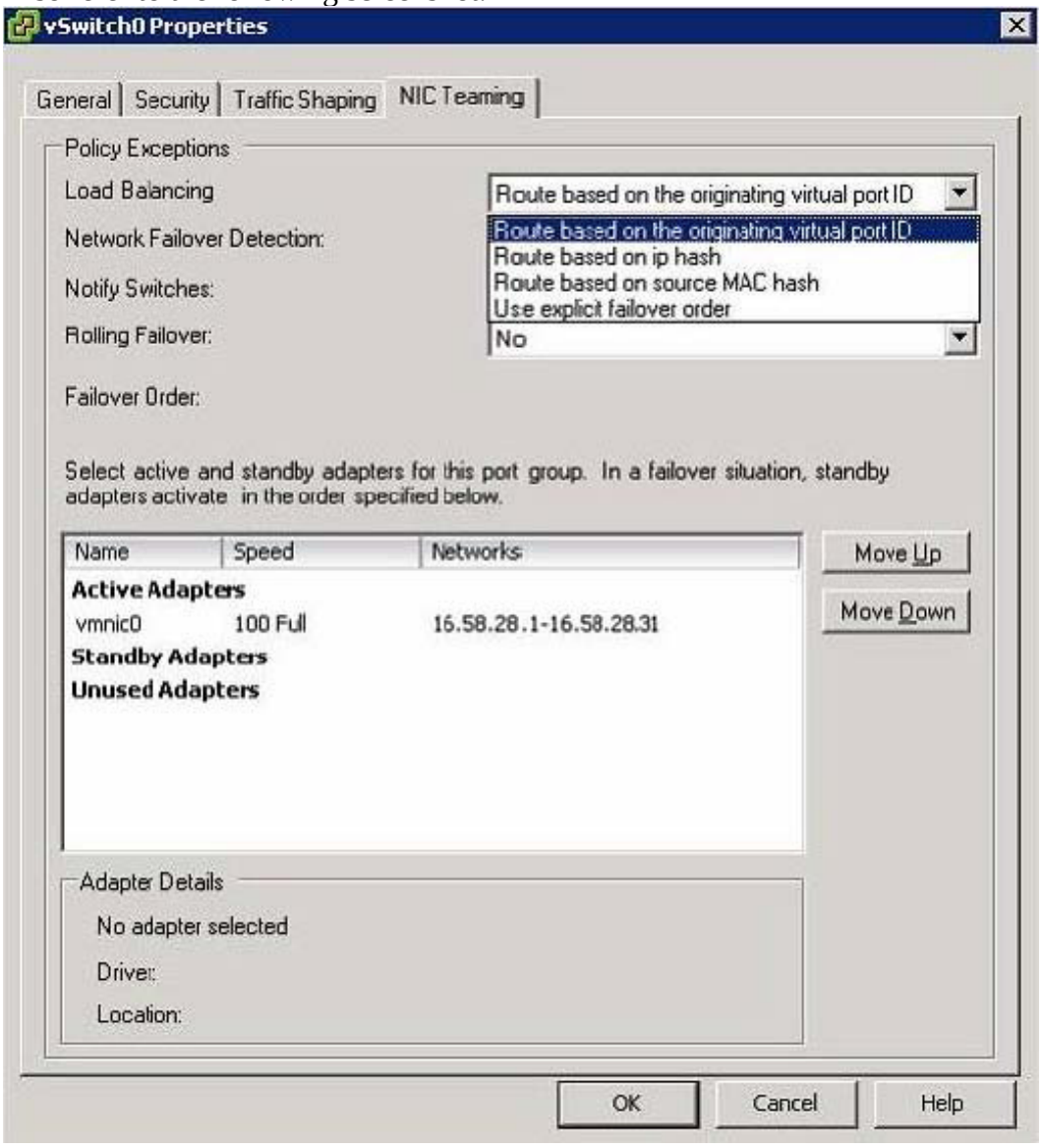
QUESTION 100:

Which three are valid network load balancing policies? Select three.

A. route based on destination MAC hash
B. route based on source and destination IP hash
C. route based on the originating virtual port ID
D. route based on explicit failover order
E. route based on source and destination MAC hash

Answer: B, C, D

Explanation:
According to the VMWare Infrastructure 3:Install and Configure guide the 3 load balancing policies are: 1) vSwitch port-based (default), 2) source MAC-based, 3) source and destination IP-based..
Also refer to the following screenshot.



QUESTION 101:

What is a function of the vmmemctl driver?

A. allows the operation of unsupported guest OS types
B. enables Transparent Page Sharing
C. reclaims unused memory from the guest OS
D. enables swapping of the virtual machines

Answer: C

QUESTION 102:

You work as an administrator at Certkiller .com. You have determined that a virtual machine (VM) is having performance problems because it does not have enough CPU resources available.
Which two methods could you use to guarantee this VM gets 100% of a CPU on the host when it needs it? Select two.

A. set CPU affinity on that virtual machine, pinning it to a CPU 1
B. set the CPU reservation for this VM to 100%
C. set CPU affinity on that VM, pinning it to CPU 1 and set CPU affinity on all other VMs so that they specifically cannot use CPU 1.
D. Set the CPU limit for this VM to 100%.

Answer: B, C

Explanation:
You can set the reservation of the VM to 100% of the processor capacity. This will ensure the no processor capacity is available for other VMs.
You can also set the affinity for the VM to CPU1 and set the CPU affinity on all other VMs so that they specifically cannot use CPU1. This will ensure that only this VM can use CPU1.
Incorrect Answers:
A: Just setting the CPU affinity on the VM isn't enough because other VMs could also have the affinity set to CPU1. In this case, the VMs would share CPU1.
D: Just setting the CPU limit on the VM isn't enough because other VMs could also use CPU1. In this case, the VMs would share CPU1.

QUESTION 103:

A virtual machine (VM) residing in a resource pool is exhibiting poor performance, and appears hung. The resource pool in which it resides is limited to 500 MHz of CPU. The cluster server in which the resource pool resides has a total of 6000 MHz, with 1000 MHz available.

Which step can be used to increase the performance of the VM?

A. increase the CPU Limit on the VM
B. increase the CPU Reservations on the resource pool
C. increase the CPU Limit on the resource pool
D. increase the CPU Reservations on the VM

Answer: C

QUESTION 104:

Which is a valid reason NOT to set affinity on a single virtual machine (VM)?

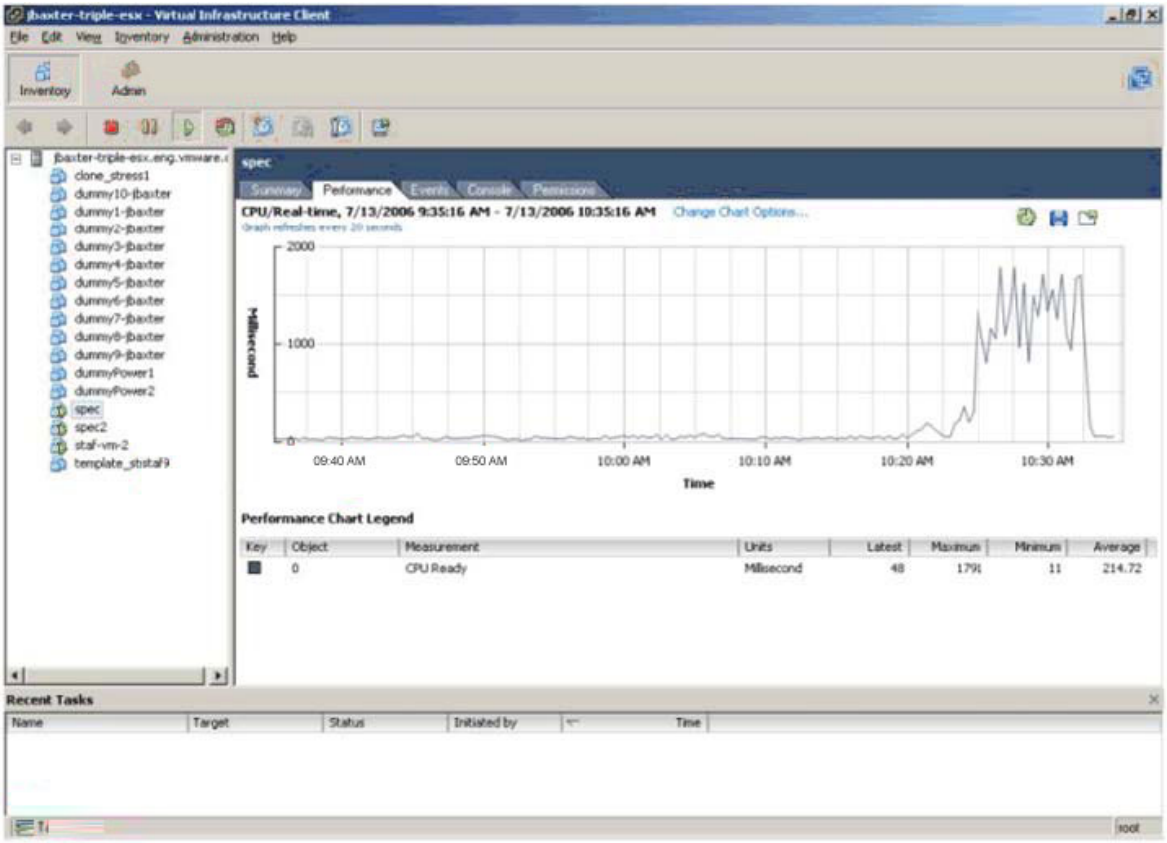
A. Affinity settings are ignored as part of a VMotion
B. Affinity can only be set on hyperthreaded systems.
C. A VM with affinity might not receive 100 percent of the CPU.
D. Setting affinity will monopolize a CPU making it unusable for other VMs on the server.

Answer: A

Explanation: Affinity settings can NOT be set / applied while using VMotion. You have to clear / negate the affinity settings when using VMotion.

QUESTION 105:

Exhibit:



Which of the following changes would likely reduce the symptom in the performance chart shown in the exhibit? Select three.

A. setting CPU affinity
B. increasing CPU limit
C. increasing CPU shares
D. resetting the CPU affinity back to the default
E. increasing CPU reservation

Answer: B, D, E

QUESTION 106:

You work as a network administrator for Certkiller .com. You have a dual-processor VM (Virtual Machine) that has affinity set so that the virtual CPUs are pinned to CPU 3 and 4 in VirtualCenter. The VM also has a reservation setting guaranteeing it 100% of available resources for those two CPUs. Performance is poor in this VM, however performance for all other VMs on this is acceptable.
What can you do to improve performance for this VM?

A. change the CPU share allocation from 'Normal' to 'High'
B. set CPU affinity on all other VMs prohibiting them from using CPU 3 and 4.
C. Remove the reservations on the CPUs inorder to allow the VMKernel to switch the

virtual CPUs between CPU 3 and 4 as needed.
D. Change the CPU affinity settings to ensure that virtual CPUs are running on two separate physical CPUs on the host.

Answer: D

Explanation:
Resource Management Guide - Chapter 9 Advance Resource Management - Pg. 126
In some cases, such as display-intensive workloads, significant communication might occur between the virtual CPUs and these other virtual machine threads. Performance might degrade if the virtual machine's affinity setting prevents these additional threads from being scheduled concurrently with the virtual machine's virtual CPUs (for example, a uniprocessor virtual machine with affinity to a single CPU, or a two-way SMP virtual machine with affinity to only two CPUs).
For the best performance, when manual affinity settings are used, VMware recommends that you include at least one additional physical CPU in the affinity setting in order to allow at least one of the virtual machine's threads to be scheduled at the same time as its virtual CPUs (for example, a uniprocessor virtual machine with affinity to at least two CPUs or a two-way SMP virtual machine with affinity to at least three CPUs).

QUESTION 107:

In a resource-constrained environment, which ESX Server memory conservation technique has the LEAST negative effect on the performance of a running virtual machine?

A. Vmmemctl
B. Using the .vswp file
C. Transparent Page Sharing
D. Lowering the Reservation variable

Answer: A

Explanation:
Balloon Driver - memory reclaimed from virtual machines by cooperation with the VMware Tools (vmmemctl driver) and guest operating systems.
This is the preferred method for reclaiming memory from virtual machines, since it reclaims the memory that is considered least valuable by the guest operating system. The system "inflates" the balloon driver to increase memory pressure within the virtual machine, causing the guest operating system to invoke its own native memory management algorithms. When memory is tight, the guest operating system decides which particular pages of memory to reclaim, and if necessary, swaps them to its own virtual disk. This proprietary technique provides predictable performance that closely matches the behavior of a native system under similar memory constraints.

QUESTION 108:

You are setting up a new ESX Server and will initially install two virtual machines (VMs) for users to access. The applications to be run are CPU intensive. The plan is for 20 identical VMs to be installed within six months, which will cause CPU contention.
How can you configure the first two VMs so that their performance does not decrease as more VMs are added?

A. set a CPU limit on the VMs that is a lower value than the available CPU resources for the VMs
B. set CPU affinity so that each of the VMs only runs on one available CPU
C. set an expandable CPU reservation on the VM that is lower than 50% of the available CPU resources for the VMs
D. set a CPU reservation on the VMs that is lower than 50% of the available CPU resources for the VMs

Answer: A

QUESTION 109:

A resource pool is a logical collection of _____.

A. clusters
B. CPU and memory resources
C. servers
D. CPU, memory, disk I/O and network I/O resources

Answer: B

QUESTION 110:

Which three tasks can a Resource Pool Administrator perform? Select three.

A. create a new virtual machine in the resource pool
B. change the resource pool resource limits
C. create a new template from a virtual machine
D. modify assigned licenses
E. add a port group to a virtual switch

Answer: A, B, C

Explanation:
Per VI3 Admin Guide.
Resource Pool Administrator
Perform actions on datastores, hosts, virtual machines, resources, and alarms.

Provides resource delegation and is assigned to resource pool inventory objects.
This includes:
! All privileges for folder, virtual machine, alarms, and scheduled task privileges groups.
! Selected privileges for global items, datastore, resource, and permissions privileges groups.
! No privileges for datacenter, network, host, sessions, or performance privileges groups.
page 256 Basic Administration Guide (Table 15-1)

QUESTION 111:

Which statement is true about resource pools?

A. They may contain one or more child VMware HA clusters.
B. They may contain one or more child resource pools.
C. They may aggregate groups of resource pools.
D. They may contain one or more child DRS clusters.

Answer: B

Explanation:
Introduction\VMware Infrastructure Introduction: Virtual DatacenterArchitecture: Hosts, Clusters, and Resource Pools
Resource pools are partitions of computing and memory resources froma single host or a cluster. Any resource pool can be partitioned intosmaller resource pools to further divide and assign resources todifferent groups or for different purposes. In other words, resourcepools can be hierarchical and nested.
page 22 Basic Administration Guide

QUESTION 112:

Which two resource types are managed by resource pools? (Choose two.)

A. host memory
B. virtual machines' CPU
C. virtual machines' memory
D. host CPU

Answer: A, D

QUESTION 113:

Disk shares manage contention between multiple virtual machines on _____.

A. The same ESX Server accessing the same LUN only.
B. Different ESX Server accessing the same LUN only.
C. Different ESX Server accessing any LUN.

D. The same ESX server and different ESX Servers accessing the same LUN.

Answer: A

Explanation: Per VI3 ESX SAN Guide
Use disk shares to distinguish high-priority from low-priority virtual machines.
Note that disk shares are relevant only within a given ESX Server host.
The shares assigned to virtual machines on one ESX Server host have no effect on virtual machines on other ESX Server hosts.
page 38 SAN Configuration Guide

QUESTION 114:

If a VM that belongs to a resource pool does not have enough physical resources available to meet its reservation:

A. it will power off immediately.
B. VMs outside the resource pool will not be able to power on.
C. it will not be able to power on until sufficient physical resources in use are freed up.
D. if its reservations are expandable, it will attempt to draw upon the resources of its parent resource pool.

Answer: D

QUESTION 115:

What are three benefits of using resource pools? (Choose three.)

A. improved network utilization
B. flexible hierarchical organization
C. access control and delegation
D. isolation between pools, sharing within pools
E. decreased virtualization overhead

Answer: B, C, D

QUESTION 116:

You attempt to create a new resource pool in a cluster, but the New Resource Pool selection is unavailable.
What could be the cause?

A. DRS has not been enabled on the cluster.
B. There are no servers in the cluster.
C. VMware HA has not been enabled on the cluster.
D. The cluster has too few resources to create a new resource pool.

