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1Y0-A09 Implementing Citrix XenServer Enterprise Edition 5.0

Practice Exam

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Implementing Citrix® XenServer Enterprise Edition 5.0 2008 Practice Exam

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Along with the materials listed above, this practice exam is meant to be used in preparation for the 1Y0-A09 Implementing Citrix® XenServer Enterprise Edition 5.0 exam. Also suggested for preparation are other books that relate to the subjects and above all, personal experience with the products. Citrixxperience.com recommends further preparation by using other 1Y0-A09 products found at www.Citrixxperience.com.

#Pre-Deployment Planning

1. A virtual machine is connected to resources on an external network through _?_.
    a. a physical interface
    b. a virtual interface
    c. a virtual switch
    d. a physical switch

    Answer: a.
    Explanation: A virtual machine connects to resources on the physical network through a physical interface (PIF). The virtual machine connects to a virtual switch through a virtual interface (VIF), which then connects it to the PIF.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 177

2. Networks without an association to a PIF are considered _?_.
    a. segregated
    b. internal
    c. external
    d. insecure

    Answer: b.
    Explanation: Networks without an association to a physical network interface (PIF) are considered internal and can be used to provide connectivity only between virtual machines on a given XenServer host, with no connection to the outside world.
    Source: XenServer Administrator's Guide 5.0.0, Page 46

3. Networks with a PIF association are considered _?_.
    a. segregated
    b. internal
    c. external
    d. insecure

    Answer: c.
    Explanation: Networks with a physical network interface (PIF) association are considered external, and provide a bridge between virtual network interfaces (VIFs) and the PIF connected to the network, enabling connectivity to resources available through the PIF's NIC.
    Source: XenServer Administrator's Guide 5.0.0, Page 46

4. The NICs on a XenServer host can be configured in one of two modes. What are the two modes? (Choose 2)
    a. Physical
    b. Virtual
    c. Normal
    d. Management

    Answer: c.d.
    Explanation: NICs on a XenServer host can be configured in management mode or normal mode. Management mode is reserved for management traffic and can not be used for virtual machine communication. Normal mode is used for virtual machine and guest traffic.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 179

5. In addition to the management NIC that is installed during XenServer installation, a normal NIC can be configured in management mode after installation. For what reason might an administrator want a second management NIC?
    a. To allow more virtual machines to be installed on the XenServer host
    b. To reduce the load on the primary management NIC
    c. To allow additional administrators to manage the virtual machines
    d. To minimize the bandwidth usage on the network

   Answer: b.
   Explanation: A normal NIC can be configured in management mode after installation to reduce the load on the primary management NIC by being dedicated to secondary management tasks, such as remote storage.
   Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 180

6. When creating a new virtual NIC, a MAC address can be manually set by typing the address in the 'MAC address' field in the:
    a. 'Management interfaces' screen in XenCenter
    b. properties of the secondary NIC on the virtual machine host server
    c. Network Configuration tab in XenCenter
    d. General tab in XenCenter

   Answer: c.
   Explanation: To manually set the MAC address of a new virtual NIC, click the Network Configuration tab in XenCenter, type the MAC address in the 'MAC address' field, select the network in the Network drop-down list, click Add and click Apply. The MAC address can also be manually created using xe network commands in the CLI.
   Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 185

7. An example of a MAC address is:
    a. 2001:db8:85a3:0:0:8a2e:370:7334
    b. 192.168.0.64
    c. 00:14:22:FB:90:08
    d. 00:14:22:FB:90

   Answer: c.
   Explanation: A MAC address is entered in the form of xy:xx:xx:xx:xx:xx where x = any hexadecimal digit and y = 2, 6, A or E. An example is: 00:14:22:FB:90:08
   Source: XenCenter Help

8. Which of the following are true of virtual NICs? (Choose 3)
    a. A maximum of seven virtual NICs can be added to each virtual machine
    b. The MAC address can be manually added through XenCenter or using xe network commands in the CLI
    c. The virtual machine must be powered on when manually adding a MAC address
    d. A range of MAC addresses is automatically created by XenServer

   Answer: a.b.d.
   Explanation: The following are true of virtual NICs: Up to seven virtual NICs can be added to each virtual machine. The MAC addresses are manually created using the Add button in the Network tab of XenCenter or using xe network commands in the CLI. The virtual machine must be powered OFF, not on, when manually adding a MAC address. A valid range of MAC addresses is automatically created by XenServer.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 185

9. Scenario: Several Windows Server 2003 virtual servers exist on a XenServer host in their own self-contained network. They do not communicate with any servers on a physical network. Which network component is not used for communication in the internal network?
    a. physical NIC
    b. virtual interface
    c. virtual NIC
    d. in-memory bus
    e. virtual switch

    Answer: a.
    Explanation: Internal-only networks only provide connectivity between virtual machines. When accessing resources in the internal network, no connection is made to a physical NIC.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 176

10. Scenario: Several Windows Server 2003 virtual servers exist on a XenServer host in their own self-contained network. They do not communicate with any servers on a physical network. What kind of network are the servers on?
    a. bonded
    b. internal
    c. external
    d. secure

    Answer: b.
    Explanation: Internal-only networks only provide connectivity between virtual machines. When accessing resources in the internal network, no connection is made to a physical NIC.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 176

11. Which of the following allow a virtual machine to connect to resources available through the server's physical network card?
    a. bonded
    b. internal
    c. external
    d. secure

    Answer: c.
    Explanation: External networks have an association with a physical network interface and provide a bridge between a virtual machine and the physical network interface connected to the network, enabling a virtual machine to connect to resources available through the server's physical network interface card.
    Source: XenCenter Help

12. _?_ networks use two NICs to create a single, high-performing channel between the virtual machine and the network.
    a. bonded
    b. internal
    c. external
    d. secure

    Answer: a.

Explanation: Bonded networks use two NICs to create a single, high-performing channel between the virtual machine and the network.
Source: XenCenter Help

13. Which of the following will improve server resiliency by assuring that if one NIC fails, the server's traffic will automatically be routed to the other NIC?
    a. A NIC bond between a virtual NIC on a virtual machine and a physical NIC on the server
    b. A NIC bond between a virtual NIC and a physical NIC on the server
    c. A NIC bond between two physical NICs on the server
    d. A NIC bond between two virtual NICs on the server

    Answer: c.
    Explanation: NIC bonding can improve server resiliency by using two physical NICs as if they were one. If one NIC within the bond fails, the server's network traffic will automatically be routed over the second NIC.
    Source: XenCenter Help

14. Scenario: The director of the IT department has mandated that there be two physical NICs on each XenServer host for redundancy. Which network interface implementation should the administrator who was assigned this project configure?
    a. NIC emulation
    b. NIC bonding
    c. External-only
    d. Internal-only

    Answer: b.
    Explanation: NIC bonding automatically routes network traffic to the second NIC if one NIC in the bond fails. NIC bonds operate in active/active mode, meaning that traffic is load balanced between the two NICs.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 181

15. Which step is in the procedure to create an internal-only network?
    a. Choose a physical NIC
    b. Add a network
    c. Configure two NICs in a bond
    d. Assign a number to the new logical VLAN

    Answer: b.
    Explanation: To add a new internal network: On the first page of the New Network wizard, select Internal Network and then click Next. Enter a name and description for the new network and click Next. To automatically add the new network to any new virtual machines created using the New VM wizard, select the checkbox. Click Finish to create the new network and close the wizard.
    Source: XenCenter Help

16. Which of the following steps are in the procedure to create an external-only network? (Choose 3)
    a. Choose a physical NIC
    b. Add a network
    c. Configure two NICs in a bond
    d. Assign a number to the new logical VLAN

Answer: a.b.d.
Explanation: To add a new external network: On the first page of the New Network wizard, select External Network and then click Next. Enter the name and an optional description for the new network and click Next. Choose a physical network interface card (NIC). Assign a number to the new logical network or VLAN. To automatically add the new network to any new virtual machines created using the New VM wizard, select the checkbox. Click Finish to create the new network and close the wizard.
Source: XenCenter Help

17. Physical NICs on a XenServer host do not require an IP address if they are being used for _?_ traffic.
    a. management
    b. guest
    c. non-guest
    d. storage

    Answer: c.
    Explanation: XenServer host physical NICs do not require IP configuration when used for guest traffic. This is because the bond operates at Layer 2 of the OSI, the data link layer, and no IP addressing is used at this layer. When used for non-guest traffic (for example, management with XenCenter or network storage), IP configuration is required.
    Source: XenServer Administrator's Guide 5.0.0, Page 47

18. To change the IP address of a XenServer host NIC using the command line, use the _?_ command.
    a. vif-param-set
    b. vif-reconfigure-ip
    c. pif-param-set
    d. pif-reconfigure-ip

    Answer: d.
    Explanation: To change the IP address of a XenServer host NIC using the CLI, type pif-reconfigure-ip. Example: xe pif-reconfigure-ip mode=static uuid= cf25864c-d461-b25a-2a97-411d8c1301b7 IP=192.168.0.64 gateway=192.168.0.1 netmask=255.255.255.0 DNS=208.67.222.222,208.67.220.220,dns1.xyz.com
    Source: XenServer Administrator's Guide 5.0.0, Page 55

19. To change a normal XenServer host NIC to a management NIC, which of the following commands would you type in the command line interface?
    a. host-management-reconfigure
    b. pif-param-set
    c. pif-management-reconfigure
    d. host-param-set

    Answer: a.
    Explanation: To change a normal XenServer host NIC to a management NIC using the CLI, use host-management-reconfigure, like this: xe host-management-reconfigure uuid=<pif_uuid>
    Source: XenServer Administrator's Guide 5.0.0, Page 58

20. Scenario: An IP address needs to be configured on the primary management NIC on a XenServer host. The administrator assigned to this task opens the Management Interfaces dialog in XenCenter. What is the name of the tab on which the administrator will make the configuration?
    a. NICs
    b. Primary
    c. Network
    d. IP Address

    Answer: b.
    Explanation: To configure the IP address of the primary management NIC of a XenCenter host using XenCenter, select the server in the Resources pane, click the Server menu and select Management Interfaces (alternatively, you can right-click the server in the resources pane and choose Management Interfaces). On the Primary tab, choose a network from the Network list. Configure the IP and DNS server settings and click OK. You must enter an IP address, but the Subnet mask and Gateway settings are optional.
    Source: XenCenter Help

21. Scenario: A new management NIC needs to be configured on a XenServer host. Using XenCenter, which of the following steps should the administrator assigned to this task take? (Choose 3)
    a. Click New Interface from the Server menu
    b. Click New Interface from the Management Interfaces dialog box
    c. Choose a network
    d. Configure the IP settings

    Answer: b.c.d.
    Explanation: To configure a new management NIC for a XenServer host using XenCenter, select the server in the Resources pane then do one of the following: On the Server menu, click Management Interfaces and then click New Interface -OR- click the NICs tab and then click 'Help me dedicate a NIC' below the list of NICs. Enter the name of the new interface. Choose a network from the Network list. Configure the IP settings for the new interface. You must enter an IP address, but the Subnet mask and Gateway settings are optional.
    Source: XenCenter Help

22. Scenario: A management NIC needs to be removed from a XenServer host. The administrator responsible for this assignment opens XenCenter. Which menu should the administrator click to start the NIC removal process?
    a. Pool
    b. Storage
    c. Server
    d. VM
    e. Tools

    Answer: c.
    Explanation: To remove a management NIC form a XenServer host using XenCenter, select the server in the Resources pane, click the Server menu and click Management Interfaces (alternatively, you can right-click the server in the resources pane and choose Management Interfaces). Click the tab for the management interface you want to remove, then click 'Remove this interface'. Click OK.
    Source: XenCenter Help

23. A Windows 2000 Server virtual machine installed on XenServer 5.0 can have a maximum of _?_ CPUs.
    a. Four
    b. Eight
    c. Two
    d. One

    Answer: a.
    Explanation: The maximum number of CPUs on Microsoft operating systems is as follows: Windows Vista 32Bit – 2; Windows Server 2003 Standard 64Bit - 4; Windows Server 2003 Enterprise 64Bit - 8; Windows Server 2003 Standard - 4; Windows Server 2003 Enterprise - 8; Windows 2000 Server - 4; Windows 2000 Advanced Server - 8; Windows XP Professional - 2.
    Source: CTX-2401 Citrix XenServer Enterprise Edition 4.0: Administration, Page 39

24. A Windows Server 2003 Enterprise 64bit virtual machine installed on XenServer 5.0 can have a maximum of _?_ CPUs.
    a. Four
    b. Eight
    c. Two
    d. One

    Answer: b.
    Explanation: The maximum number of CPUs on Microsoft operating systems is as follows: Windows Vista 32Bit – 2; Windows Server 2003 Standard 64Bit - 4; Windows Server 2003 Enterprise 64Bit - 8; Windows Server 2003 Standard - 4; Windows Server 2003 Enterprise - 8; Windows 2000 Server - 4; Windows 2000 Advanced Server - 8; Windows XP Professional - 2.
    Source: CTX-2401 Citrix XenServer Enterprise Edition 4.0: Administration, Page 39