Answer: A

QUESTION 117:

You work as an administrator at Certkiller .com. A standalone ESX Server with two physical CPUs has two running virtual machines (/VMs) labeled Certkiller A and Certkiller B. Each VM has two virtual CPUs. Certkiller A has 4000 CPU shares and Certkiller B has 2000 CPU shares. Certkiller A is continuously using 10% of the ESX Server's CPU Resources. Certkiller B attempts to use all CPU resources on the ESX Server.
Ignore the overhead from the service console. What percentage of the ESX Server's CPU Resources will Certkiller B be granted?

A. 0%
B. 25%
C. 33%
D. 50%
E. 67%
F. 75%
G. 100%

Answer: C

Explanation: 33% - 2000 shares / 6000 total shares = 33% maximum available to Certkiller B.

QUESTION 118:

In a fully automated DRS cluster, what can be done to ensure that a specific virtual machine (VM) does not migrate automatically to another host?

A. set the DRS VM options
report_section="8" for specific VM to Partially Automated
B. use the Affinity Wizard to specify manual automation
C. Do nothing because the DRS cluster must be put in Partially Automated mode to allow this level of control.
D. Set the DRS VM rule to "keep on this host"

Answer: B

Explanation:
After you have created a DRS cluster, you can edit its properties to create rules that specify affinity. You can use these rules to determine that:
- DRS should try to keep certain VMs together on the same host
- DRS should try to make sure that certain VM's are not together..."

QUESTION 119:

One of the hosts in a cluster of 10 hosts requires maintenance. This host is currently running two virtual machines (VMs) for a total of 30% CPU utilization.
What is the best practice for repairing the hardware?

A. place the VMs on the host in Maintenance mode
B. place the host in Offline mode
C. place the host in Maintenance mode
D. repair the server while running VMs

Answer: C

QUESTION 120:

On a DRS cluster, which three steps are part of the process of creating a virtual machine (VM) from a template in VirtualCenter 2.x? Select three.

A. choose the number of processors the new VM will use
B. select the datacenter that contains the template
C. choose a resource pool for the new VM
D. determine if the VM will deploy to a virtual disk or a raw LUN
E. decide whether or not to customize the guest OS

Answer: B, C, E

Explanation:
To create a VM from a template, you need to specify the datacenter that contains the template, choose a resource pool for the new VM then decide whether or not to customize the guest OS.
Incorrect Answers:
A: The number of processors will be specified in the template.
D: This will be specified in the template.

QUESTION 121:

On the DRS cluster, which three steps are part of the process of creating a virtual machine (VM) in VirtualCenter2.x? Select three

A. choose whether you are creating a Typical or Custom VM
B. Select the group folder within the server farm in which you want to the VM to reside
C. Select the resource pool in which you want to run the VM
D. Connect the CD-ROM drive to your OS disk image
E. Select a datastore in which to store the VM files

Answer: A, C, E

QUESTION 122:

You work as an administrator at Certkiller .com. DRS on a cluster is set to Fully Automated at its most aggressive setting. One particular server in the cluster is running at 98% CPU utilization. You notice that none of the virtual machines (VMs) are being placed on other servers.
What are two possible causes of the problem? Select two.

A. The VM options
report_section = "8" in the DRS Settings on that cluster for all of the VMs on that server are set to Manual.
B. No other server in the cluster has enough resources to accommodate any of the VMs on the overloaded server.
C. An Affinity Rule for those particular VMs has been set to "Separate Virtual Machine" for the VMs on the overloaded host.
D. The guest OS types for the VMs do not support DRS.

Answer: A, B

QUESTION 123:

You work as an administrator at Certkiller .com. One of the hosts in a cluster of 10 hosts requires maintenance. This host is currently running two virtual machines (VMs) for a total of 30% CPU utilization.
What is the best practice for repairing the hardware?

A. place the host in Maintenance mode
B. place the host in Offline mode
C. place the VMs on the host in Maintenance mode
D. repair the server while running VMs

Answer: A

QUESTION 124:

A standalone ESX Server with two physical CPUs has two running virtual machines (VMs) labeled VMA and VMB. Each VM has two virtual CPUs. VMA has 4000 CPU shares and VMB has 2000 CPU shares. VMA is continuously using 10% of the ESX Server's CPU resources. VMB attempts to use all CPU resources on the ESX Server.
Ignore overhead from the service console. What percentage of the ESX Server's CPU resources will VMB be granted?

A. 90%
B. 100%
C. 33%
D. 50%

Answer: C

Explanation: The VMB only has2000 CPU shares and VMA has 4000 CPU shares.
The max VMB can use is 33% (2000 shares / 6000 shares = 33%).

QUESTION 125:

A Virtual Infrastructure Client shows a DRS cluster that contains a resource pool named "Grafted from xyz."
What is the likely explanation for this?

A. The host named xyz was put into Maintenance mode.
B. Another DRS cluster named xyz used an expandable reservation to provide resources to this DRS cluster.
C. The host named xyz was added to the DRS cluster.
D. Originally, the DRS cluster contained a host named xyz that has since been removed from the cluster.

Answer: C

QUESTION 126:

Cluster Resources could be monitored using _____ .

A. Virtual Infrastructure Client connecting to ESX Server
B. Web Access
C. Virtual Infrastructure Client connecting to VC Server
D. esxtop

Answer: C

QUESTION 127:

You work as an administrator at Certkiller .com. You have a Windows virtual machine (VM) that when viewed through Task Manager shows CPU utilization averaging 95-100%.
What does this indicate?

A. The VM has an impending performance problem. You should check the running processes in Windows Task Manager to determine what applications are consuming CPU resources.

B. The VM is utilizing most of the CPU resources allocated to it. You should check CPU Ready values to determine if this is a resource constraint.
C. The VM has CPU affinity Set to CPU 0 and is competing with the service console for CPU resources.
You should run esxtop to confirm your diagnosis.
D. The VM CPU reservation is not sufficient.

Answer: B

Explanation: The key indicator of a virtual machine losing competition for CPU time is "CPU ready" time in its CPU resource graph. Those intervals when a virtual machine is ready to execute instructions, but cannot because it cannot get scheduled onto a CPU, are tabulated as ready time.

QUESTION 128:

You have a Windows virtual machine (VM) that is performing poorly. You suspect high CPU utilization is the culprit.
To definitively ascertain the cause of the performance problem, you should look for a _____.

A. high CPU Usage % value in Windows Task Manager
B. low CPU Ready value in VirtualCenter
C. high CPU Usage % in a third-party monitoring tool installed in the VM
D. high CPU Ready value in VirtualCenter

Answer: D

QUESTION 129:

What are two characteristics of VMware Consolidation Backup? Select two.

A. It requires backup agents in virtual machines.
B. It allows the use of Fibre Channel tape froma gents within the virtual machines.
C. It performs image level backups for Windows virtual machines.
D. It performs file level backups for Windows virtual machines

Answer: C, D

Explanation:
Virtual Machine Backup Guide\VMware Consolidated Backup : VMwareConsolidated Backup Overview
Consolidated Backup offers the following features:
Offloads backup processes to a dedicated physical host (VCB proxy). Eliminates the need for a backup window by using VMware virtualmachine snapshot technology.
Doesn't require backup agents in virtual machines.

Works with industry-leading backup applications allowing you to takeadvantage of their advanced scheduling and backup management features. Doesn't restrict the use of Fibre Channel tapes.
***Supports file-level backups for virtual machines running MicrosoftWindows guest operating system.
***Supports image-level backups for virtual machines running any guestoperating system.
page 24 Virtual Machine Backup Guide

QUESTION 130:

Which statements are true about running virtual machines on NAS Storage? Select two.

A. The NAS file share must use NFS
B. Virtual machines cannot be placed on NAS storage
C. RDMs residing on a NAS file share must be placed in physical compatibility mode
D. The RDM for a virtual machine (if used) cannot reside on the NAS file share.

Answer: A, D

QUESTION 131:

You work as an administrator at Certkiller .com. You are trying to decide whether to back up virtual machines (VMs) using a backup agent in each guest OS or using a backup agent in the service console.
When is it most appropriate to use the guest OS strategy rather than the service console strategy to backup VMs? Select two

A. when space for storing backups is severely limited
B. when all of the VMs must operate 24 hours a day, 7 days a week
C. when the current backup software license is per-server and is very costly
D. when quick recovery of full systems is a priority

Answer: A, B

Explanation:
A backup agent in the service console is used to back up an entire virtual machine (the operating system, programs and data). Obviously, this requires more backup space than just backing up the data. Furthermore, the virtual machine must be taken offline to perform this backup.
Therefore, if backup space is limited or you cannot take the virtual machine offline, you should use the guest OS strategy.

QUESTION 132:

What is the advantage of installing backup client software in a Linux virtual machine's guest OS?

A. This configuration enables LAN-free backup.
B. This configuration enables individual files to be selected for backup or restore.
C. This configuration enables immediate booting from a restored virtual machine.
D. This configuration enables ESX Server to do backup and restore operations.

Answer: B

QUESTION 133:

Which of the following are required for installing VMware Consolidated Backup? Select two.

A. the server can be a physical or a virtual machine
B. the server must be a physical machine
C. the operating system must be Windows
D. the operating system can Windows or Linux

Answer: B, C

Explanation: VCB will only work on physical machine not on a VM and the requirement OS must be Win2k3 not Linux.

QUESTION 134:

What are two advantages of VCB over conventional agent-based methods of backing up a virtual machine's (VM's) data? Select two

A. enables LAN-free backup and avoids undue overloading of the datacenter network
B. helps to eliminate the need for a backup window by using an online snapshot-based backup
C. allows selection of files and directories from the guest file system of a Linux VM
D. makes it possible to do both file-based and full-system backup of the same VM simultaneously

Answer: A, B

Explanation: Confirmed via the VMware backup guide (page 12). Three other benefits include
* allowing the addition of backup agents to be optional
* allowing for backup of powered off VMs.
* reduces the load on the ESX Server by moving backup tasks to a backup proxy machine
page 24 Virtual Machine Backup Guide

QUESTION 135:

What are three advantages of VCB over conventional agent-based methods of backing up a virtual machine's (VM's) data? Select three

A. reduces the load on the ESX Server by moving backup tasks to a backup proxy machine
B. enables LAN-free backup and avoids undue overloading of the datacenter network
C. helps to eliminate the need for a backup window by using a "hot" snapshot-based backup
D. allows selection of files and directories from the guest file system of a Linux VM
E. makes it possible to do both file-based and full-system backup of the same VM simultaneously

Answer: A, B, C

Explanation: Confirmed via the VMware backup guide (page 12). Two other benefits include allowing the addition of backup agents to be optional and allowing for backup of powered off VMs.
page 24 Virtual Machine Backup Guide

QUESTION 136:

Which statement is true about VCB proxy?

A. It must be set to assign Windows drive letters to prevent data corruption.
B. It must be set to prevent assignment of Windows drive letters to prevent data corruption.
C. When running under Linux, it has no concept of Windows drive letter mappings.
D. It assigns Windows drive letters to RDMS that are assigned to Windows virtual machines.

Answer: B

QUESTION 137:

Which statement is true about running both DRS and VMware HA (HA) on the same cluster?

A. This is not a recommended configuration.
B. After a host failure, HA will restart virtual machines and DRS will migrate them to balance the workloads.
C. After a host failure, HA can start virtual machines intelligently using DRS algorithms.
D. There is no advantage to running these two technologies on the same cluster as they are completely unrelated.

Answer: C

Explanation: VMware HA is a reactive system, reacting to host failures, DRS is a proactive solution, and gives you better utilization for running VMs by balancing the cluster.
After a host failure, HA will evacuate all the Vms that were running on that host and use the DRS algorithms in order to place them intelligently on the hosts that remain in your cluster.
Resource Management Guide\Understanding VMware HA\VMware HA Features:
A cluster enabled for HA: Is fully integrated with DRS. If a hosthas failed and virtual machines have been restarted on other hosts,DRS can provide migration recommendations or migrate virtual machines for balanced resource allocation. If one or both of the source andtarget hosts of a migration fail, HA can help recover from thatfailure.

QUESTION 138:

Which two situations will result in VMware restarting virtual machines? Select two.

A. A guest OS fails.
B. An ESX Server in the cluster becomes isolated from the network.
C. An ESX Server in the cluster is manually powered off.
D. An ESX Server in the cluster is put into Maintenance mode.

Answer: B, C

Explanation: Per VI# ESX Resource Mgmt Guide -
A cluster pools a set of hosts. If DRS is enabled, the cluster supports shared resource pools and performs placement and dynamic load balancing for virtual machines.
If HA is enabled, the cluster supports failover. When a host fails, all associated virtual machines are restarted on different hosts.
page 29-30 Resource Management Guide

QUESTION 139:

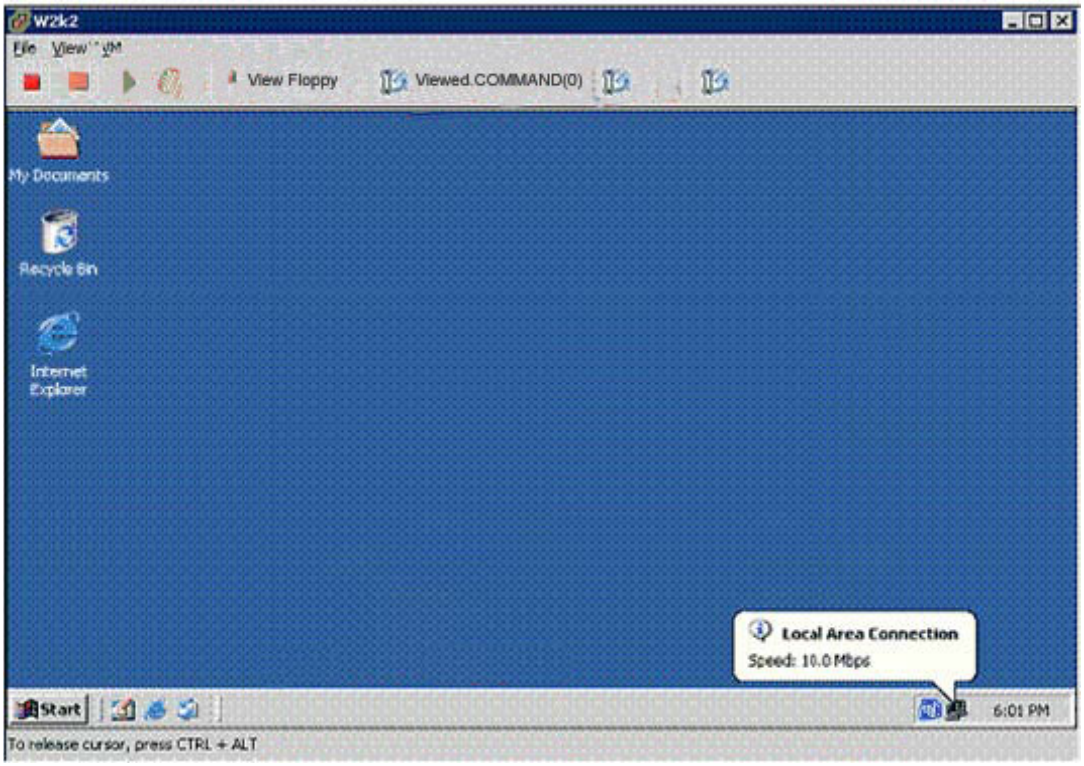
Which two conditions can prevent a virtual machine (VM) that is part of a VMware HA (HA) cluster from being powered on? (Choose two.)

A. The VM has been configured with a virtual disk on local storage.
B. Strict admission control is configured and insufficient resources are available for the VM.
C. Guaranteed admission control cannot allocate sufficient CPU reservation for the VM.
D. There is a mismatch in CPU capabilities between one or more HA cluster nodes.

Answer: A, B

QUESTION 140:

Exhibit:



Which statement is true about the network performance of the virtual machine (VM) shown in the exhibit?

A. VM can send at the maximum of 10 Mbps.
B. Virtual switch auto-negotiation settings need to be adjusted to improve performance.
C. VM can send traffic as fast as the underlying physical NIC.
D. Underlying physical NIC is configured for 100 Mbps/half-duplex

Answer: C

QUESTION 141:

What are three requirements for a VMware HA cluster? Select three

A. name resolution between all hosts
B. identical type and quantity of CPUs in each host
C. access to shared storage from all hosts
D. access to the virtual machine networks from all hosts
E. private Gigabit Ethernet network for all hosts.