25. A Windows Server 2003 Enterprise virtual machine installed on XenServer 5.0 can have a maximum of _?_ CPUs.
    a. Four
    b. Eight
    c. Two
    d. One

    Answer: b.
    Explanation: The maximum number of CPUs on Microsoft operating systems is as follows: Windows Vista 32Bit – 2; Windows Server 2003 Standard 64Bit - 4; Windows Server 2003 Enterprise 64Bit - 8; Windows Server 2003 Standard - 4; Windows Server 2003 Enterprise - 8; Windows 2000 Server - 4; Windows 2000 Advanced Server - 8; Windows XP Professional - 2.
    Source: CTX-2401 Citrix XenServer Enterprise Edition 4.0: Administration, Page 39

26. A Windows Server 2003 Standard virtual machine installed on XenServer 5.0 can have a maximum of _?_ CPUs.
    a. Four
    b. Eight
    c. Two
    d. One

    Answer: a.
    Explanation: The maximum number of CPUs on Microsoft operating systems is as follows: Windows Vista 32Bit – 2; Windows Server 2003 Standard 64Bit - 4; Windows Server 2003

Enterprise 64Bit - 8; Windows Server 2003 Standard - 4; Windows Server 2003 Enterprise - 8; Windows 2000 Server - 4; Windows 2000 Advanced Server - 8; Windows XP Professional - 2.
Source: CTX-2401 Citrix XenServer Enterprise Edition 4.0: Administration, Page 39

27. A Windows XP Professional virtual machine installed on XenServer 5.0 can have a maximum of _?_ CPUs.
    a. Four
    b. Eight
    c. Two
    d. One

    Answer: c.
    Explanation: The maximum number of CPUs on Microsoft operating systems is as follows: Windows Vista 32Bit – 2; Windows Server 2003 Standard 64Bit - 4; Windows Server 2003 Enterprise 64Bit - 8; Windows Server 2003 Standard - 4; Windows Server 2003 Enterprise - 8; Windows 2000 Server - 4; Windows 2000 Advanced Server - 8; Windows XP Professional - 2.
    Source: CTX-2401 Citrix XenServer Enterprise Edition 4.0: Administration, Page 39

28. A Windows Vista virtual machine installed on XenServer 5.0 can have a maximum of _?_ CPUs.
    a. Four
    b. Eight
    c. Two
    d. One

    Answer: c.
    Explanation: The maximum number of CPUs on Microsoft operating systems is as follows: Windows Vista – 2; Windows Server 2003 Standard 64Bit - 4; Windows Server 2003 Enterprise 64Bit - 8; Windows Server 2003 Standard - 4; Windows Server 2003 Enterprise - 8; Windows 2000 Server - 4; Windows 2000 Advanced Server - 8; Windows XP Professional - 2.
    Source: CTX-2401 Citrix XenServer Enterprise Edition 4.0: Administration, Page 39

29. The maximum number of virtual CPUs a Windows virtual machine can support is _?_.
    a. Two
    b. Four
    c. Six
    d. Eight

    Answer: d.
    Explanation: Windows virtual machines can support a maximum of eight virtual CPUs.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 3

30. The maximum number of virtual CPUs a Linux virtual machine can support is _?_.
    a. 32
    b. 24
    c. 16
    d. 8

    Answer: a.
    Explanation: Linux virtual machines can support a maximum of 32 virtual CPUs, but only a maximum of eight will show in XenCenter.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Pages 3, 4

31. _?_ allows the creation of a virtual machine from an existing Windows installation on a physical server.
    a. Paravirtualization
    b. Cloning
    c. P2V
    d. XenConvert

    Answer: d.
    Explanation: XenConvert converts a Windows installation on a physical server or desktop to a virtual machine. Supported operating systems are: Windows Server 2003 Web, Standard, Enterprise, SP1, SP2, R2; Windows XP SP2; Windows 2000 SP4 and 64-bit Windows Server 2003 Standard, Enterprise SP2.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 142

32. _?_ allows the creation of a virtual machine from an existing Linux installation on a physical server.
    a. Paravirtualization
    b. Cloning
    c. P2V
    d. XenConvert

    Answer: c.
    Explanation: XenServer includes physical-to-virtual (P2V) conversion tools on the installation CD that allow the creation of a paravirtualized virtual machine from an existing Linux installation on a physical server.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 117

33. Scenario: The Linux P2V conversion tool is going to be used to convert a 32-bit source server. An administrator needs to run which of the following steps first, after booting the XenServer installation CD?
    a. Select a discovered OS
    b. Set the details of the target XenServer
    c. Select the P2V option
    d. Press F2 and type "p2v-legacy" in the boot prompt

    Answer: d.
    Explanation: Because the XenServer 4.1 and 5.0 installer is 64-bit, by default the P2V tool will not run on a 32-bit source server. To overcome this constraint, press F2 to get the advanced boot options and type "p2v-legacy" in the boot prompt.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 117

34. The physical-to-virtual (P2V) conversion tool can be used on which of the following Linux operating systems? (Choose 4)
    a. Red Hat Enterprise Linux 3.6 - 3.8
    b. Red Hat Enterprise Linux 4.5
    c. Red Hat Enterprise Linux 5.0 - 5.2 (32-bit and 64-bit)
    d. Suse Linux Enterprise Server 9 SP3 and SP4
    e. Suse Linux Enterprise Server 10 SP1 and SP2
    f. CentOS 4.5 - 4.6
    g. CentOS 5.0 - 5.2 (32-bit and 64-bit)
    h. Oracle Enterprise Linux 5.0 - 5.2 (32-bit and 64-bit)

Answer: a.b.d.f.
Explanation: The P2V conversion tool can be used on Red Hat Enterprise Linux 3.6 - 3.8, Red Hat Enterprise Linux 4.5, Suse Linux Enterprise Server 9 SP3 and SP4 and CentOS 4.5 - 4.6.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 114

#Installing XenServer Enterprise Edition 5.0

35. What is the maximum RAM a Windows virtual machine can handle?
    a. 16GB
    b. 32GB
    c. 64GB
    d. 128GB

    Answer: b.
    Explanation: All Windows virtual machines can handle a maximum of 32GB of RAM.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 3

36. What is the maximum RAM any of the Linux virtual machines can handle?
    a. 16GB
    b. 32GB
    c. 64GB
    d. 128GB