Answer: A, C, D

Explanation: Clusters Enabled for HA
For clusters enabled for HA, all virtual machines and their configuration files must reside on shared storage (typically a SAN), because you must be able to power on the virtual machine on any host in the cluster. This also means that the hosts must be configured to have access to the same virtual machine network and to other resources.
Each host in an HA cluster must be able to resolve the host name and IP address of all other hosts in the cluster. To achieve this, you can either set up DNS on each host (preferred) or fill in the /etc/hosts entries manually (error prone and discouraged).

QUESTION 142:

On which platform does the VCB proxy run?

A. a Windows physical machine
B. a Windows virtual machine
C. an agent in an ESX Server
D. a Linux physical machine
E. a Linux virtual machine

Answer: A

Explanation:
Virtual Machine Backup Guide\VMware Consolidated Backup\ Setting UpVMware Consolidated Backup : Configuring VCB Proxy
You need to configure a VCB backup proxy, a physical machine thatruns Consolidated Backup and your third-party backup software. The VCB proxy must be able to run Microsoft Windows 2003. The proxy is running Microsoft Windows 2003. Consolidated Backup doesn't support any other versions of Windows on the proxy.
page 33 Virtual Machine Backup Guide

QUESTION 143:

VirtualCenter server is running within a virtual machine (VM) that is part of a VMware HA (HA) and DRS cluster. The VirtualCenter VM can migrate between all hosts in the cluster by using VMotion. DRS is configured for partial automation.
What happens if the ESX host that is currently running the VirtualCenter VM experiences a power outage?

A. HA will restart the VirtualCenter VM on another host.
B. This situation cannot occur because VirtualCenter cannot be installed on an HA cluster.
C. All DRS cluster operations will be unavailable until the ESX host is brought back online.
D. VirtualCenter will stay offline, but all VMs on the remaining hosts will continue without interruption.

Answer: A

QUESTION 144:

You work as an administrator at Certkiller .com. Certkiller .com decides to replace one 8-CPU host with four dual-CPU hosts.
This Virtual Infrastructure uses server-based licensing.
How many new licenses will be required?

A. 0
B. 2
C. 4
D. 8
E. 12
F. 16
G. 32

Answer: A

Explanation: The total number of processor licenses did not increase.
page 37 Installation and Upgrade Guide

QUESTION 145:

You work as an administrator at Certkiller .com. Certkiller .com plans to implement an ESX 3.X / VirtualCenter 2.0 infrastructure that includes the following:
* three ESX Server host machines each with four physical dual-core processors
* the ability to migrate running virtual machines (VMs) between these hosts without taking them offline
* multiple processor support for certain applications
What licensing is necessary to support these requirements?

A. 1 VirtualCenter server license, a 12-processor VMotion license, and a 12-processor ESX Server license
B. 1 VirtualCenter server license, a 24-processor VMotion license, and a 24-processor ESX Server license
C. 3 VirtualCenter server licenses, a 3-processor VMotion licenses, and a 3-processor ESX Server license
D. 1 VirtualCenter server license, a 1 processor VMotion license, and an ESX Server license for each virtual processor for each running VM

Answer: A

Explanation:
The ability to migrate VMs between hosts without taking them offline requires a

VMotion license per processor slot. You also need an ESX Server license per processor and a single Virtual Center license for the Virtual Center server. We have three ESX server hosts each with four physical processors therefore the total number of ESX server and VMotion licenses is 12.

QUESTION 146:

If the connection between the license server and VirtualCenter 2.0 Server is lost:

A. there is no impact because licenses are stored and configured per host when using a license server.
B. VMs will continue to run, but after a grace period ends, they cannot be powered back on until connectivity with the license server is restored.
C. ESX Server hosts can be configured and additional hosts added, but no VMs can be powered on until connectivity with the license server is restored.
D. all VMs will power off if connectivity is not restored within a 48 hour grace period.
Hence, we recommend installing the license server on the same machine with the VirtualCenter Server.

Answer: B

QUESTION 147:

You work as an administrator at Certkiller .com. Certkiller is a user. Jack has been given access to VirtualCenter using the Virtual Infrastructure Client to administer virtual machines.
What else can Jack do?

A. log on to the VirtualCenter server
B. log on to any ESX Server managed by VirtualCenter
C. log on to the VirtualCenter server if an administer grants the Permit Web Access privilege
D. log on to the VirtualCenter server and any ESX Server managed by VirtualCenter

Answer: A

Explanation:
Two access methods are used to access Virtual Center and ESX servers. Virtual Center access is controlled by Windows domain security, ESXserver log on access is controlled by locally configured access rightson the ESX server.
Quick Start Users Guide\Creating and Managing VMwareInfrastructure\Starting the VI Client and Logging On
To log on to a VirtualCenter Server, enter an appropriate Windowsdomain user name and password. If this is the first time you arelogging on, log on as Windows Administrator so you can set permissionsfor other users.
Incorrect Answers:

B: ESX servers have a separate user list; they don't use Windows domain security. To log on to an ESX server, you must be granted permission on that server.
C: It is not necessary to be granted the Permit Web Access privilege to log on to the VirtualCenter.
D: ESX servers have a separate user list; they don't use Windows domain security. To log on to an ESX server, you must be granted permission on that server.

QUESTION 148:

What is the minimum version of Windows supported to run VirtualCenter?

A. Windows Server 2003
B. Windows Server 2003 SP1
C. Windows 2000 Server SP4 with Update Rollup 1
D. Windows 2000 Server SP3 with .NET Framework
E. Windows 2000 Server SP1

Answer: C

Explanation: Quick Start Guide\Introduction to VMware Infrastructure : System Requirements : VirtualCenter Server Requirements
VirtualCenter Server requires a computer with the following specifications:
***Windows 2000 Server SP4 with Update Rollup 1, Windows 2003, orWindows XP Professional installed
2.0GHz or faster Intel or AMD x86 processor
2GB or more of RAM
A minimum of 560MB disk storage (2GB recommended)
If you plan to install your VirtualCenter database on the samecomputer as VirtualCenter Server, additional storage and processorcapacity might be required.
page 11 Quick Start Guide

QUESTION 149:

An alarm in VirtualCenter can be configured to perform which three actions?
Select three.

A. run a script
B. reboot a virtual machine
C. send an e-mail
D. reboot an ESX Server
E. disable the balloon driver

Answer: A, B, C

Explanation:

An alarm can be configured to run a script, reboot a VM or send an e-mail. It cannot be configured to reboot an ESX server or disable the balloon driver.

QUESTION 150:

Pointing a VI Client directly to an ESX Server host rather than a VirtualCenter Server:

A. is not recommended, even if VirtualCenter was not purchased.
B. works identically, but any tasks issued are superseded by the VirtualCenter Server.
C. is similar except that objects are at the host and not datacenter level, and enterprise tasks such as cloning and migrating VMs are not available.
D. is similar except that objects are at the host and not datacenter level, but typical tasks such as template creation and cloning VMs are available.

Answer: C

QUESTION 151:

Which of the following is true about cold migration of a VM from one host to another using VMware Infrastructure?

A. The VM must be powered off.
B. The VM must be either powered off or suspended.
C. The two hosts involved must use the same network labels.
D. Both hosts must have the same bit type (32-bit or 64- bit) CPU.

Answer: B

Explanation: You can "cold migrate" a VM from one host to another using VI if the VM is powered off or suspended.

QUESTION 152:

Which two must be obtained from the database administrator that manages the remote SQL Server that VirtualCenter will use? (Choose two.)

A. SQL Server username and password with appropriate rights to the VirtualCenter database
B. SQL Server login with access to the master database
C. password for the sa account on the database
D. SQL Server name and database name of a new, empty database to be used by VirtualCenter

Answer: A, D

QUESTION 153:

What type of authentication is supported with iSCSI?

A. NTFS
B. FAT16
C. CHAP
D. FAT32

Answer: C

Explanation:
CHAP (Challenge Handshake Auth. Protocol)

QUESTION 154:

How many sets of CHAPS credentials per software initiator does ESX support?

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

Answer: B

Explanation:
Only 1 per ESX box since a software initiator is per host

QUESTION 155:

What are the two types of initiators? (Select 2)

A. Software
B. SCSI
C. Parallel port
D. Hardware

Answer: A, D

Explanation:
software and hardware (hardware is an HBA)

QUESTION 156:

Does ESX support both unidirectional and bidirectional CHAP authentication?

A. No
B. Yes

Answer: A

Explanation:
Yes, only unidirectional CHAP authentication is supported. Bi-directional involves both the host and the target, which would put additional overhead on the ESX server.

QUESTION 157:

ESX can support per-target credential?

A. True
B. False

Answer: B

Explanation:
No, only one set of authentication credentials can be sent from the ESX Server host. ESX Server does not support per-target authentication credentials.

QUESTION 158:

The following authentication protocols are not supported with VMware ESX Server. (Select all that apply)

A. Kerberos
B. CHAP
C. Secure Remote Protocol (SRP)
D. IPsec authentication
E. encryption

Answer: A, C, D, E

Explanation:
The following authentication protocols are not supported: Kerberos, Secure Remote Protocol (SRP), or public key authentication methods for iSCSI. Additionally, IPsec authentication and encryption are not supported with VMware ESX Server.

QUESTION 159:

ESX recommends running iSCSI on the same network as the Service Console or VMotion?

A. True

B. False

Answer: B

Explanation:
For iSCSI configurations, ESX Server supports only isolated networks.

QUESTION 160:

iSCSI networks are just as secure as Fiber SAN? (True or False)

A. False
B. True

Answer: A

Explanation:
NO - Inherently, Fibre Channel SANs have an added security advantage over iSCSI SANs because they are based on a physically isolated fabric.

QUESTION 161:

Does iSCSI support 100Mb adapters for connectivity?

A. No
B. Yes

Answer: A

Explanation:
False, it must be 1000Mb connectivity

QUESTION 162:

iSCSI is recommended to be set at Auto-negotiate?

A. False
B. True

Answer: A

Explanation:
NO - Ensure that the iSCSI interface is set to full duplex or configured to negotiate at full duplex.

QUESTION 163:

ESX recommends using DHCP on iSCSI adapters/initiators?

A. True
B. False

Answer: B

Explanation:
NO - Use static IP addresses for initiators. ESX Server does not support DHCP for iSCSI connections.
Note: If DHCP must be used and the storage is on a public LAN, be sure CHAP authentication is implemented.

QUESTION 164:

If a VM needs additional space requirements the initial iSCSI LUN has available, it is recommended that you extend LUNS?

A. False
B. True

Answer: A

Explanation:
False - If a virtual machine needs more space than can be allocated from the existing VMware VMFS file system, avoid extending VMware VMFS volumes. Instead, create a new LUN with a new VMware VMFS volume. An extended volume will not balance data across the two physical participants, resulting in hot and cold spots at the target.

QUESTION 165:

It is NOT recommended that you dedicate disk or RAID groups for LUNS that will be housing VMFS volumes?

A. True
B. False

Answer: B

Explanation:
FALSE - Where possible, dedicate disk or RAID groups to LUNs that will host VMware VMFS volumes.
Remember that multiple hosts will be requesting I/O from the disk or RAID group simultaneously.

QUESTION 166:

It is considered best practice to enable multiple initiators on an ESX host?

A. False
B. True

Answer: A

Explanation:
Confugure iSCSI in a VMware ESX server enviroment :
http://www.vmware.com/pdf/vi3_iscsi_cfg.pdf
Page 4 SW Initiator Specific :
"You can configure only one SW Initiator on an ESX Server Host."
Additionally in the VMware Infrastructure 3 : Install and Configure Student Guide Part 1 in Module 4, page 20 :
"ESX Server does not support both HW and SW initiators running simultaneously."

QUESTION 167:

When using a software initiator, it is recommended to use a dedicated virtual switch or not?

A. True
B. False

Answer: A

Explanation:
TRUE - When using a software initiator, use a dedicated virtual switch to lower chances of having network traffic intercepted by potential attackers during transmission. This configuration will physically segment virtual machine network traffic and iSCSI traffic.

QUESTION 168:

What are the two methods for accessing iSCSI targets?

A. Active/Passive
B. Passive/Passive
C. Active/Standby
D. Active/Active

Answer: AD

Explanation:

Active/Active and Active/Passive - Depending on the vendor, the target uses either an active/active or active/passive method of accessing a LUN.

QUESTION 169:

What is the recommended policy for Active/Active?

A. Fixed
B. MRU
C. Active
D. Passive

Answer: A

Explanation:
When using an active/active iSCSI target, use fixed mode failover policy.

QUESTION 170:

What is the recommended policy for Active/Passive?

A. Fixed
B. MRU
C. Passive
D. Active

Answer: B

Explanation:
When using an Active/Passive iSCSI target, use MRU.

QUESTION 171:

What is the maximum number of LUNs that iSCSI can see?

A. 254
B. 255
C. 256
D. 253

Answer: C

Explanation:

Storage Maximums (Continuec)

	Maximum
NFS	
LUNs per server	256
SCSI controllers per server	2
LUNs concurrently opened by all virtual machines	256
Hardware & software iSCSI	
LUNs per server	256
SCSI controllers per server	2

[1] Minimum = 100MB

[2] ~ denotes an approximate value.

Reference: http://www.vmware.com/pdf/vi3_301_201_config_max.pdf Page 3

QUESTION 172:

What is the max VMFS3 volumes per ESX server?

A. 120
B. 128
C. 256
D. 254

Answer: C

QUESTION 173:

What is the max file size on a VMFS 3 volume

A. 64T
B. 32T
C. 400G
D. 100G
E. 2 TB

Answer: E

Explanation:
Storing Multiple Virtual Machines on a VMFS Volume
You can store multiple virtual machines on the same VMFS volume. Each virtual machine, encapsulated in a small set of files, occupies a separate single directory. VMFS supports the following file and block sizes enabling you to run even the most data intensive applications, including databases, ERP, and CRM in virtual machines:
1. Maximum virtual disk size: 2 TB
2. Maximum file size: 2 TB

3. Block size: 1 MB to 8 MB
Reference: VMWare 3.0.1 configuration guide (
http://www.vmware.com/pdf/vi3_server_config.pdf)
page 2 Configuration Maximums for VMware Infrastructure 3

QUESTION 174:

What is the max number of targets for iSCSI?

A. 64
B. 1
C. 2
D. 8

Answer: A

Explanation:
A maximum of 64 targets for iSCSI
Reference: Page 17 of www.vmware.com/pdf/vi3_san_guide.pdf

QUESTION 175:

Clustering is supported for iSCSI?

A. True
B. False

Answer: B

Explanation:
No - Clustering not supported for iSCSI

QUESTION 176:

Can you boot from SAN using iSCSI and a software initiator?

A. True
B. False

Answer: B

Explanation:
No, Boot from SAN not possible using software initiator, only using a hardware initiator
supported experimentally by VMware

QUESTION 177:

To restrict server access to storage arrays not allocated to that server, the SAN uses _____.

A. masking
B. stripping
C. zoning
D. device sharing

Answer: C

Explanation:
To restrict server access to storage arrays not allocated to that server, the SAN uses zoning. Typically, zones are created for each group of servers that access a shared group of storage devices and LUNs. Zones define which HBAs can connect to which SPs. Devices outside a zone are not visible to the devices inside the zone.

QUESTION 178:

ESX Server uses _____ locks, which are managed by the VMFS distributed lock manager.

A. disk level
B. file level
C. drive level
D. vmfs level

Answer: B

Explanation:
VMFS CAN Coordinate access to virtual disk files . ESX Server uses file level locks, which are managed by the VMFS distributed lock manager.

QUESTION 179:

SCSI reservations are not held during metadata updates to the VMFS volume. ESX Server uses _____ SCSI reservations as part of its distributed locking protocol.

A. long term
B. file level
C. short-term
D. short-lived

Answer: D

Explanation:
SCSI reservations are not held during metadata updates to the VMFS volume. ESX Server uses short-lived SCSI reservations as part of its distributed locking protocol.

QUESTION 180:

The more virtual machines are sharing a VMFS, the greater the potential for performance degradation due to I/O contention.

A. True
B. False

Answer: A

Explanation:
True - The more virtual machines are sharing a VMFS, the greater the potential for performance degradation due to I/O contention.

QUESTION 181:

A VMFS holds files, directories, symbolic links, RDMs, and so on, and corresponding metadata for these objects. Metadata is accessed each time the attributes of a file are accessed or modified. These operations include, but are not limited to:

A. Powering a virtual machine on or off.
B. Creating, growing, or locking a file
C. Changing a file's attributes.
D. Creating a virtual machine
E. Powering an ESX host on or off.