    Answer: b.
    Explanation: Some of the Linux virtual machines can handle up to 32GB of RAM while others can only handle up to 16GB.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 3

37. What is the maximum number of virtual NICs that either a Linux or Windows virtual machine support?
    a. two
    b. four
    c. seven
    d. eight

    Answer: c.
    Explanation: Linux and Windows virtual machines can hold up to seven virtual NICs.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 4

38. What is the maximum number of virtual disks that a Linux virtual machine can support?
    a. two
    b. four
    c. seven
    d. eight

    Answer: d.
    Explanation: A Linux virtual machine can support up to eight virtual disks, including a virtual CD-ROM. Only one virtual CD-ROM drive is supported.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 3

39. What is the maximum number of virtual disks that a Windows virtual machine can support?
    a. two

b. four
c. seven
d. eight

Answer: c.
Explanation: A Windows virtual machine can support up to seven virtual disks, including a virtual CD-ROM. Only one virtual CD-ROM drive is supported.
Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 3

40. XenServer requires _?_-bit _?_ or _?_ processors to run Windows virtual machines.
    a. 64-bit / Intel Pentium / AMD Semron
    b. 32-bit / Intel Pentium / AMD Semron
    c. 32-bit / Intel VT / AMD-V
    d. 64-bit / Intel VT / AMD-V

    Answer: d.
    Explanation: XenServer requires 64-bit x86 CPUs. Either Intel VT or AMD-V processors are required to run Windows virtual machines.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 74

41. The minimum amount of required physical RAM for XenServer is _?_.
    a. 1GB
    b. 2GB
    c. 4GB
    d. 8GB

    Answer: a.
    Explanation: The minimum amount of required physical RAM for XenServer is 1GB. 2GB or more is recommended
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 74

42. The minimum network connection speed for XenServer is _?_.
    a. 10Mbps
    b. 100Mbps
    c. 1000Mbps
    d. 10000Mbps

    Answer: b.
    Explanation: The minimum network connection speed for XenServer is 100Mbps. This is only suitable for management tasks. 1000Mbps (Gigabit) or more is recommended, especially for connections to storage repositories.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 74

43. Scenario: An administrator tried to install XenServer 5.0 on a server that has not been used in some time. The server has 64GB of disk space, dual 32-bit Intel Pentium 4 processors, 4GB of RAM and two Gigabit NIC cards installed. Which of the hardware specs would cause the installation to fail?
    a. Not enough memory
    b. The NIC cards are too slow
    c. The processors are not supported
    d. Not enough disk space

    Answer: c.

Explanation: The installation would fail because the processors are not supported. XenServer requires 64-bit x86 CPUs. Either Intel VT or AMD-V processors are required to run Windows virtual machines. The minimum amount of required physical RAM for XenServer is 1GB. 2GB or more is recommended. The minimum network connection speed for XenServer is 100Mbps. 1000Mbps (Gigabit) or more is recommended, especially for connections to storage repositories.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 74

44. How much disk space is required for XenServer 5.0 installation?
    a. 32GB
    b. 8GB
    c. 64GB
    d. 16GB

    Answer: d.
    Explanation: XenServer 5.0 installation requires 16GB of disk space, where 8GB is used for the control domain and the remainder is reserved for the guest VM repository.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 74

45. When performing a network installation of XenServer, a DHCP server tells the XenServer _?_. (Choose the option that best completes the sentence)
    a. what drive letter to use for the local CD drive which contains the installation media
    b. where the web server hosting required installation files is located
    c. what IP address to reserve for the management NIC
    d. where to load the install program from the TFTP server

    Answer: d.
    Explanation: When performing a network installation of XenServer, a DHCP server tells the XenServer where to load the install program from the TFTP server. This install program loads and either asks questions or uses an answer file to install the product.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 75

46. Which of the following types of storage support fast cloning? (Choose 4)
    a. Local Physical Disk
    b. Local File System
    c. NetApp
    d. LVM over FC LUN
    e. iSCSI
    f. Fibre Channel
    g. NFS Based
    h. EqualLogic Filer

    Answer: b.c.g.h.
    Explanation: Local File System, NetApp, NFS Based and EqualLogic Filer storage types support fast cloning.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 195

47. Which of the following types of storage support thin provisioning? (Choose 4)
    a. Local Physical Disk
    b. Local File System
    c. NetApp

d. LVM over FC LUN
e. iSCSI
f. Fibre Channel
g. NFS Based
h. EqualLogic Filer

Answer: b.c.g.h.
Explanation: Local File System, NetApp, NFS Based and EqualLogic Filer storage types support thin provisioning.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 195

48. Which of the following types of storage support disk resizing? (Choose 6)
    a. Local Physical Disk
    b. Local File System
    c. NetApp
    d. LVM over FC LUN
    e. iSCSI
    f. Fibre Channel
    g. NFS Based
    h. EqualLogic Filer

    Answer: a.c.d.e.f.h.
    Explanation: Local Physical Disk, NetApp, LVM over FC LUN, iSCSI, Fibre Channel and EqualLogic Filer storage types support disk resizing.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 195

49. Which of the following types of storage support shared storage? (Choose 6)
    a. Local Physical Disk
    b. Local File System
    c. NetApp
    d. LVM over FC LUN
    e. iSCSI
    f. Fibre Channel
    g. NFS Based
    h. EqualLogic Filer

    Answer: c.d.e.f.g.h.
    Explanation: NetApp, LVM over FC LUN, iSCSI, Fibre Channel, NFS Based and EqualLogic Filer types of storage support shared storage.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 195

50. Scenario: The IT department decided to create an ISO library to store their virtual CDs so that they can create their virtual machines from those ISOs. While configuring the ISO library, what choices does the administrator encounter as the library type for the ISOs? (Choose 2)
    a. PROCFS
    b. CIFS
    c. NFS
    d. NTFS

    Answer: b.c.
    Explanation: When creating an ISO library, choose Windows File Sharing (CIFS) or NFS as the library type.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 97

51. Which of the following is a necessary component for an ISO library?
    a. a network share
    b. shared storage
    c. a server pool
    d. NetApp

    Answer: a.
    Explanation: An ISO library is used to store ISOs in a network share so that they can be made available to multiple XenServers. To create an ISO library, launch the New ISO Library wizard and click New Storage. The New Storage Repository dialog opens. Select Windows File Sharing (CIFS) or NFS as the library type. Type a name for the file share and fill in the path to the share.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 96, 97