Answer: ABC

Explanation:
A VMFS holds files, directories, symbolic links, RDMs, and so on, and corresponding metadata for these objects. Metadata is accessed each time the attributes of a file are accessed or modified. These operations include, but are not limited to:
- Creating, growing, or locking a file.
- Changing a file's attributes.
- Powering a virtual machine on or off.

QUESTION 182:

The VMkernel discovers LUNs when it boots, and those LUNs are then visible in the VI Client. If changes are made to the LUNs, which of the following would cause you

to rescan to see those changes?

A. Changes to LUN masking
B. New LUNs created on the SAN storage arrays
C. Changes in ESX network connectivity
D. Changes in SAN connectivity or other aspects of the SAN
E. Adding new virtual machines

Answer: A, B, D

Explanation:
A SAN is dynamic, and which LUNs are available to a certain host can change based on a number of factors including:
- New LUNs created on the SAN storage arrays
- Changes to LUN masking
- Changes in SAN connectivity or other aspects of the SAN
The VMkernel discovers LUNs when it boots, and those LUNs are then visible in the VI Client. If changes are made to the LUNs, you must rescan to see those changes.

QUESTION 183:

Multipathing software is supported within the virtual machines (True or False)

A. True
B. False

Answer: B

Explanation:
Your ESX Server system performs multipathing for you. Multipathing software (such as PowerPath) in the virtual machine is not supported (and not required). An exception is Dynamic Disks multipathing software in Windows virtual machines.

QUESTION 184:

Zoning has the following effects:

A. Controls and isolates paths within a fabric.
B. Reduces the number of targets and LUNs presented to an ESX Server system.
C. Should not be used to segregating environments (for example, a test from a production environment).
D. Can prevent non-ESX Server systems from seeing a particular storage system, and from possibly destroying ESX Server VMFS data.
E. Can prevent ESX Server systems from seeing a particular storage system
F. Can be used to separate different environments (for example, a test from a production environment).

Answer: A, B, D, F

Explanation:
Zoning has the following effects:
- Reduces the number of targets and LUNs presented to an ESX Server system.
- Controls and isolates paths within a fabric.
- Can prevent non-ESX Server systems from seeing a particular storage system, and from possibly destroying ESX Server VMFS dat
A. - Can be used to separate different
environments (for example, a test from a production environment).

QUESTION 185:

When you use SAN zoning, keep in mind the following:

A. ESX Server hosts that use shared storage for failover or load balancing must be in different zones.
B. ESX Server hosts that use shared storage for failover or load balancing must be in one zone.
C. If you have a very large deployment, you might need to create separate zones for different areas of functionality
D. It does not work well to create many small zones of, for example, two hosts with four virtual machines each.

Answer: B, C, D

Explanation:
When you use SAN zoning, keep in mind the following:
- ESX Server hosts that use shared storage for failover or load balancing must be in one zone.
- If you have a very large deployment, you might need to create separate zones for different areas of functionality. For example, you can separate accounting from human resources.
- It does not work well to create many small zones of, for example, two hosts with four virtual machines each.

QUESTION 186:

When configuring your iSCSI initiators, make sure they have proper names. The initiators can use one of the following formats:

A. FQDN (fully qualified domain name)
B. IQN (iSCSI qualified name)
C. IQDN (iSCSI qualified domiain name)
D. EUI (extended unique identifier)

Answer: B, D

Explanation:
When configuring your iSCSI initiators, make sure they have properly formatted names. The initiators can use one of the following formats:
- IQN (iSCSI qualified name) - Can be up to 255 characters long and has the following format:
iqn.<year-mo>.<reversed_domain_name>:<unique_name>,where <year-mo> represents the year and month your domain name was registered, <reversed_domain_name> is the official domain name, reversed, and <unique_name> is any name you want to use, for example, the name of your server.
An example might be iqn.1998-01.com.mycompany:myserver.
- EUI (extended unique identifier) - Represents the eui. prefix followed by the 16-character name. The name includes 24 bits for company name assigned by the IEEE and 40 bits for a unique ID such as a serial number.

QUESTION 187:

IQN (iSCSI qualified name) - Can be up to 255 characters long and has the following format:

A. iqn.<year-mo>.<unique_name>:<reversed_domain_name>,where <year-mo> represents the year and month your domain name was registered, <reversed_domain_name>
B. iqn.<year-mo>.<reversed_domain_name>:<unique_name>,where <year-mo> represents the year and month your domain name was registered, <reversed_domain_name>
C. There is no such thing as IQN
D. The other alternatives are all incorrect.

Answer: B

Explanation:
IQN (iSCSI qualified name) - Can be up to 255 characters long and has the following format:
iqn.<year-mo>.<reversed_domain_name>:<unique_name>,where <year-mo> represents the year and month your domain name was registered, <reversed_domain_name> is the official domain name, reversed, and <unique_name> is any name you want to use, for example, the name of your server.
An example might be iqn.1998-01.com.mycompany:myserver.

QUESTION 188:

You can expand a datastore that uses the VMFS format by attaching a hard disk partition as an extent. The datastore can span over __ physical storage extents.

A. 56
B. 32
C. 256
D. 24

Answer: B

Explanation:
You can expand a datastore that uses the VMFS format by attaching a hard disk partition as an extent. The datastore can span over 32 physical storage extents.

QUESTION 189:

All communications from clients are encrypted through SSL by default. The SSL connection uses ___-bit AES block encryption and ____-bit RSA key encryption.

A. 128/1024
B. 256/1048
C. 256/1024
D. 128/1048

Answer: C

Explanation:
All communications from clients are encrypted through SSL by default. The SSL connection uses 256-bit AES block encryption and 1024-bit RSA key encryption.

QUESTION 190:

What is the minimum supported LUN capacity for VMFS3?

A. 1200MB
B. 1500MB
C. 2200MB
D. 1G

Answer: A

Explanation:
The minimum supported LUN capacity for VMFS3 is 1200MB.

QUESTION 191:

VMFS3 supports how many LUNS per server?

A. 120
B. 128
C. 256
D. 254

Answer: C

Explanation:
The max number of VMFS 3 volumes per server is 256.

VMFS-3	
Volume size (block size = 1MB)	~16TB-4GB[2]
Volume size (block size = 2MB)	~32TB-8GB
Volume size (block size = 4MB)	~64TB-16GB
Volume size (block size = 8MB)	64TB
File size (block size=1MB)	256GB
File size (block size=8MB)	2TB
Number of files per directory	unlimited
Number of directories per volume	unlimited
Number of files per volume	unlimited
Fibre Channel	
LUNs per server	256
SCSI controllers per server	16
Devices per SCSI controller	16
Number of paths to a LUN	32
LUNs concurrently opened by all virtual machines	256
LUN ID	255

Reference: www.vmware.com/pdf/vi3_301_201_config_max.pdf

QUESTION 192:

A vSwitch models a physical Ethernet switch. The default number of logical ports for a vSwitch is __. However, a vSwitch can be created with up to ____ ports in ESX Server 3.X.

A. 56/529
B. 1016/1600
C. 56/1016
D. 52/1016

Answer: C

Explanation:
A vSwitch models a physical Ethernet switch. The default number of logical ports for a vSwitch is 56. However, a vSwitch can be created with up to 1016 ports in ESX Server 3.X.

QUESTION 193:

You can create a maximum of ____ port groups on a single host.

A. 512
B. 528
C. 1016
D. 56

Answer: A

Explanation:
You can create a maximum of 512 port groups on a single host.
page 3 Configuration Maximums for VMware Infrastructure 3

QUESTION 194:

The network adapters panel displays the following information:

A. All Port Groups
B. Device
C. Host Name
D. Speed
E. Configured
F. vSwitch
G. Networks

Answer: B, D, E, F, G

Explanation:
The network adapters panel displays the following information:
- Device - Name of the network adapter
- Speed - Actual speed and duplex of the network adapter
- Configured - Configured speed and duplex of the network adapter IP address vSwitch VM network properties pop-up network adapter port group VMware, Inc.
- vSwitch - vSwitch that the network adapter is associated with
- Networks - IP addresses that the network adapter has access to

---

QUESTION 195:

If you enter __ or leave the field blank, the port group can see only untagged

(non-VLAN) traffic. If you enter ____, the port group can see traffic on any VLAN while leaving the VLAN tags intact.

A. 0/4095
B. 999/0
C. 4095/0
D. 99/4095

Answer: A

Explanation:
If you enter 0 or leave the field blank, the port group can see only untagged (non-VLAN) traffic. If you enter 4095, the port group can see traffic on any VLAN while leaving the VLAN tags intact.

QUESTION 196:

The IP address that you assign to the service console during installation must be different from the IP address that you assign to VMkernel's TCP/IP

A. True
B. False

Answer: A

Explanation:
The IP address that you assign to the service console during installation must be different from the IP address that you assign to VMkernel's TCP/IP stack from the Configuration > Networking tab of the Virtual Infrastructure Client.

QUESTION 197:

All NAS and iSCSI servers need to be either reachable by the default gateway or on same broadcast domain as the associated vSwitches.

A. True
B. False

Answer: A

Explanation:
All NAS and iSCSI servers need to be either reachable by the default gatweway or on same broadcast domain as the associated vSwitches.

QUESTION 198:

Layer 2 is the data link layer. The three elements of the Layer 2 Security policy are:
(Select all that apply)

A. promiscuous mode
B. non-promiscuous mode
C. MAC address changes
D. uplink speed
E. forged transmits
F. network shaping

Answer: ACE

Explanation:
Layer 2 is the data link layer. The three elements of the Layer 2 Security policy are promiscuous mode, MAC address changes, and forged transmits.

QUESTION 199:

In the Policy Exceptions pane, what two options do you have under the Layer2 Security policy exceptions: Promiscuous Mode?

A. Reject
B. Accept
C. Apply
D. Cancel

Answer: A, B

Explanation:
In the Policy Exceptions pane, select whether to reject or accept the Layer2 Security policy exceptions: Promiscuous Mode
- Reject - Placing a guest adapter in promiscuous mode has no effect on which frames are received by the adapter.
- Accept - Placing a guest adapter in promiscuous mode causes it to detect all frames passed on the vSwitch that are allowed under the VLAN policy for the port group that the adapter is connected to.

QUESTION 200:

ESX Server shapes traffic by establishing parameters for three outbound traffic characteristics: average bandwidth, burst size, and peak bandwidth. You can set values for which characteristics through the VI Client, establishing a traffic shaping policy for each uplink adapter?

A. Average Bandwidth
B. Maximum Bandwidth

C. Burst Size
D. Peak Bandwidth
E. Burst Average
F. Maximum Burst

Answer: A, C, D

Explanation:
Traffic Shaping Policy
ESX Server shapes traffic by establishing parameters for three outbound traffic characteristics: average bandwidth, burst size, and peak bandwidth. You can set values for these characteristics through the VI Client, establishing a traffic shaping policy for each uplink adapter.
Average Bandwidth establishes the number of bits per second to allow across the vSwitch averaged over time-the allowed average load.
Burst Size establishes the maximum number of bytes to allow in a burst. If a burst exceeds the burst size parameter, excess packets are queued for later transmission. If the queue is full, the packets are dropped. When you specify values for these two characteristics, you indicate what you expect the vSwitch to handle during normal operation.
Peak Bandwidth is the maximum bandwidth the vSwitch can absorb without dropping packets. If traffic exceeds the peak bandwidth you establish, excess packets are queued for later transmission after traffic on the connection has returned to the average and there are enough spare cycles to handle the queued packets. If the queue is full, the packets are dropped. Even if you have spare bandwidth because the connection has been idle, the peak bandwidth parameter limits transmission to no more than peak until traffic returns to the allowed average load.

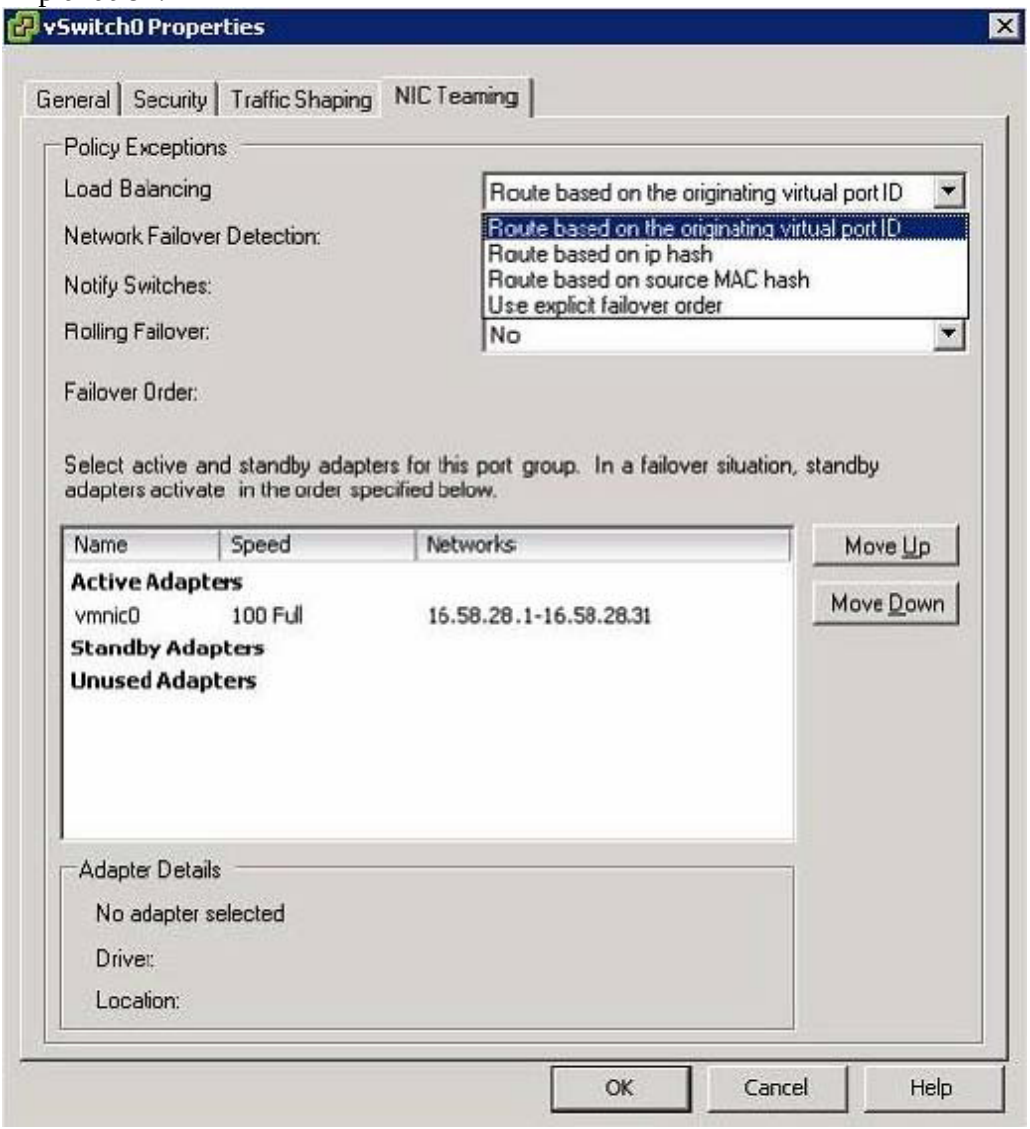
QUESTION 201:

In the Policy Exceptions pane: Load Balancing - What Options are available?
(Select all that apply)

A. Route based on the originating port ID
B. Route based on the destination port ID
C. Route based on ip hash
D. Route based on destination MAC hash
E. Route based on source MAC hash
F. Route based on source NIC hash
G. Use explicit failover order

Answer: A, C, E, G

Explanation:



QUESTION 202:

VLANs enable a single physical LAN segment to be further segmented so that groups of ports are isolated from one another as if they were on physically different segments. _____ is the standard.

A. 802.1Q
B. 801.2Q
C. 802.2Q
D. 801.1Q

Answer: A

Explanation:

VLANs enable a single physical LAN segment to be further segmented so that groups of ports are isolated from one another as if they were on physically different segments. 802.1Q is the standard.

QUESTION 203:

When two or more virtual machines are connected to the same vSwitch, network traffic between them is _____

A. routed externally
B. routed locally
C. not routed
D. routed internally

Answer: B

Explanation:
Before you can configure virtual machines to access a network, you must create at least one vSwitch. When two or more virtual machines are connected to the same vSwitch, network traffic between them is routed locally.
Reference: VI3 Server Configuration Guide, Page 24

QUESTION 204:

You need to enable two types of network services in ESX Server:

A. Connecting virtual machines to the physical network
B. Connecting VMkernel services to an internal only network
C. Connecting VMkernel services to the physical network
D. Connecting virtual machines to a vSwitch with no Physical NIC

Answer: AC

Explanation:
You need to enable two types of network services in ESX Server:
- Connecting virtual machines to the physical network
- Connecting VMkernel services (such as NFS, iSCSI, or VMotion) to the physical network
The service console, which runs the management services, is set up by default during the installation of ESX Server.

QUESTION 205:

Your _____ networking stack must be set up properly to accommodate VMotion.

A. Service Console
B. VMkernel
C. vSwitch
D. Port Group

Answer: B

Explanation:
Your VMkernel networking stack must be set up properly to accommodate VMotion.

QUESTION 206:

What are the network services provided by the VMKernel? (Select all that apply)

A. iSCSI
B. VMotion
C. NFS
D. SAN based
E. Local Storage

Answer: A, B, C

Explanation:
The network services provided by the VMkernel (iSCSI, NFS, and VMotion) use a TCP/IP stack in the VMkernel.

QUESTION 207:

Unlike other VMkernel services, _____ has a service console component, so networks that are used to reach iSCSI targets must be accessible to both service console and VMkernel TCP/IP stacks.

A. iSCSI
B. NFS
C. SAN
D. Local Disk Storage

Answer: A

Explanation:
Unlike other VMkernel services, iSCSI has a service console component, so networks that are used to reach iSCSI targets must be accessible to both service console and VMkernel TCP/IP stacks.

QUESTION 208:

The vSwitch policies consist of:

A. Layer 3 Security policy
B. Layer 2 Security policy
C. Failover policy
D. Traffic Shaping policy
E. Load Balancing policy
F. Load Balancing and Failover policy

Answer: B, D, F

Explanation:
The vSwitch policies consist of:
- Layer 2 Security policy
- Traffic Shaping policy
- Load Balancing and Failover policy

QUESTION 209:

What is the best way to eliminate single point of failure, even when binding multiple NICS?

A. Ensure the network adapters that are bound to multiple virtual switches originate from separate network switches to eliminate any single points of failure.
B. Ensure the network adapters that are bound to the virtual switch originate from a single network switche to eliminate any single points of failure.
C. Ensure the network adapters that are bound to the virtual switch originate from separate network switches to eliminate any single points of failure.

Answer: C

Explanation:
Ensure the network adapters that are bound to the virtual switch originate from separate network switches to eliminate any single points of failure.

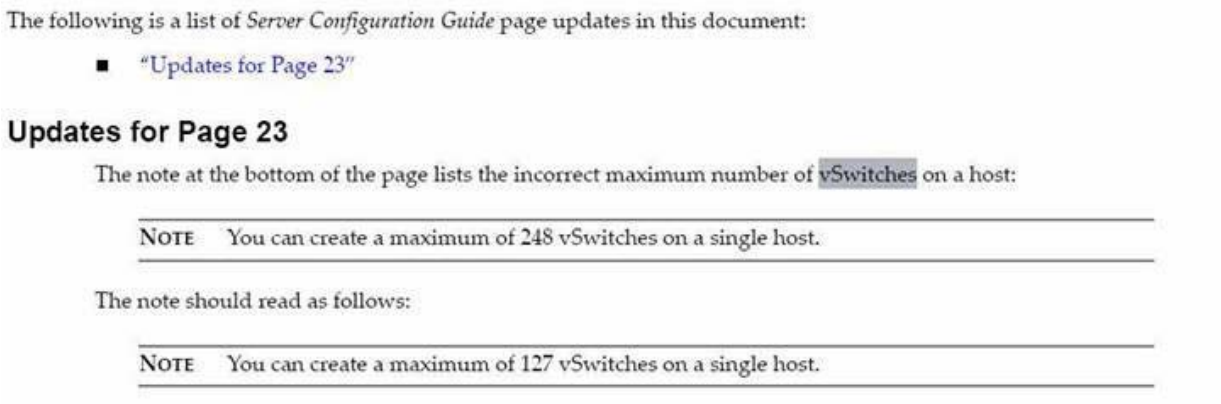
QUESTION 210:

What is the maximum number of vSwitches on a single host?

A. 256
B. 248
C. 284
D. 128
E. 127

Answer: E

Explanation:
You can create a maximum of 127 vSwitches on a single host.



The following is a list of *Server Configuration Guide* page updates in this document:

- "Updates for Page 23"

Updates for Page 23

The note at the bottom of the page lists the incorrect maximum number of vSwitches on a host:

NOTE You can create a maximum of 248 vSwitches on a single host.

The note should read as follows:

NOTE You can create a maximum of 127 vSwitches on a single host.

page 3 Configuration Maximums for VMware Infrastructure 3

QUESTION 211:

_____ helps prevent virtual machines from hoarding idle memory. The approach in ESX
Server ensures that a virtual machine from which idle memory has been reclaimed can ramp up
quickly to its full share-based allocation once it starts using its memory more actively.

A. Virtual Memory
B. Memory over-allocation
C. Memory tax
D. Memory Ballooning

Answer: C

Explanation:
Memory tax helps prevent virtual machines from hoarding idle memory. The approach in ESX
Server ensures that a virtual machine from which idle memory has been reclaimed can ramp up quickly to its full share-based allocation once it starts using its memory more actively.
page 132 Resource Management Guide

QUESTION 212:

ESX Server employs which two distinct techniques for dynamically expanding or contracting the amount of memory allocated to virtual machines:

A. A memory balloon driver

B. A RAM manager
C. Paging from a host to a server swap file
D. Paging from a virtual machine to a server swap file

Answer: A, D

Explanation:
ESX Server employs two distinct techniques for dynamically expanding or contracting the amount of memory allocated to virtual machines:
A memory balloon driver (vmmemct1), loaded into the guest operating system running in a virtual machine, part of the VMware Tools package
Paging from a virtual machine to a server swap file, without any involvement by the guest operating system
page 132 Resource Management Guide

QUESTION 213:

The balloon driver, also known as the _____ driver,

A. vmmemctl
B. vmmctl
C. vmmemcntl
D. vmmemtcl

Answer: A

Explanation:
The balloon driver, also known as the vmmemctl driver,
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QUESTION 214:

What are Shares?

A. Number of shares allocated to this virtual machine.
B. Amount of CPU or memory specified as reservation for this virtual machine. By default, no reservation is specified and 0 is displayed.
C. Shares specified for this virtual machine. Each virtual machine is entitled to resources in proportion to its specified shares, bounded by its reservation and limit. A virtual machine with twice as many shares as another is entitled to twice as many resources. Shares default to Normal.
D. Amount of CPU or memory specified as upper limit for this virtual machine. By default, no limit is specified and Unlimited is displayed.
E. Percentage of shares allocated to this virtual machine.
F. For resource pools, either Expandable or Fixed.

Answer: C

Explanation:
Shares - Shares specified for this virtual machine. Each virtual machine is entitled to resources in proportion to its specified shares, bounded by its reservation and limit. A virtual machine with twice as many shares as another is entitled to twice as many resources. Shares default to Normal.
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QUESTION 215:

What is the Shares Value?

A. Number of shares allocated to this virtual machine.
B. Amount of CPU or memory specified as reservation for this virtual machine. By default, no reservation is specified and 0 is displayed.
C. Shares specified for this virtual machine. Each virtual machine is entitled to resources in proportion to its specified shares, bounded by its reservation and limit. A virtual machine with twice as many shares as another is entitled to twice as many resources. Shares default to Normal.
D. Amount of CPU or memory specified as upper limit for this virtual machine. By default, no limit is specified and Unlimited is displayed.
E. Percentage of shares allocated to this virtual machine.
F. For resource pools, either Expandable or Fixed.

Answer: A

Explanation:
Shares Value - Number of shares allocated to this virtual machine.
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QUESTION 216:

What is the % Shares?

A. Number of shares allocated to this virtual machine.
B. Amount of CPU or memory specified as reservation for this virtual machine. By default, no reservation is specified and 0 is displayed.
C. Shares specified for this virtual machine. Each virtual machine is entitled to resources in proportion to its specified shares, bounded by its reservation and limit. A virtual machine with twice as many shares as another is entitled to twice as many resources. Shares default to Normal.
D. Amount of CPU or memory specified as upper limit for this virtual machine. By default, no limit is specified and Unlimited is displayed.
E. Percentage of shares allocated to this virtual machine.
F. For resource pools, either Expandable or Fixed.

Answer: E

Explanation:
% Shares - Percentage of shares allocated to this virtual machine.
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QUESTION 217:

What is "type"?

A. Number of shares allocated to this virtual machine.
B. Amount of CPU or memory specified as reservation for this virtual machine. By default, no reservation is specified and 0 is displayed.
C. Shares specified for this virtual machine. Each virtual machine is entitled to resources in proportion to its specified shares, bounded by its reservation and limit. A virtual machine with twice as many shares as another is entitled to twice as many resources. Shares default to Normal.
D. Amount of CPU or memory specified as upper limit for this virtual machine. By default, no limit is specified and Unlimited is displayed.
E. Percentage of shares allocated to this virtual machine.
F. For resource pools, either Expandable or Fixed.

Answer: F

Explanation:
Type - For resource pools, either Expandable or Fixed.
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QUESTION 218:

Shares specify the _____ or importance of a virtual machine.

A. relative priority
B. RAM shares
C. actual priority
D. dedication

Answer: A

Explanation:
Shares specify the relative priority or importance of a virtual machine.
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QUESTION 219:

Shares are typically specified as high, normal, or low. High, normal, and low specify share values with a __:__:__ ratio.

A. 4:2:1
B. 3:2:1
C. 1:2:4
D. 8:4:2

Answer: A

Explanation:
Shares are typically specified as high, normal, or low. High, normal, and low specify share values with a 4:2:1 ratio.
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QUESTION 220:

By default, you can choose high, normal, and low. High means twice as many shares as normal, and normal means twice as many shares as low.
Share values default to:

A. High . 2000 shares per virtual CPU, 20 shares per MB of virtual machine memory.
B. Low . 1000 shares per virtual CPU, 5 shares per MB of virtual machine memory
C. Normal . 1000 shares per virtual CPU, 10 shares per MB of virtual machine memory
D. High . 1000 shares per virtual CPU, 10 shares per MB of virtual machine memory.
E. Low . 500 shares per virtual CPU, 5 shares per MB of virtual machine memory
F. Normal . 1000 shares per virtual CPU, 20 shares per MB of virtual machine memory

Answer: A, C, E

Explanation:
By default, you can choose high, normal, and low. High means twice as many shares as normal, and normal means twice as many shares as low.
Share values default to:
- High . 2000 shares per virtual CPU, 20 shares per MB of virtual machine memory.
NOTE In many cases, it makes sense to use the default settings.
- Normal . 1000 shares per virtual CPU, 10 shares per MB of virtual machine memory
- Low . 500 shares per virtual CPU, 5 shares per MB of virtual machine memory
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QUESTION 221:

Reservation specifies the _____ for a virtual machine

A. normal reservation
B. absolute reservation

C. guaranteed reservation
D. relative reservation

Answer: C

Explanation:
Reservation specifies the guaranteed reservation for a virtual machine
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QUESTION 222:

Limit specifies the _____ for CPU or memory for a virtual machine.

A. absolute limit
B. relative limit
C. upper limit
D. lower limit

Answer: C

Explanation:
Limit specifies the upper limit for CPU or memory for a virtual machine. A server can allocate more than the reservation to a virtual machine, but never allocates more than the limit. The limit is expressed in concrete units (MHz or MB).
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QUESTION 223:

When you power on a virtual machine, the system checks the amount of CPU and memory resources that have not yet been reserved. Based on the available unreserved resources, the system determines whether it can guarantee the reservation for which the virtual machine has been configured (if any). This process is called _____.

A. overuse
B. over allocate
C. resource control
D. admission control

Answer: D

Explanation:
When you power on a virtual machine, the system checks the amount of CPU and memory resources that have not yet been reserved. Based on the available unreserved resources, the system determines whether it can guarantee the reservation for which the

virtual machine has been configured (if any). This process is called admission control.
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QUESTION 224:

Which of the following are Resource Pool attributes? (Select all that apply.)

A. CPU Shares
B. Memory Shares
C. Memory Max
D. Reservation
E. RAM
F. Expandable reservation
G. Limit

Answer: A, B, D, F, G

Explanation:
CPU Shares
Memory Shares
Allows you to specify the shares for this resource pool. The basic principles are the same as for virtual machines, discussed in .Shares.
Reservation
Displays the amount of CPU or memory the host reserves for this resource pool. Defaults to 0.
A non-zero reservation is subtracted from the unreserved resources of the parent (host or resource pool). The resources are considered reserved, regardless of whether virtual machines are associated with the resource pool.
Expandable reservation
If this check box is selected (the default), and if the resource pool needs to make a reservation that is higher than its own reservation (for example, to power on a virtual machine), then the resource pool can use resources of a parent and reserve those resources.
Limit
Displays the upper limit on the CPU or memory that the host allocates to the selected resource pool. Default is unlimited. This default avoids wasting idle resources. Deselect the Unlimited check box to specify a different limit. Resource pool limits are useful, for example, if you want to assign a certain amount of resources to a group administrator. The group administrator can then create virtual machines for the group as needed, but never use more resources than specified by the limit.
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QUESTION 225:

HA can support a maximum of __ concurrent host failures.

A. 4
B. 8
C. 10
D. 6

Answer: A

Explanation:
HA can support a maximum of 4 concurrent host failures.
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QUESTION 226:

Each virtual machine consumes a portion of the CPU, memory, network bandwidth, and storage resources of the ESX Server host. The host guarantees each virtual machine
Its share of the underlying hardware resources based on a number of factors:

A. Available resources for the virtual machine
B. Available resources for the ESX Server host (or the cluster).
C. Reservation, limit, or shares of the ESX Server host
D. Reservation, limit, or shares of the virtual machine
E. Number of virtual machines powered on, and resource utilization by those virtual machines.
F. Amount of memory
G. Overhead required to manage the virtualization.
H. Reservation, limit, and shares the administrator assigned to the resource pools in the resource pool hierarchy.

Answer: B, D, E, G, H

Explanation:
Each virtual machine consumes a portion of the CPU, memory, network bandwidth, and storage resources of the ESX Server host. The host guarantees each virtual machine
Its share of the underlying hardware resources based on a number of factors:
- Available resources for the ESX Server host (or the cluster).
- Reservation, limit, or shares of the virtual machine. These attributes of a virtual machine have default values that you can change to customize resource allocation.
- Number of virtual machines powered on, and resource utilization by those virtual machines.
- Reservation, limit, and shares the administrator assigned to the resource pools in the resource pool hierarchy.
- Overhead required to manage the virtualization.
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QUESTION 227:

The server manages network and disk resources on a _____ basis.

A. per-host
B. per-virtual machine
C. per-nic
D. per-cluster

Answer: A

Explanation:
The server manages network and disk resources on a per-host basis.
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QUESTION 228:

Click the _____ icon to selectively reveal secondary and tertiary information.

A. blue speech
B. red speech
C. red alert
D. blue alert

Answer: A

Explanation:
Click the blue speech icon to selectively reveal secondary and tertiary information.

QUESTION 229:

Memory used by the ESX Server system.
ESX Server 3.X uses at least _____ of system memory for the VMkernel, plus additional memory for device drivers. This memory is allocated automatically when the ESX Server is loaded and is not configurable.

A. 50MB
B. 5G
C. 24MB
D. 500MB

Answer: A

Explanation:
Memory used by the ESX Server system.

ESX Server 3.X uses at least 50MB of system memory for the VMkernel, plus additional memory for device drivers. This memory is allocated automatically when the ESX Server is loaded and is not configurable.
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QUESTION 230:

Memory tax helps prevent virtual machines from hoarding idle memory. The default tax rate is __ percent, that is, an idle page costs as much as four active pages.

A. 25
B. 75
C. 26
D. 50

Answer: B

Explanation:
Memory tax helps prevent virtual machines from hoarding idle memory. The default tax rate is 75 percent, that is, an idle page costs as much as four active pages.
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QUESTION 231:

For optimum performance, ESX Server hosts use the _____ approach (implemented by the vmmemctl driver) whenever possible.