52. Scenario: An administrator is going to perform an upgrade of XenServer. To prepare the XenServer host, the administrator needs to migrate the virtual machines from the XenServer host to another server in the resource pool. What is the most readily way this can be accomplished?
    a. Place the XenServer host in Maintenance Mode using XenCenter
    b. Use the command: xe host-evacuate
    c. Suspend all of the virtual machines and export them to another server
    d. Shut down all of the virtual machines and import them on another server

    Answer: a.
    Explanation: Before performing maintenance operations, including upgrades, on a XenServer host that is part of a resource pool, you should disable it (which prevents any virtual machines from being started on it), then migrate its virtual machines to another XenServer host in the pool. This can most readily be accomplished by placing the XenServer host into Maintenance Mode using XenCenter.
    Source: XenServer Installation Guide 5.0.0, Page 19

53. Which of the following operations are recommended before upgrading an unpooled XenServer host? (Choose 2)
    a. Uninstall the XenServer Tools on all of the virtual machines on the XenServer host
    b. Migrate any running virtual machines to another XenServer host in the pool
    c. Disable the XenServer host
    d. Shutdown or suspend any running virtual machines on the XenServer host

    Answer: c.d.
    Explanation: To prepare an unpooled XenServer host for upgrade: 1) Disable the XenServer host. 2) Shut down or suspend any running virtual machines. If you choose
    to suspend any virtual machines, check that no CDs are attached to them. 3) Perform the upgrade. 4) Once the upgrade is completed, enable the XenServer host and restart any halted virtual machines and/or resume any suspended virtual machines.
    Source: XenServer Installation Guide 5.0.0, Pages 19, 20

54. Scenario: A XenServer installation was started by a systems administrator. When the installer detected a previously installed version of XenServer, the administrator chose to upgrade the existing version. Which of the following steps will the administrator not have to perform for the upgrade? (Choose 4)

a. Configure the time zone
b. Specify the source of the installation packages
c. Configure networking
d. Configure system time
e. Choose whether to verify the installation source using the MD5 checksum
f. Set a root password
g. Specify the hostname and configuration for the name service

Answer: a.c.d.g.
Explanation: If you choose to upgrade the existing version of XenServer, the existing management NIC configuration, hostname and name service configuration, time zone configuration and system time are used so these screens are bypassed.
Source: XenServer Installation Guide 5.0.0, Pages 9 - 12

55. Scenario: While upgrading an existing XenServer installation, which of the following steps does an administrator have to take? (Choose 4)
    a. Specify the hostname and configuration for the name service
    b. Configure networking
    c. Specify the source of the installation packages
    d. Configure system time
    e. Choose whether to verify the installation source using the MD5 checksum
    f. Set a root password
    g. Create a backup of the existing installation
    h. Configure the time zone

    Answer: c.e.f.g.
    Explanation: If you choose to upgrade the existing version of XenServer, you will get a message that the installer is going to create a backup of the existing installation and you click Continue to proceed. If you have multiple hard disks, you choose the primary disk for the installation. You must specify the source of the installation packages. If multiple network interfaces exist, you are prompted to select one to access the product repository. You next choose either 'Automatic configuration (DHCP)' or 'Static configuration' for the NIC's configuration. You are asked if you'd like to verify the installation source using the MD5 checksum - you may do so or skip verification. You are prompted to set a root password. You install XenServer and reboot the server. Since you are upgrading, you don't have to configure the management NIC, hostname and name service, time zone or system time and the existing settings are used.
    Source: XenServer Installation Guide 5.0.0, Pages 9 - 12

56. What three options does an administrator have to install a XenServer license key on a XenServer host? (Choose 3)
    a. In XenCenter
    b. Menu-driven text console
    c. xe host-license-add
    d. In the License Management Console

    Answer: a.b.c.
    Explanation: A XenServer license key can be installed on a XenServer host: 1) In XenCenter by selecting the host, clicking the Server menu item and clicking Install License Key. 2) Using the menu-driven text console by selecting XenServer Details and Licensing, selecting Install XenServer License, entering login and password and selecting the location of the license file. 3) By using the xe host-license-add command in the CLI.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 82 - 84

57. Which of the following are required for XenServer 5.0 licensing? (Choose 3)
    a. A license file
    b. XenServer Platinum Edition
    c. An email from Citrix
    d. A URL to download the license files

    Answer: a.c.d.
    Explanation: When XenServer 5.0 is first installed it is enabled with Express Edition features. A license key on a license file must be installed on each XenServer host for advanced capabilities. Citrix delivers an email with a URL where the license files can be downloaded. The downloaded licenses should be saved in an accessible location.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 81, 82

58. When using XenServer Platinum Edition, which of the following licensing steps are required? (Choose 2)
    a. Manual application of Enterprise Edition licenses
    b. Obtain separate Provisioning Server licenses
    c. Open port 443 between the license server and XenServer hosts
    d. Apply latest licensing daemon hotfixes

    Answer: a.b.
    Explanation: The XenServer Platinum Edition requires manual application of XenServer Enterprise Edition licenses and separate Provisioning Server licenses.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 81

59. How can you tell when a license will expire?
    a. The XenServer Logs and Reports
    b. The XenServer host General tab in XenCenter
    c. The pool General tab in XenCenter
    d. MyCitrix.com

    Answer: b.
    Explanation: To confirm the license expiration within XenCenter, select the XenServer host in the Resource pane. Select the General tab. At the bottom of this screen, view the expiration date in the License Details section.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 312

60. Before installing XenServer, do the following: (Choose 3)
    a. Verify a spare partition on a pre-formatted disk
    b. Verify that the server meets the CPU, memory and networking requirements
    c. Verify the availability of a whole physical disk or LUN with at least 16 GB of space
    d. Test the connection if installing on a remote disk

    Answer: b.c.d.
    Explanation: Before installing XenServer, verify that the server meets the CPU, memory and networking requirements, verify the availability of a whole physical disk or LUN with at least 16 GB of space, as the installer will only list those disks with enough space, and test the connection if installing on a remote disk. XenServer cannot be installed on a spare partition of a pre-formatted disk.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 77

61. XenServer can be installed with three different methods: (Choose 3)
    a. CD install media
    b. Streamed to a server using XenDesktop
    c. PXE-enabled network install
    d. Automated using an answer file

    Answer: a.c.d.
    Explanation: XenServer can be installed from the CD install media, from a PXE-enabled network or automated using an XML-based answer file.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 77