A. reclaiming
B. swapping
C. ballooning
D. memory

Answer: C

Explanation:
For optimum performance, ESX Server hosts use the ballooning approach (implemented by the vmmemctl driver) whenever possible. Swapping is a reliable mechanism of last resort that a host uses only when necessary to reclaim memory.
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QUESTION 232:

You can use the _____ and _____ advanced settings to control the rate at which the system scans memory to identify opportunities for sharing memory.

A. Mem.ShareScanVM and Mem.ShareScanAverageTotal
B. Mem.ShareScanVM and Mem.ShareScanTotal
C. Mem.ScanVM and Mem.ShareScanTotal
D. Mem.ShareScanVM and Mem.ScanTotal
E. Mem.ShareScanTime and Mem.ShareScanGHz

Answer: E

Explanation:
You can use the Mem.ShareScanTime and Mem.ShareScanGHz advanced settings to control the rate at which the system scans memory to identify opportunities for sharing memory.
Ref: RESOURCE MANAGEMENT GUIDE FOR ESX 3.5 and VC 2.5

QUESTION 233:

Mem.CtlMaxPercent (Select Appropriate definition)

A. Limits the maximum amount of memory that can be reclaimed from any virtual machine using vmmemctl,based on a percentage of its configured memory size. Specifying 0 disables reclamation via vmmemctl for all virtual machines. Default is 65
B. Specifies the total system-wide rate at which memory should be scanned for transparent page sharing opportunities. The rate is specified as the number of pages to scan per second. Defaults to 200 pages/sec. Default is 200
C. Controls the rate at which the system scans memory to identify opportunities for sharing memory. Units are pages per second. Default 50
D. Specifies the idle memory tax rate, as a percentage. This tax effectively charges virtual machines more for idle memory than for memory they are actively using. A tax rate of 0 percent defines an allocation policy that ignores working sets and allocates memory strictly based on shares. A high tax rate results in an allocation policy that allows idle memory to be reallocated away from virtual machines that are unproductively hoarding it. Default 75
E. Specifies the periodic time interval, measured in seconds of the virtual machine's execution time, over which memory activity is monitored to estimate working set sizes. Default 60
F. Specifies the periodic time interval, in seconds, for automatic memory reallocations. Reallocations are also triggered by significant changes in the amount of free memory. Default 15

Answer: A

Explanation:
Mem.CtlMaxPercent
Limits the maximum amount of memory that can be reclaimed from any virtual machine using vmmemctl,based on a percentage of its configured memory size. Specifying 0

disables reclamation via vmmemctl for all virtual machines. Default 65
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QUESTION 234:

Mem.ShareScanTotal (Select Appropriate definition)

A. Limits the maximum amount of memory that can be reclaimed from any virtual machine using vmmemctl,based on a percentage of its configured memory size. Specifying 0 disables reclamation via vmmemctl for all virtual machines. Default is 65
B. Specifies the total system-wide rate at which memory should be scanned for transparent page sharing opportunities. The rate is specified as the number of pages to scan per second. Defaults to 200 pages/sec. Default is 200
C. Controls the rate at which the system scans memory to identify opportunities for sharing memory. Units are pages per second. Default 50
D. Specifies the idle memory tax rate, as a percentage. This tax effectively charges virtual machines more for idle memory than for memory they are actively using. A tax rate of 0 percent defines an allocation policy that ignores working sets and allocates memory strictly based on shares. A high tax rate results in an allocation policy that allows idle memory to be reallocated away from virtual machines that are unproductively hoarding it. Default 75
E. Specifies the periodic time interval, measured in seconds of the virtual machine's execution time, over which memory activity is monitored to estimate working set sizes. Default 60
F. Specifies the periodic time interval, in seconds, for automatic memory reallocations. Reallocations are also triggered by significant changes in the amount of free memory. Default 15

Answer: B

Explanation:
Mem.ShareScanTotal
Specifies the total system-wide rate at which memory should be scanned for transparent page sharing opportunities. The rate is specified as the number of pages to scan per second. Defaults to 200 pages/sec. Default 200
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QUESTION 235:

Mem.ShareScanVM (Select Appropriate definition)

A. Limits the maximum amount of memory that can be reclaimed from any virtual machine using vmmemctl,based on a percentage of its configured memory size. Specifying 0 disables reclamation via vmmemctl for all virtual machines. Default is 65
B. Specifies the total system-wide rate at which memory should be scanned for transparent page sharing opportunities. The rate is specified as the number of pages to

scan per second. Defaults to 200 pages/sec. Default is 200
C. Controls the rate at which the system scans memory to identify opportunities for sharing memory. Units are pages per second. Default 50
D. Specifies the idle memory tax rate, as a percentage. This tax effectively charges virtual machines more for idle memory than for memory they are actively using. A tax rate of 0 percent defines an allocation policy that ignores working sets and allocates memory strictly based on shares. A high tax rate results in an allocation policy that allows idle memory to be reallocated away from virtual machines that are unproductively hoarding it. Default 75
E. Specifies the periodic time interval, measured in seconds of the virtual machine's execution time, over which memory activity is monitored to estimate working set sizes. Default 60
F. Specifies the periodic time interval, in seconds, for automatic memory reallocations. Reallocations are also triggered by significant changes in the amount of free memory. Default 15

Answer: C

Explanation:
Mem.ShareScanVM
Controls the rate at which the system scans memory to identify opportunities for sharing memory. Units are pages per second. Default 50
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QUESTION 236:

Mem.IdleTax (Select Appropriate definition)

A. Limits the maximum amount of memory that can be reclaimed from any virtual machine using vmmemctl,based on a percentage of its configured memory size. Specifying 0 disables reclamation via vmmemctl for all virtual machines. Default is 65
B. Specifies the total system-wide rate at which memory should be scanned for transparent page sharing opportunities. The rate is specified as the number of pages to scan per second. Defaults to 200 pages/sec. Default is 200
C. Controls the rate at which the system scans memory to identify opportunities for sharing memory. Units are pages per second. Default 50
D. Specifies the idle memory tax rate, as a percentage. This tax effectively charges virtual machines more for idle memory than for memory they are actively using. A tax rate of 0 percent defines an allocation policy that ignores working sets and allocates memory strictly based on shares. A high tax rate results in an allocation policy that allows idle memory to be reallocated away from virtual machines that are unproductively hoarding it. Default 75
E. Specifies the periodic time interval, measured in seconds of the virtual machine's execution time, over which memory activity is monitored to estimate working set sizes. Default 60
F. Specifies the periodic time interval, in seconds, for automatic memory reallocations.

Reallocations are also triggered by significant changes in the amount of free memory. Default 15

Answer: D

Explanation:
Mem.IdleTax
Specifies the idle memory tax rate, as a percentage. This tax effectively charges virtual machines more for idle memory than for memory they are actively using. A tax rate of 0 percent defines an allocation policy that ignores working sets and allocates memory strictly based on shares. A high tax rate results in an allocation policy that allows idle memory to be reallocated away from virtual machines that are unproductively hoarding it. Default 75
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QUESTION 237:

Mem.SamplePeriod (Select Appropriate definition)

A. Limits the maximum amount of memory that can be reclaimed from any virtual machine using vmmemctl,based on a percentage of its configured memory size. Specifying 0 disables reclamation via vmmemctl for all virtual machines. Default is 65
B. Specifies the total system-wide rate at which memory should be scanned for transparent page sharing opportunities. The rate is specified as the number of pages to scan per second. Defaults to 200 pages/sec. Default is 200
C. Controls the rate at which the system scans memory to identify opportunities for sharing memory. Units are pages per second. Default 50
D. Specifies the idle memory tax rate, as a percentage. This tax effectively charges virtual machines more for idle memory than for memory they are actively using. A tax rate of 0 percent defines an allocation policy that ignores working sets and allocates memory strictly based on shares. A high tax rate results in an allocation policy that allows idle memory to be reallocated away from virtual machines that are unproductively hoarding it. Default 75
E. Specifies the periodic time interval, measured in seconds of the virtual machine's execution time, over which memory activity is monitored to estimate working set sizes. Default 60
F. Specifies the periodic time interval, in seconds, for automatic memory reallocations. Reallocations are also triggered by significant changes in the amount of free memory. Default 15

Answer: E

Explanation:
Mem.SamplePeriod
Specifies the periodic time interval, measured in seconds of the virtual machine's execution time, over which memory activity is monitored to estimate working set sizes.

Default 60
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QUESTION 238:

Mem.BalancePeriod (Select Appropriate definition)

A. Limits the maximum amount of memory that can be reclaimed from any virtual machine using vmmemctl,based on a percentage of its configured memory size. Specifying 0 disables reclamation via vmmemctl for all virtual machines. Default is 65
B. Specifies the total system-wide rate at which memory should be scanned for transparent page sharing opportunities. The rate is specified as the number of pages to scan per second. Defaults to 200 pages/sec. Default is 200
C. Controls the rate at which the system scans memory to identify opportunities for sharing memory. Units are pages per second. Default 50
D. Specifies the idle memory tax rate, as a percentage. This tax effectively charges virtual machines more for idle memory than for memory they are actively using. A tax rate of 0 percent defines an allocation policy that ignores working sets and allocates memory strictly based on shares. A high tax rate results in an allocation policy that allows idle memory to be reallocated away from virtual machines that are unproductively hoarding it. Default 75
E. Specifies the periodic time interval, measured in seconds of the virtual machine's execution time, over which memory activity is monitored to estimate working set sizes. Default 60
F. Specifies the periodic time interval, in seconds, for automatic memory reallocations. Reallocations are also triggered by significant changes in the amount of free memory. Default 15

Answer: F

Explanation:
Mem.BalancePeriod
Specifies the periodic time interval, in seconds, for automatic memory reallocations. Reallocations are also triggered by significant changes in the amount of free memory. Default 15
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QUESTION 239:

Using resource pools can result in the following benefits:

A. Rigid hierarchical organization
B. Flexible hierarchical organization
C. Limited Access control and delegation
D. Isolation between pools, sharing within pools
E. Access control and delegation

F. Separation of resources from hardware
G. Integration of resources from hardware
H. Management of sets of virtual machines running a multi-tier service

Answer: B, D, E, F, H

Explanation:
Using resource pools can result in the following benefits:
- Flexible hierarchical organization. You can add, remove, or reorganize resource pools or change resource allocations as needed.
- Isolation between pools, sharing within pools . Top-level administrators can make a pool of resources available to a department-level administrator. Allocation changes that are internal to one departmental resource pool do not unfairly affect other unrelated resource pools.
- Access control and delegation. When a top-level administrator makes a resource pool available to a department-level administrator, that administrator can then perform all virtual machine creation and management within the boundaries of the resources to which the resource pool is entitled by the current shares,
reservation, and limit settings. Delegation is usually done in conjunction with permissions settings, which are discussed in the Introduction to Virtual Infrastructure.
- Separation of resources from hardware. If you are using clusters enabled for DRS, the resources of all hosts are always assigned to the cluster. That means administrators can perform resource management independently of the actual hosts that contribute the resources. If you replace three 2GB hosts with two 3GB hosts, you don't need to make changes to your resource allocations. This separation allows administrators to think more about aggregate computing capacity and less about individual hosts.
- Management of sets of virtual machines running a multi-tier service. You don't need to set resources on each virtual machine. Instead, you can control the aggregate allocation of resources to the set of virtual machines by changing settings on their enclosing resource pool.
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QUESTION 240:

If the reservation type is _____, the system checks that the resource pool has sufficient unreserved resources. If it does, the action can be performed. If it does not, a message appears and the action cannot be performed.

A. Fixed
B. Expandable

Answer: A

Explanation:
If the reservation type is Fixed, the system checks that the resource pool has sufficient unreserved resources. If it does, the action can be performed. If it does not, a message

appears and the action cannot be performed.
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QUESTION 241:

If the reservation type is _____, the system first checks that the resource pool has sufficient resources to fulfill the requirements.

A. Fixed
B. Expandable

Answer: B

Explanation:
If the reservation type is Expandable, the system first checks that the resource pool has sufficient resources to fulfill the requirements.
- If there are sufficient resources, the action is performed.
- If there are not sufficient resources, the managing server checks whether resources are available in a parent resource pool (direct parent or ancestor). If they are, the action is performed and the parent resource pool resources are reserved. If no resources are available, a message appears and the action is not performed.
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QUESTION 242:

You need to be sure your guest operating systems have sufficient swap space. This swap space must be greater than or equal to the difference between the virtual machine's configured memory size and its _____.

A. own memory
B. RAM
C. disk size
D. reservation

Answer: D

Explanation:
You need to be sure your guest operating systems have sufficient swap space. This swap space must be greater than or equal to the difference between the virtual machine's configured memory size and its reservation.
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QUESTION 243:

What is Reservation, MHz/MB?

A. Number of shares allocated to this virtual machine.
B. Amount of CPU or memory specified as reservation for this virtual machine. By default, no reservation is specified and 0 is displayed.
C. Shares specified for this virtual machine. Each virtual machine is entitled to resources in proportion to its specified shares, bounded by its reservation and limit. A virtual machine with twice as many shares as another is entitled to twice as many resources. Shares default to Normal.
D. Amount of CPU or memory specified as upper limit for this virtual machine. By default, no limit is specified and Unlimited is displayed.
E. Percentage of shares allocated to this virtual machine.
F. For resource pools, either Expandable or Fixed.

Answer: B

Explanation:
Reservation . MHz/MB - Amount of CPU or memory specified as reservation for this virtual machine.
By default, no reservation is specified and 0 is displayed.
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QUESTION 244:

What is CPU Limit?

A. Number of shares allocated to this virtual machine.
B. Amount of CPU or memory specified as reservation for this virtual machine. By default, no reservation is specified and 0 is displayed.
C. Shares specified for this virtual machine. Each virtual machine is entitled to resources in proportion to its specified shares, bounded by its reservation and limit. A virtual machine with twice as many shares as another is entitled to twice as many resources. Shares default to Normal.
D. Amount of CPU or memory specified as upper limit for this virtual machine. By default, no limit is specified and Unlimited is displayed.
E. Percentage of shares allocated to this virtual machine.
F. For resource pools, either Expandable or Fixed.

Answer: D

Explanation:
Limit - Amount of CPU or memory specified as upper limit for this virtual machine.
By default, no limit is specified and Unlimited is displayed.
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QUESTION 245:

It is recommended that you disconnect all HBA's during installation?

A. True
B. False

Answer: A

Explanation:
True, Disconnect the HBAs during ESX Server installation when you install an ESX Server host connected to an existing SAN.
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QUESTION 246:

An ESX Server system has the following key components: (Select 3)

A. Virtual layer
B. Virtualization layer
C. User layer
D. Hardware interface components
E. User interface
F. Network layer

Answer: B, D, E

Explanation:
Virtualization layer. This layer provides the idealized hardware environment and virtualization of underlying physical resources to the virtual machines. It includes the Virtual Machine Monitor (VMM), which is responsible for virtualization, and VMkernel.
Hardware interface components . The virtual machine communicates with hardware such as CPU or disk using hardware interface components. These components include device drivers, which enable hardware-specific service delivery while hiding hardware differences from other parts of the system.
User interface. Administrators can view and manage ESX Server hosts and virtual machines in several ways.
A Virtual Infrastructure Client (VI Client) can connect directly to the ESX Server host. This is appropriate if your environment has only one host.
A VI Client can also connect to a VirtualCenter Management Server and interact with all ESX Server hosts managed by that VirtualCenter Server.
The VI Web Access Client allows you to perform many management tasks using a browser-based interface.
The service console command-line interface is used only rarely. Starting with ESX Server 3.X, the VI Client replaces the service console for most of the interactions. (Commands have changed since previous versions of ESX Server.)
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QUESTION 247:

This layer schedules both the service console running on the ESX Server host and the virtual machine operating systems.

A. Virtualization layer
B. Hardware interface components
C. Service Console layer
D. User interface

Answer: A

Explanation:
The virtualization layer schedules both the service console running on the ESX Server host and the virtual machine operating systems. The virtualization layer manages how the operating systems access physical resources. The VMkernel needs its own drivers to provide access to the physical devices. VMkernel drive are modified Linux drivers, even though the VMkernel is not a Linux variant.
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QUESTION 248:

In this layer the virtual machines communicates with hardware

A. Hardware Interface components
B. Virtualization layer
C. User Interface
D. ESX layer

Answer: A

Explanation:
Hardware interface components: The virtual machine communicates with hardware such as CPU or disk using hardware interface components. These components include device drivers, which enable hardware-specific service delivery while hiding hardware differences from other parts of the system.
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QUESTION 249:

This layer provides the idealized hardware environment and virtualization of underlying physical resources to the virtual machines. It includes the Virtual Machine Monitor (VMM), which is responsible for virtualization, and VMkernel.