62. Scenario: The IT department decides that they are going to install XenServer hosts using a PXE-enabled network installation. The administrator that is handling the project has to find out what is required for this type of installation. Which of the following components are needed for a PXE-enabled network installation of XenServer? (Choose 3)
    a. File server
    b. TFTP server
    c. SysPrep for XenServer
    d. DHCP server

    Answer: a.b.d.
    Explanation: In a PXE-enabled network installation, a standard DHCP server tells the XenServer where to load the install program from a TFTP (trivial FTP) server. This install program loads and either asks questions or uses a pre-built answer file to install the product. Any required files are hosted on an NFS, FTP or web (HTTP) server.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 78

63. While installing XenServer 5.0, consider that if the XenServer host is going to be a part of a resource pool the primary management NIC on the server must _?_.
    a. be bonded with another NIC
    b. have a static IP address
    c. have a throughput of a Gigabit at minimum
    d. be the only NIC on the server

    Answer: b.
    Explanation: You can select DHCP for the management NIC during XenServer installation, but if the XenServer host is going to be part of a resource pool, the NIC must have a static IP address.
    Source: XenServer Installation Guide 5.0.0, Page 10

64. Scenario: A virtual machine storage repository was set up on a separate disk than the XenServer host. The best practice in this type of configuration would be that the disk hosting XenServer is set up in a _?_ format and the storage repository is set up in a _?_ format.
    a. RAID 0 / RAID 1
    b. RAID 5 / RAID 0
    c. RAID 1 /RAID 5
    d. RAID 5 / RAID 5

    Answer: c.
    Explanation: With a separate virtual machine storage repository, XenServer is installed on one disk and the virtual machine storage repository is installed on a separate disk. When more than one disk is available, it is best practice because the XenServer disk can be set up in a RAID 1

format for reliability and the storage repository can be set up in a RAID 5 format for performance and reliability.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 76

#Creating Virtual Machines

65. What four basic steps are involved in creating a Windows virtual machine? (Choose 4)
    a. Verify the virtual machine meets hardware requirements
    b. Install XenServer Platinum Edition licenses
    c. Create a new virtual machine using the New VM wizard
    d. Install XenServer Tools
    e. Determine the installation source
    f. Install Windows

    Answer: c.d.e.f.
    Explanation: The four basic steps to create a Windows virtual machine are: 1) Determine the installation source. 2) Create a new virtual machine using the New VM wizard. 3) Install Windows. 4) Install XenServer Tools.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 93

66. Scenario: An administrator needs to create a new virtual machine. The administrator has XenCenter open and wants to start the New VM wizard. Which of the following ways can the administrator start the New VM wizard in XenCenter? (Choose 3)
    a. CTRL+T
    b. Templates > New VM
    c. VM > New
    d. Click the New VM icon on the toolbar

    Answer: b.c.d.
    Explanation: There are six ways to start the New VM wizard: 1) On the toolbar, click New VM. 2) Press Ctrl+N. 3) On the VM menu, click New. 4) On the Server menu, click New VM. 5) On the Templates menu, click New VM. 6) Select a server in the Resources pane, right-click and then click New VM on the shortcut menu.
    Source: XenCenter Help

67. Which of the following are ways that an administrator can launch the New VM wizard in XenCenter? (Choose 3)
    a. Server > New VM
    b. Right-click a server in the Resources pane and click New VM
    c. Tools > New VM
    d. CTRL+N

    Answer: a.b.d.
    Explanation: There are six ways to start the New VM wizard: 1) On the toolbar, click New VM. 2) Press Ctrl+N. 3) On the VM menu, click New. 4) On the Server menu, click New VM. 5) On the Templates menu, click New VM. 6) Select a server in the Resources pane, right-click and then click New VM on the shortcut menu.
    Source: XenCenter Help

68. After opening the New VM wizard in XenCenter, what are some of the steps an administrator will take to create a new virtual machine? (Choose 4)

a. Add to resource pool
b. Configure virtual interfaces
c. Configure CPU and memory
d. Select the operating system
e. Configure virtual storage
f. Configure virtual disks

Answer: b.c.d.f.
Explanation: In the New VM wizard, select the appropriate operating system and click Next. Type a name and description for the virtual machine. Select either the physical optical drive or an ISO image for the location and click Next. Configure the number of CPUs and initial amount of memory and click Next. Configure the virtual disks by adding additional disks from the local or shared storage, or by editing the default setting. Click Finish and the virtual machine automatically reboots. When it starts up, the normal Windows installation begins.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 99, 100

69. XenServer Tools are not required for virtual machines created from _?_ templates.
    a. Windows
    b. Red Hat
    c. Suse
    d. Debian

Answer: d.
Explanation: XenServer Tools are not required for virtual machines created from Debian templates.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 116

70. Which of the following are true of XenServer Tools for Linux? (Choose 3)
    a. Include high-speed paravirtualized storage and network drivers to optimize VM performance
    b. Install a guest agent to enable virtual machine features through XenCenter
    c. Must be manually installed after creating the virtual machine and installing the operating system
    d. Are not required with virtual machines created from the Red Hat templates

Answer: a.b.c.
Explanation: XenServer Tools for Linux include high-speed paravirtualized storage and network drivers to optimize VM performance, install a guest agent to enable virtual machine features through XenCenter, must be manually installed after creating the virtual machine and installing the operating system and are not required with virtual machines created from Debian templates.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 116

71. Scenario: After creating a Linux virtual machine, an administrator is now ready to install the XenServer Tools on the virtual machine. Which of the following steps should the administrator take? (Choose 4)
    a. Mount the image on to the virtual machine
    b. Click the virtual machine, click the Console tab and click the Console
    c. Execute the installation script as the root user
    d. Log in with root level access to the Linux instance of the virtual machine
    e. In XenCenter, right-click the XenServer host, select Install XenServer Tools

Answer: a.b.c.d.
Explanation: After installing a Linux virtual machine it is time to install the XenServer Tools. In XenCenter, right-click the virtual machine and select Install XenServer Tools. Click OK on the message dialog to go to the virtual machine console. Click the virtual machine, click the Console tab and click the Console. Log in with root level access to the Linux instance of the virtual machine. Mount the image onto the virtual machine using mount /dev/xvdd /mt. Execute the installation script as the root user: /mnt/Linux/install.sh. Reboot the virtual machine.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 116

72. If the XenServer was upgraded from a previous version of XenServer, the administrator may need to run the command _?_.
    a. chkconfig xengmond off
    b. chkconfig xengmond on
    c. chkconfig multipathd on
    d. chkconfig multipathd off

    Answer: a.
    Explanation: If the XenServer was upgraded from a previous version of XenServer, the administrator may need to run the command: chkconfig xengmond off
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 116

73. Windows XenServer Tools: (Choose 3)
    a. install a guest agent to enable virtual machine management features through XenCenter
    b. replace emulated storage and network drivers with high-speed paravirtualized versions
    c. must be manually installed after creating the virtual machine and installing the operating system
    d. provide high-speed transport between Windows and XenServer with little overhead

    Answer: a.b.d.
    Explanation: Windows XenServer Tools install a guest agent to enable virtual machine management features through XenCenter, initially use emulated storage and network drivers but replace them with high-speed paravirtualized versions to optimize virtual machine performance and provide high-speed transport between Windows and XenServer with only 2% - 6% overhead. Emulated drivers cause 30% - 40% overhead.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 101

74. Emulated drivers cause _?_ to _?_ overhead, dramatically impacting performance.
    a. 5% to 10%
    b. 30% to 40%
    c. 15% to 25%
    d. 1 to 3.3%

    Answer: b.
    Explanation: Emulated drivers cause 30% to 40% overhead, dramatically impacting performance.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 101

75. Scenario: After creating a Windows virtual machine, an administrator is now going to install the XenServer Tools. Which of the following steps are required to install the Tools? (Choose 3)
    a. Restart the virtual machine
    b. Execute the installation script as the Local Administrator
    c. Log in the Windows virtual machine

d. Right-click the virtual machine and select Install XenServer Tools

Answer: a.c.d.

Explanation: After creating a Windows virtual machine, to install the XenServer Tools: Log in the Windows virtual machine as an administrator. Right-click the virtual machine and select Install XenServer Tools. Follow the installation wizard. Restart the virtual machine. Open the Windows Device Manager to see the paravirtualized drivers.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 102

76. After XenServer Tools are installed, the Windows virtual machine uses the _?_ drivers.
    a. universal
    b. native
    c. paravirtualized
    d. emulated

    Answer: c.

    Explanation: Before the XenServer Tools are installed, the Windows virtual machine uses emulated NIC and storage drivers. After the Tools are installed, the Windows virtual machine uses the paravirtualized drivers.

    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 102

77. What are the three types of templates used for creating new virtual machines found in XenCenter? (Choose 3)
    a. secure
    b. basic
    c. full
    d. custom

    Answer: b.c.d.

    Explanation: There are three types of templates available in XenCenter when creating a new virtual machine: 1) Basic, which include recommended basic settings for new virtual machines, but do not include an operating system. 2) Full, which are full copies of the operating system with files and recommended settings. XenServer ships with full templates for Debian Etch and Sarge. 3) Custom templates are user-created and remove the need to run through an operating system install and system backup.

    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 130

78. Scenario: An administrator was given the task of creating a template from an existing virtual machine. The administrator opens XenCenter. What are the next steps? (Choose 2)
    a. Right-click a XenServer and select Virtual Machines
    b. Right-click an existing virtual machine and select Convert to Template
    c. Shut down the virtual machine
    d. Suspend the virtual machine

    Answer: b.c.

    Explanation: To convert an existing VM into a template, shut down the virtual machine, right-click the virtual machine and click Convert to Template (alternatively, on the VM menu, click Convert to Template). Click OK to confirm. You can view the conversion progress in the status bar at the bottom of the XenCenter window. When conversion is complete, the virtual machine disappears from the Resources pane and reappears as a new custom template.

    Source: XenCenter Help

79. To create a virtual machine from a template, start _?_ and select the desired template.
    a. XenCenter
    b. the CLI
    c. the Copy VM dialog
    d. the New VM wizard

    Answer: d.
    Explanation: To create a virtual machine from a template, start the New VM wizard and select the desired template. Walk through the New VM wizard process and when done, boot the new VM.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 131

80. What is the purpose of virtual machine templates?
    a. To create and customize new virtual machines from
    b. To store as backups for running virtual machines
    c. To run as normal virtual machines
    d. To revert corrupt virtual machines back to a usable state

    Answer: a.
    Explanation: Templates are just ordinary virtual machines which are intended to be used as master copies to create new copies from. A virtual machine can be customized and converted into a template. Templates are read-only and cannot be used as normal virtual machines without first cloning them.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 6

81. Scenario: The IT department needs to create a separate Windows XP virtual machine for three different groups in the call center. The three groups need many of the same applications installed, but each of them also requires applications unique to their group. An administrator has been assigned to create the virtual machines. Using a Windows XP template already created with many of the applications used by all three groups, how should the administrator proceed?
    a. Start the Windows XP template as a virtual machine, install the applications for the first group, shut down the virtual machine and create the needed virtual machines from the template using the New VM wizard. Repeat the process for the second and third groups
    b. Using the New VM wizard, create a new virtual machine and start it. Install the applications needed for the first group, shut down the virtual machine and convert it to a template. Repeat the process for the second and third groups
    c. Make three copies of the Windows XP template. Start each copy as a virtual machine, add the needed applications, shut it down and convert it to a template. Create the needed virtual machines from each template using the New VM wizard
    d. Export the Windows XP template to three different XenServer hosts, start the Windows XP template as a virtual machine on each host, install the applications for a different group on each host, shut down the virtual machines and convert each virtual machine to a template. Create the needed virtual machines from the new templates using the New VM wizard

    Answer: b.
    Explanation: Once a template is created it can never be started as a virtual machine. If a few changes to a template are needed, a virtual machine should be created from the template using the New VM wizard. Make the needed changes (add applications, service packs, etc.) and convert the new virtual machine to a template. Use the new template to create new virtual machines.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 130, 131

82. An administrator can copy an existing virtual machine to shared storage using either _?_ or _?_. (Choose 2)
    a. the CLI
    b. Provisioning Server
    c. New VM wizard
    d. XenCenter

    Answer: a.d.
    Explanation: To copy a virtual machine: If the virtual machine you want to copy is a Windows virtual machine, run the sysprep utility to prepare it for copying. If the virtual machine is running, you must shut it down before you can copy it. Select the virtual machine in the Resources pane and then do one of the following: Right-click and click Copy VM on the shortcut menu or in the VM menu, click Copy VM. In the Copy Virtual Machine dialog box, enter the new virtual machine name in the Name box. To delete the original virtual machine when the copy has been made, select the 'Remove original VM afterwards' check box. To keep the original virtual machine, clear this check box. Select the storage repository where you want to copy the virtual machine's virtual disks. Click Copy to copy the virtual machine to the selected storage repository and close the dialog box.
    Source: XenCenter Help