A. User interface
B. Virtualization layer

C. Hardware interface components
D. Virtual Interface layer

Answer: B

Explanation:
This layer provides the idealized hardware environment and virtualization of underlying physical resources to the virtual machines. It includes the Virtual Machine Monitor (VMM), which is responsible for virtualization, and VMkernel.
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QUESTION 250:

CPU Virtualization - Each virtual machine appears to run on its own CPU (or a set of CPUs), fully isolated from other virtual machines. Registers, the translation lookaside buffer, and other control structures are maintained separately for each virtual machine. (True or False)

A. False
B. True

Answer: B

Explanation:
CPU Virtualization - Each virtual machine appears to run on its own CPU (or a set of CPUs), fully isolated from other virtual machines. Registers, the translation lookaside buffer, and other control structures are maintained separately for each virtual machine.
page 16 SAN Configuration Guide

QUESTION 251:

Memory Virtualization offers a contiguous memory space is visible to each virtual machine, as well as contiguous physical memory. (True or False)

A. False
B. True

Answer: A

Explanation:
Memory Virtualization - A contiguous memory space is visible to each virtual machine. However, the allocated physical memory might not be contiguous.
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QUESTION 252:

The _____ layer guarantees that each virtual machine is isolated from other virtual machines. Virtual machines can talk to each other only through networking mechanisms similar to those used to connect separate physical machines.

A. Virtualization
B. Networking
C. User interface
D. Hardware interface components

Answer: A

Explanation:
Network Virtualization: The virtualization layer guarantees that each virtual machine is isolated from other virtual machines. Virtual machines can talk to each other only through networking mechanisms similar to those used to connect separate physical machines.
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QUESTION 253:

What the only two types of SCSI controllers? (Select two)

A. LSS Logic
B. Buslogic
C. Busram
D. LSI Logic

Answer: B, D

Explanation:
In an ESX Server environment, each virtual machine includes from one to four virtual SCSI HBAs (host bus adapters). These virtual adapters may appear as either Buslogic or LSI Logic SCSI controllers. They are the only types of SCSI controllers that are accessible by a virtual machine.
page 20 SAN Configuration Guide

QUESTION 254:

Although all SCSI devices are presented as SCSI targets, what are the three physical implementation alternatives?

A. Device mapping locally
B. Virtual machine .vmdk file stored on a VMFS volume
C. Local SCSI device passed through directly to the virtual machine
D. Device mapping to a SAN LUN

Answer: B, C, D

Explanation:
1.) Virtual machine .vmdk file stored on a VMFS volume. See .Virtual Machine File System (VMFS).
2.) Device mapping to a SAN LUN (logical unit number). See .Raw Device Mapping.
3.) Local SCSI device passed through directly to the virtual machine (for example, a local tape drive).
page 21 SAN Configuration Guide

QUESTION 255:

In a simple configuration, the virtual machines. disks are stored as files within a VMFS. When guest operating systems issue SCSI commands to their virtual disks, the _____ layer translates these commands to VMFS file operations.

A. Hardware interface components
B. Virtualization
C. User interface
D. Service Console layer

Answer: B

Explanation:
In a simple configuration, the virtual machines, disks are stored as files within a VMFS. When guest operating systems issue SCSI commands to their virtual disks, the virtualization layer translates these commands to VMFS file operations.
page 22 SAN Configuration Guide

QUESTION 256:

ESX Server systems use VMFS to store virtual machine files. To minimize disk I/O overhead, VMFS has been optimized to run multiple virtual machines as one workload.
VMFS also provides _____ _____ for your virtual machine files, so that your virtual machines can operate safely in a SAN environment where multiple ESX Server
hosts share a set of LUNs.

A. distributed locking
B. file sharing
C. distributed sharing
D. distributed files

Answer: A

Explanation:
ESX Server systems use VMFS to store virtual machine files. To minimize disk I/O overhead, VMFS has been optimized to run multiple virtual machines as one workload. VMFS also provides distributed locking for your virtual machine files, so that your virtual machines can operate safely in a SAN environment where multiple ESX Server hosts share a set of LUNs.
page 22 SAN Configuration Guide

QUESTION 257:

VMFS is first configured as part of the ESX Server installation. When you create a new VMFS-3 volume, it must be _____ or larger

A. 300MB
B. 1GB
C. 1200MB
D. 650MB

Answer: C

Explanation:
VMFS is first configured as part of the ESX Server installation. When you create a new VMFS-3 volume, it must be 1200MB or larger. See the Installation and Upgrade Guide. It can then be customized, as discussed in the Server Configuration Guide.
p.15 vmware esx san config guide esx3.5

QUESTION 258:

A VMFS volume can be extended over __ physical storage extents, including SAN LUNs and local storage.

A. 32
B. 64
C. 12
D. 24

Answer: A

Explanation:
A VMFS volume can be extended over 32 physical storage extents, including SAN LUNs and local storage. This allows pooling of storage and flexibility in creating the storage volume necessary for your virtual machine. With the new ESX3 Logical Volume Manager (LVM), you can extend a volume while virtual machines are running on the volume. This lets you add new space to your VMFS volumes as your virtual machine needs it.
page 22 SAN Configuration Guide

QUESTION 259:

A Raw Device Mapping (RDM) is a special file in a VMFS volume that acts as a _____ for a raw device.

A. firewall
B. proxy
C. server
D. gateway

Answer: B

Explanation:
A Raw Device Mapping (RDM) is a special file in a VMFS volume that acts as a proxy for a raw device. The RDM provides some of the advantages of a virtual disk in the VMFS file system while keeping some advantages of direct access to physical devices.
page 22 SAN Configuration Guide

QUESTION 260:

_____ might be required if you use Microsoft Cluster Service (MSCS) or if you run SAN snapshot or other layered applications in the virtual machine.

A. RDM (Raw Device Mapping)
B. VMFS-2
C. VMFS-3
D. Disk Sharing

Answer: A

Explanation:
RDM might be required if you use Microsoft Cluster Service (MSCS) or if you run SAN snapshot or other layered applications in the virtual machine. RDMs better enable systems to use the hardware features inherent to SAN arrays.
page 22 SAN Configuration Guide

QUESTION 261:

The following ESX Server management processes and services run in the service console: (Select all that apply)

A. hostd
B. https
C. vmauthd
D. net-snmpd

E. ccagent

Answer: A, C, D

Explanation:
- Host daemon (hostd) . Performs actions in the service console on behalf of the service console and the VI Client.
- Authentication daemon (vmauthd) . Authenticates remote users of the VI Client and remote consoles using the user name and password database. Any other authentication store that can be accessed using the service console.s Pluggable Authentication Module (PAM) capabilities can also be used. Having multiple
password storage mechanisms permits the use of passwords from a Windows domain controller, LDAP or RADIUS server, or similar central authentication store in conjunction with VMware ESX Server for remote access.
- SNMP server (net-snmpd) . Implements the SNMP traps and data structures that an administrator can use to integrate an ESX Server system into an SNMP-based system-management tool.

QUESTION 262:

When transferring data between the host server and storage, the SAN uses a _____ technique. Multipathing allows you to have more than one physical path from the ESX Server host to a LUN on a storage array.

A. multipathing
B. multiplexing
C. singlepathing
D. single path

Answer: A

Explanation:
When transferring data between the host server and storage, the SAN uses a multipathing technique. Multipathing allows you to have more than one physical path from the ESX Server host to a LUN on a storage array.
page 22 SAN Configuration Guide

QUESTION 263:

VMkernel controls and manages most of the physical resources on the hardware, including:

A. RAM
B. Memory
C. Disk Space
D. Physical processors

E. Storage controllers
F. Networking
G. Keyboard, video, and mouse
H. iSCSI

Answer: B, D, E, F, G

Explanation:
VMkernel controls and manages most of the physical resources on the hardware, including:
Memory
Physical processors
Storage controllers
Networking
Keyboard, video, and mouse
page 36-37 Resource Management Guide

QUESTION 264:

The _____ is the component actually responsible for virtualizing the CPUs.

A. hardware layer
B. virtual machine monitor
C. user interface layer
D. service console

Answer: B

Explanation:
The virtual machine monitor is the component actually responsible for virtualizing the CPUs.
page 37 Resource Management Guide

QUESTION 265:

Can you boot ESX from a shared LUN?

A. Yes
B. No

Answer: B

Explanation:
If you want an ESX Server host to boot from a SAN, allocate an entire LUN to each ESX Server host.

See the SAN Configuration Guide for more information on configuring an ESX Server host to boot from a SAN.
ESX Server software does not support booting from a shared LUN. If you install ESX Server software onto a shared LUN, you might overwrite the data on the shared LUN.

QUESTION 266:

ESX Server requires a computer with the following specifications:

A. At least 640 KB of RAM
B. At least two processors of one of the following types: 1500MHz Intel Xeon and later, or AMD Opteron (32-bit mode) or AMD A64 x2 dual-core processors
C. At least two processors of one of the following types: 1100MHz Intel Xeon and later, or AMD Opteron (32-bit mode) or AMD A64 x2 dual-core processors
D. 500MB RAM minimum
E. 1GB RAM minimum
F. One or more Ethernet controllers
G. A SCSI disk, Fibre Channel LUN, or RAID LUN with unpartitioned space
H. Local Storage

Answer: B, E, F, G

Explanation:
ESX Server Requirements
ESX Server requires a computer with the following specifications:
At least two processors of one of the following types:
1500MHz Intel Xeon and later, or AMD Opteron (32-bit mode)
1500MHz Intel Viiv or AMD A64 x dual-core processors
1GB RAM minimum
One or more Ethernet controllers
A SCSI disk, Fibre Channel LUN, or RAID LUN with unpartitioned space
page 25 Installation and Upgrade Guide

QUESTION 267:

Although ESX Server supports up to 256 LUNs for operation, the installer supports a maximum of _____ iSCSI or SAN LUNs.

A. 128
B. 64
C. 32
D. 256

Answer: A

Explanation:

LUN Requirements
Although ESX Server supports up to 256 LUNs for operation, the installer supports a maximum of 128 iSCSI or SAN LUNs. If you have more than 128 LUNs, connect them after the installation is complete.
page 76 Installation and Upgrade Guide

QUESTION 268:

Before you consider how to set up your system for boot from SAN, you need to decide whether it makes sense for your environment.
Use boot from SAN: (Select all the apply)

A. If you don't want to handle maintenance of local storage.
B. If you want to handle maintenance of local storage.
C. If you need easy cloning of service consoles.
D. If you have a enough SAN space
E. In diskless hardware configurations, such as on some blade systems.

Answer: A, C, E

Explanation:
Before you consider how to set up your system for boot from SAN, you need to decide whether it makes sense for your environment.
Use boot from SAN:
- If you don't want to handle maintenance of local storage.
- If you need easy cloning of service consoles.
- In diskless hardware configurations, such as on some blade systems.
page 72 SAN Configuration Guide

QUESTION 269:

Do not use boot from SAN: (Select all that apply)

A. If you are using Microsoft Cluster Service.
B. If there is a risk of I/O contention between the service console and VMkernel.
C. If you are using RDM
D. Are running multiple ESX hosts

Answer: A, B

Explanation:
Do not use boot from SAN:
- If you are using Microsoft Cluster Service.
- If there is a risk of I/O contention between the service console and VMkernel.
NOTE With ESX Server 2.5, you could not use boot from SAN together with RDM.

With ESX Server 3.X, this restriction has been removed.
page 72 SAN Configuration Guide

QUESTION 270:

Booting from a SAN provides numerous benefits, including:

A. Cheaper servers
B. Easier server replacement
C. Less wasted space.
D. Less overhead
E. Easier backup processes
F. Improved management
G. Improved stability

Answer: A, B, C, E, F

Explanation:
Booting from a SAN provides numerous benefits, including:
- Cheaper servers . Servers can be more dense and run cooler without internal storage.
- Easier server replacement . You can replace servers and have the new server point to the old boot location.
- Less wasted space.
- Easier backup processes . The system boot images in the SAN can be backed up as part of the overall SAN backup procedures.
- Improved management . Creating and managing the operating system image is easier and more efficient.
page 72 SAN Configuration Guide

QUESTION 271:

What is the Virtual Center Server Hardware requirement? (Select four.)

A. Any hardware platform
B. Standard x86-based computer
C. 500MHz processor minimum
D. 2.0GHz or faster Intel or AMD x86 processor
E. 2GB or more of RAM
F. 500MB RAM minimum (1GB or more recommended)
G. A minimum of 560MB disk storage (2GB recommended)

Answer: B, D, E, G

Explanation:
System Requirements > PC Hardware
- Windows 2000 Server SP4 with Update Rollup 1, Windows 2003, or Windows XP

Professional installed
- A minimum of 560MB disk storage (2GB recommended)
page 22 Installation and Upgrade Guide

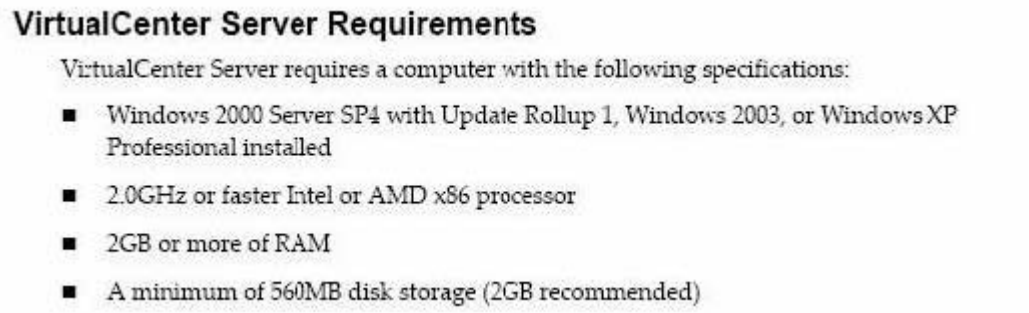
QUESTION 272:

Virtual Center > Operating Systems > Windows (Select all that apply)

A. Microsoft Windows 2003
B. Microsoft XP Home Edition
C. Windows XP Professional Service Pack 2
D. Microsoft Windows 2000 Professional Service Pack 4
E. Microsoft Windows 98
F. Microsoft Windows Vista

Answer: A, C

Explanation:



Reference http://www.vmware.com/pdf/vi3_301_201_quickstart.pdf Page 11
page 11 Quick Start Guide & page 22 Installation and Upgrade Guide
Not D: You can use Windows 2000 SP4 but you must also install "Rollup 1"

QUESTION 273:

To run VI Web Access, you must install the VMware Virtual Infrastructure plug-in.
To install VMware Virtual Infrastructure ActiveX Control in Microsoft Internet Explorer
- In the Internet Explorer window, type the VI Web Access URL:
_____

A. https://vmwarehost/ui
B. https://vmwarehost.yourdomain.com/ui
C. https://vmwarehost.yourdomain.com/mui
D. https://vmwarehost.yourdomain.com/

Answer: B

Explanation:
To run VI Web Access, you must install the VMware Virtual Infrastructure plug-in. To install VMware Virtual Infrastructure ActiveX Control in Microsoft Internet Explorer
- In the Internet Explorer window, type the VI Web Access URL:
https://vmwarehost.yourdomain.com/ui
page 18 Virtual Infrastructure Web Access Administrator's Guide

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QUESTION 274:

VirtualCenter 2.5 supports the following databases. (Select all that apply.)

A. Microsoft SQL Server 2005
B. Microsoft SQL Server 2000 (SP 4 only)
C. Microsoft SQL Server 2000 (SP 3 only)
D. Oracle 9iR2, 10gR1 (versions 10.1.0.3 and higher only), and 10gR2
E. Oracle 8i
F. Microsoft MSDE (not supported for production environments)

Answer: A, B, D

Explanation:
VirtualCenter Database Requirements
VirtualCenter supports the following databases:
- Microsoft SQL Server 2000 (SP 4 only)
- Oracle 9iR2, 10gR1 (versions 10.1.0.3 and higher only), and 10gR2
Each database requires some configuration adjustments in addition to the basic installation.
Microsoft MSDE was supported in previous versions of VirtualCenter, but it is no longer supported in VirtualCenter 2.5.
http://www.vmware.com/pdf//vi3_35/esx_3/r35/vi3_35_25_compat_matrix.pdf

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QUESTION 275:

You can run VMotion with a host-based license only?

A. True
B. False

Answer: B

Explanation:
VirtualCenter and features that require VirtualCenter, such as VMotion, must be licensed in license server-based mode.
page 15 Quick Start Guide

QUESTION 276:

What ports does VirtualCenter Server use to communicate with License Server?

A. 27000 and 27010
B. 900 and 902
C. 902 and 903
D. 27000 and 27001

Answer: A

Explanation:
VirtualCenter Server to License Server Ports 27000 and 27010 over TCP
page 29 Quick Start Guide

QUESTION 277:

Core Services are basic management services for a virtual datacenter. They include services such as:

A. Task Scheduler
B. VM Provisioning
C. Host and VM Configuration
D. VM resources
E. Resources and Virtual Machine Inventory Management
F. Statistics and Logging
G. Alarms and Event Management
H. Task Management

Answer: A, B, C, E, F, G

Explanation:
Core Services are basic management services for a virtual datacenter. They include services such as:
VM Provisioning - Guides and automates the provisioning of virtual machines
Host and VM Configuration - Allows the configuration of Hosts and Virtual machines
Resources and Virtual Machine Inventory Management - Organizes Virtual machines and resources in the virtual environment and facilities their management
Statistics and Logging - Logs and report on the performance and resources utilization statistics of datacenter elements, such as virtual machines, hosts, and clusters
Alarms and Event Management - Tracks and warns users on potential resouces over-utilization or event conditions.
Task Scheduler - Schedulers actions such as VMotion to happen at a given time
page 27 Introduction to VMware Infrastructure

QUESTION 278:

Distributed Services are solutions that extend VMware Infrastructure's capabilities to the next level such as VMware DRS, VMware HA, and VMware VMotion. Distributed Services allow the configuration and management of these solutions centrally from VirtualCenter Management Server.
VirtualCenter Server has four key interfaces. (Select four.)

A. Web interface
B. ESX Server management
C. VMware Infrastructure API
D. Database interface
E. Active Directory interface

Answer: B, C, D, E

Explanation:
Distributed Services are solutions that extend VMware Infrastructure's capabilities to the next level such as VMware DRS, VMware HA, and VMware VMotion. Distributed Services allow the configuration and management of these solutions centrally from VirtualCenter Management Server.
VirtualCenter Server has four key interfaces:
ESX Server management - Interfaces with the VirtualCenter agent to manage each physical server in the datacenter.
VMware Infrastructure API - Interfaces with VMware management clients and third-party solutions.
Database interface - Connects to Oracle or Microsoft SQL Server to store information, such as virtual machine configurations, host configurations, resources and virtual machine inventory, performance statistics, events, alarms, user permissions, and roles.
Active Directory interface - Connects to Active Directory to obtain user access control information.
page 27 Introduction to VMware Infrastructure

QUESTION 279:

Virtual Infrastructure Client Hardware Requirements:

A. Processor - 166MHz or higher Intel or AMD x86 processor (500MHz recommended).
B. Processor - 266MHz or higher Intel or AMD x86 processor (500MHz recommended).
C. Memory - 256MB RAM minimum, 512MB recommended
D. Memory - 128MB RAM minimum, 512MB recommended
E. Disk Storage - 150MB free disk space required for basic installation.
F. Networking - 10/100 Ethernet adapter (Gigabit recommended).
G. CD Rom

Answer: B, C, E, F

Explanation:
Virtual Infrastructure Client Hardware Requirements
Processor - 266MHz or higher Intel or AMD x86 processor (500MHz recommended).
Memory - 256MB RAM minimum, 512MB recommended.
Disk Storage - 150MB free disk space requird for basic installation. You must have 55MB free on the destination drive for installation of the program, and you must have 100MB free on the drive containing your %temp% directory.
Networking - 10/100 Ethernet adapter (Gigabit recommended).
page 12 Quick Start Guide

QUESTION 280:

VirtualCenter Web Access Browser Requirements
The Web Access client is designed for these browsers:

A. Windows - Netscape Navigator 7.0 or later, Mozilla 1.x, Firefox 1.0.7 and higher.
B. Windows - Internet Explorer 6.0 or higher, Netscape Navigator 7.0, Mozilla 1.X, Firefox 1.0.7 and higher.
C. Linux - Netscape Navigator 7.0 or later, Mozilla 1.x, Firefox 1.0.7 and higher.
D. Linux - Internet Explorer 6.0 or higher, Netscape Navigator 7.0, Mozilla 1.X, Firefox 1.0.7 and higher.

Answer: B, C

Explanation:
VirtualCenter Web Access Browser Requirements
The Web Access client is designed for these browsers:
Windows - Internet Explorer 6.0 or higher, Netscape Navigator 7.0, Mozilla 1.X, Firefox 1.0.7 and higher.
Linux - Netscape Navigator 7.0 or later, Mozilla 1.x Firefox 1.0.7 and higher
page 17 Virtual Infrastructure Web Access Administrator's Guide

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QUESTION 281:

What operating systems are sufficient for an installation for a license server? (Select all that apply.)

A. Microsoft Windows 2003
B. Microsoft XP Home Edition
C. Windows XP Professional Service Pack 2
D. Microsoft Windows 2000 Professional Service Pack 4
E. Microsoft Windows 98
F. Microsoft Windows Vista

Answer: A, C, D

Explanation:
Operating Systems
Windows
- Microsoft Windows 2003 Web Edition Service Pack 1, Windows 2003 Standard Edition Service Pack 1, or Windows Server 2003 Enterprise Edition Service Pack 1
- Windows XP Professional Service Pack 2 or Windows XP Home Edition Service Pack 2 - Microsoft Windows 2000 Professional Service Pack 4, Windows 2000 Server Service Pack 4, or Windows 2000 Advanced Server Service Pack 4
page 12 Quick Start Guide

QUESTION 282:

The virtual machine can run in two different modes:

A. Direct execution
B. Indirect execution
C. Virtualization mode
D. Absolute execution

Answer: A, C

Explanation:
The virtual machine can run in two different modes:
- Direct execution . Under certain conditions, the ESX Server Virtual Machine Monitor (VMM) can run the virtual machine directly on the underlying processor.
This mode is called direct execution, and it provides near-native performance in the execution of the virtual machine.s CPU instructions.
- Virtualization mode . If direct execution is not possible, the virtual machine CPU's instructions must be virtualized. This process adds a varying amount of virtualization overhead depending on the operation being performed.
page 118 Resource Management Guide

QUESTION 283:

What are the Virtual machine's available Disk Modes? (Select all that apply)

A. Persistent
B. Nonpersistent
C. Semipersistent
D. Undoable
E. Unchangable
F. Append
G. Re-do

Answer: A, B

Explanation:
Reference: Disk Modes for ESX 3 and later
ESX 3 provides full virtual machine snapshotting. With snapshots, the Disk Mode describes how the virtual hard disk participates in snapshots. Normally, the disk functions as it would in a physical machine, with changes written to the disk controlled by the snapshot mechanism. For some purposes, you might make a disk independent of the snapshot mechanism, so that snapshot operations do not affect the disk contents.
When a disk is independent, it can be:
* Persistent - The disk operates normally except that changes to the disk are permanent even if the virtual machine is reverted to a snapshot.
* Nonpersistent - The disk appears to operate normally, but whenever the virtual machine is powered off or reverted to a snapshot, the contents of the disk return to their original state (all later changes are discarded).
page 128 Basic Administration Guide & page 33 Introduction to VMware Infrastructure & page 182 SAN Configuration Guide

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QUESTION 284:

What are the available types of SCSI Bus Sharing?

A. None
B. Read-Only
C. Virtual
D. Physical
E. Shared
F. Protected

Answer: A, C, D

Explanation:
To specify whether the SCSI bus is shared, select the type of sharing in the SCSI Bus Sharing section:
- None - Virtual disks cannot be shared by other virtual machines.
- Virtual - Virtual disks can be shared by virtual machines on the same server.
- Physical - Virtual disks can be shared by virtual machines on any server.
Depending upon the type of sharing, virtual machines can access the same virtual disk simultaneously on the same server or any server.
page 167 Basic Administration Guide

QUESTION 285:

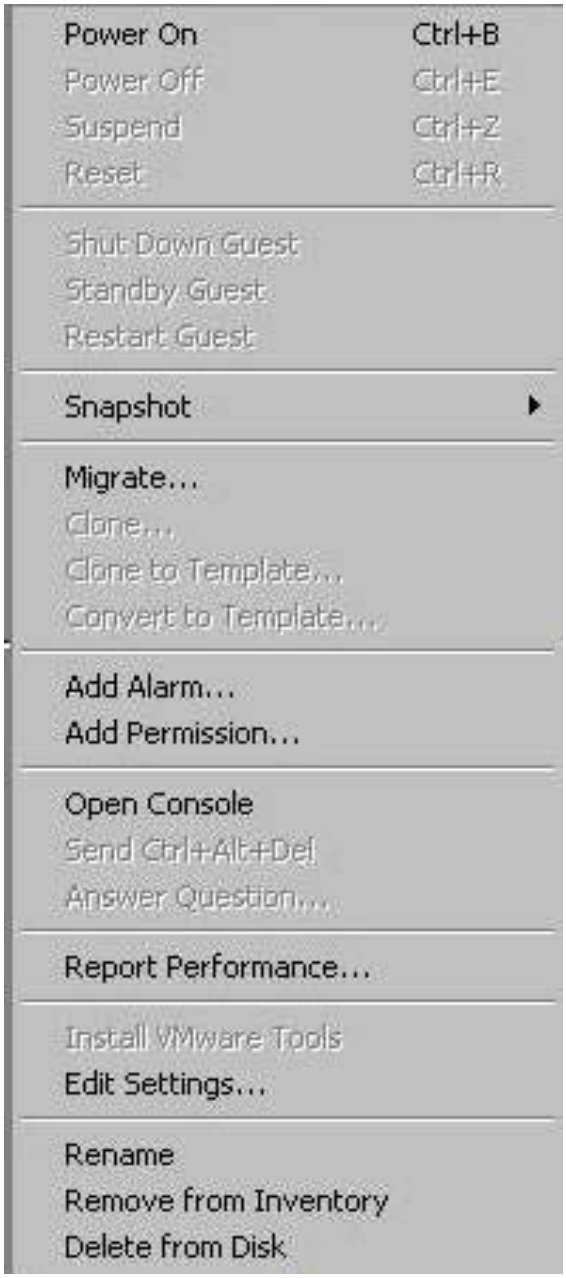
The basic power state options for virtual machines in VI3 include (Select all that apply)

A. Resend

B. Power on
C. Power off
D. Suspend
E. Resume
F. Reset
G. Shutdown

Answer: B, C, D, F

Explanation:
The basic power state options for virtual machines include:
- Power on . Powers up the virtual machine and boots the guest operating system if the guest operating system is installed.
- Power off . Powers down the virtual machine. The virtual machine does not attempt to shut down the guest operating system gracefully.
- Suspend . Pauses the virtual machine activity. All transactions are frozen until you issue a resume command.
- Reset . Shuts down the guest operating system and restarts it. If the guest operating system.
Not E: E is incorrect in VMware VI3 there is no longer a resume state! See the screen capture below: Even if I put a VM into Suspend there is no "Resume" option.



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QUESTION 286:

Virtual Machine Storage:

A. Up to four host bus adapters per virtual machine
B. Up to five host bus adapters per virtual machine
C. Up to 15 targets per host bus adapter
D. Up to 10 targets per host bus adapter
E. Up to 60 targets per virtual machine; 256 targets concurrently in all virtual machines per ESX Server host

F. Up to 50 targets per virtual machine; 252 targets concurrently in all virtual machines per ESX Server host

Answer: A, C, E

Explanation:
Virtual Storage
Up to four host bus adapter per virtual machine
Up to 15 targets per host bus adapter
Up to 60 targets per virtual machine; 256 targets concurrently in all virtual machines per ESX Server host
page 1 Configuration Maximums for VMware Infrastructure 3

QUESTION 287:

Virtual SCSI Devices

A. Up to four virtual SCSI adapters per virtual machine, with up to 15 devices per adapter
B. Up to five virtual SCSI adapters per virtual machine, with up to 15 devices per adapter
C. 64TB per virtual disk
D. 9TB per virtual disk
D. 2TB per virtual disk

Answer: A, E

Explanation:
Virtual SCSI Devices
Up to four virtual SCSI adapters per virtual machine, with up to 15 devices per adapter
2TB per virtual disk
page 1 Configuration Maximums for VMware Infrastructure 3

QUESTION 288:

The security subsystem of VirtualCenter 1 has been significantly redesigned, and VirtualCenter 2 now features over ___ privileges applicable to 13 objects and 8 standard roles. In fact, there are thirteen privileges dedicated to provisioning virtual machines.

A. 110
B. 100
C. 8
D. 13

Answer: A

Explanation:
The security subsystem of VirtualCenter 1 has been significantly redesigned, and VirtualCenter 2 now features over 110 privileges applicable to 13 objects and 8 standard roles. In fact, there are thirteen privileges dedicated to provisioning virtual machines.

QUESTION 289:

The security subsystem of VirtualCenter 1 has been significantly redesigned, and VirtualCenter 2 now features over 110 privileges applicable to ___ objects and 8 standard roles. In fact, there are thirteen privileges dedicated to provisioning virtual machines.

A. 100
B. 13
C. 110
D. 8

Answer: B

Explanation:
The security subsystem of VirtualCenter 1 has been significantly redesigned, and VirtualCenter 2 now features over 110 privileges applicable to 13 objects and 8 standard roles. In fact, there are thirteen privileges dedicated to provisioning virtual machines.

QUESTION 290:

Deploying Virtual Machines from Templates
Deploying a virtual machine from template generally refers to two steps:

A. The process of creating the template's disks and virtual hardware configuration, and running the guest customization wizard
B. The process of creating a copy of the template's disks and virtual hardware configuration, and running the guest customization wizard
C. After some one-time setup tasks are required in order to run the guest customization wizard, the process of deploying and customizing virtual machines is seamless and efficient.
D. After some one-time setup tasks are required in order to run the host customization wizard, the process of deploying and customizing virtual machines is seamless and efficient.

Answer: B, C

Explanation:
Deploying Virtual Machines from Templates
Deploying a virtual machine from template generally refers to two steps: The process of creating a copy of the template's disks and virtual hardware configuration, and running

the guest customization wizard. After some one-time setup tasks are required in order to run the guest customization wizard, the process of deploying and customizing virtual machines is seamless and efficient.

QUESTION 291:

Which four are NOT default Roles in Virtual Center? (Select 4)

A. No Access
B. Full Access
C. Read Only
D. Administrator
E. Admin (Read Only)
F. Virtual Machine Administrator
G. Datacenter Administrator
H. Virtual Machine Power User
I. Virtual Machine Full Access User
J. Virtual Machine User
K. Resource Pool Administrator
L. Resource Pool Read Only

Answer: B, E, I, L

Explanation:
ROLES
No Access
Read Only
Administrator
Virtual Machine Administrator
Datacenter Administrator
Virtual Machine Power User
Virtual Machine User
Resource Pool Administrator
page 255-256 Basic Administration Guide

QUESTION 292:

Which three are NOT available Privileges within the Roles? (Select three)

A. Local Only
B. Global
C. Datacenter
D. Folder
E. Performance
F. DataStore
G. Scheduled Task

H. Network
I. Host
J. VirtualCenter
K. Virtual Machine
L. Permissions
M. Resource
N. Alarms
O. Sessoins
P. Priviledges

Answer: A, J, P

Explanation:
PRIVILEGES
Global
Folder
Datacenter
DataStore
Network
Host
Virtual Machine
Resource
Alarms
Scheduled Task
Sessoins
Performance
Permissions
page 255-256 Basic Administration Guide

QUESTION 293:

Datacenters act as the namespace boundary for these objects. You cannot have two objects (for example, two hosts) with the same name in the same datacenter

A. True
B. False

Answer: A

Explanation:
Datacenters act as the namespace boundary for these objects. You cannot have two objects (for example, two hosts) with the same name in the same datacenter, but you can have two objects with the same name in different datacenters.
page 24 Basic Administration Guide

QUESTION 294:

You can VMotion between compatible hosts from two different datacenters, if managed by the same VirtualCenter?

A. True
B. False

Answer: B

Explanation:
Because of the namespace property, VMotion is permitted between any two compatible hosts within a datacenter, but even powered off virtual machines cannot be moved between hosts in different datacenters. Moving an entire host between two datacenters is permitted.
page 24 Basic Administration Guide

QUESTION 295:

Which three are ESX Server pre-defined roles? (Choose three.)

A. Virtual Machine User
B. No Access
C. Virtual Machine Administrator
D. Read Only
E. Administrator

Answer: B,D,E