83. Before using XenConvert to convert a Windows system from a physical machine to a virtual machine, which of the following steps should be taken?
    a. Install the XenServer Tools
    b. Configure an ISO library
    c. Stop security services
    d. Add the source server to a resource pool

    Answer: c.
    Explanation: Before converting a physical Windows machine to a virtual machine, stop security services on the Windows machines such as anti-virus and end-point protection services, as they can interfere with a conversion.
    Source: Citrix XenConvert Guide, Page 20

84. Before converting Windows Server 2003 from a physical machine to a virtual machine using XenConvert, which of the following tasks should be accomplished? (Choose 2)
    a. Enable auto-mount
    b. Configure an ISO library
    c. Stop security services
    d. Install the XenServer Tools

    Answer: a.c.
    Explanation: Before converting a Windows Server 2003 physical machine to a virtual machine using XenConvert, enable auto-mount and stop security services such as anti-virus and end-point protection services, as they can interfere with a conversion.
    Source: Citrix XenConvert Guide, Page 20

85. XenConvert runs on a _?_ and automatically imports the virtual machine into a _?_.
    a. XenServer host / storage repository
    b. XenServer host / physical Windows machine

c. physical Windows machine / storage repository
d. physical Windows machine / XenServer host

Answer: d.
Explanation: XenConvert converts a server or desktop workload from either a physical machine or from another type of virtual machine, to a XenServer virtual machine. It then automatically imports the virtual machine into a XenServer host.
Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 5

86. To convert a Windows system from a physical workstation to a virtual machine and then create a template, which of the following steps should an administrator take? (Choose 2)
    a. Run XenConvert on the physical Windows machine
    b. Import the template to a XenServer host
    c. Reboot the physical host
    d. Modify the device drivers

    Answer: a.b.
    Explanation: XenConvert runs on a physical Windows machine and converts it to live into a disk image or template suitable for importing to a XenServer host. The physical host does not need to be restarted during the process and device drivers are automatically modified to make them compatible with running in a virtual environment.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 5

87. Which of the following steps should an administrator take to convert a VMWare virtual machine to XenServer? (Choose 5)
    a. Run XenConvert on the XenServer host
    b. In XenCenter, import the virtual machine (ova.xml)
    c. Add the network interfaces to the virtual machine
    d. Select the XenServer host to deploy the virtual machine to
    e. Run the XenServer Virtual Disk Migration Utility (v2xva.exe) from a command prompt
    f. Select the storage repository to store the virtual machine

    Answer: b.c.d.e.f.
    Explanation: To convert a VMWare virtual machine to a XenServer virtual machine, identify the virtual machine you want to export. Log on to that virtual machine and uninstall VMware Tools. Delete any snapshots located with the virtual machine. Delete any unnecessary data, drives, or applications you no longer need with that virtual machine. Browse the physical location of the VMware files and locate the virtual machine's .virtual machinex file. Make a note of the path to the virtual machine's .virtual machinex file. Download XenServer Virtual Disk Migration Utility. Extract the contents to a folder on your Windows computer. Open a command prompt and go to the location of the folder. Change the directory to the location of the v2xva.exe file. Create a folder that will contain the contents of the converted virtual machine. Type the x2va.exe command to convert the virtual machine. Allow the export process to finish. After the export process completes, go to the destination folder and locate the ova.xml file. Log on to XenCenter. On the menu bar, go to VM > Import. You will have the option to browse for the ova.xml file or choose either Exported VM or 'Exported template'. Select XenServer Virtual Appliance Version 1 (ova.xml) from the Files of Type list. You are now able to browse and see the ova.xml file. Select the XenServer host that you want to deploy the imported virtual machine to. Select the storage repository where the virtual disks for the newly imported virtual machine will be stored. Add the network interfaces you want to configure for the new virtual machine. Click Finish to complete the import process.

Source: Citrix Knowledge Center, Article CTX116603

88. An administrator should _?_ and _?_ after completing a XenConvert P2V migration. (Choose 2)
    a. reboot the physical Windows machine
    b. install the XenServer Tools on the virtual machine
    c. delete unnecessary driver information
    d. modify the device drivers on the virtual machine

    Answer: b.c.
    Explanation: After completing a XenConvert P2V migration, an administrator should install the XenServer Tools on the virtual machine and delete unnecessary software from the virtual machine. The physical host does not need to be restarted during the process and device drivers are automatically modified to make them compatible with running in a virtual environment.
    Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 5

89. Scenario: While an administrator was running a P2V migration with XenConvert 1.1, a Windows Server 2003 SP1 system failed to convert. Which of the following most likely caused the failure?
    a. The server is a Domain Controller
    b. A virus was detected on the server during the conversion process
    c. Windows Server 2003 didn't have the latest service pack installed
    d. Microsoft .NET Framework version 2.0 was not installed on the server before installing XenConvert

    Answer: a.
    Explanation: XenConvert cannot copy files that are in use by another application or service, so it is not recommended to convert a system that has a critical service running, like a Domain Controller. Virus detection is not part of the conversion process. Windows Server 2003 SP1 is supported by XenConvert 1.1. If the system being converted does not have Microsoft .NET Framework version 2.0 installed, XenConvert will automatically install it.
    Source: Citrix XenConvert Guide, Pages 9, 13, 14

90. Which of the following is most likely to cause a XenConvert migration to fail? (Choose 2)
    a. A virtual display adapter driver is not installed automatically
    b. A critical service or file is in use
    c. A mapped network drive
    d. Autorun is enabled

    Answer: b.d.
    Explanation: XenConvert will fail if a critical service, like the Domain Controller with Active Directory service, is running or if a critical file is in use. It may also fail if Autorun is enabled. If a network drive is mapped, it may not be mapped after conversion. If a virtual display adapter driver is not installed automatically, a standard VGA mode driver will be installed.
    Source: Citrix XenConvert Guide, Pages 8 - 12

#Working with Virtual Machines

91. To free up memory and CPU cycles on a XenServer host, an administrator should _?_ a virtual machine.
    a. shut down
    b. suspend
    c. reboot

d. uninstall

Answer: b.

Explanation: Reasons to suspend a virtual machine include: Storing the memory image outside the virtual disk of the virtual machine, freeing up memory and CPU cycles on a XenServer host and reducing startup times.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 132

92. An administrator should choose to suspend virtual machines when desiring to: (Choose 3)
    a. reduce startup times
    b. free up memory and CPU cycles on a XenServer host
    c. store the memory outside the virtual disk of the virtual machine
    d. upgrade XenServer

    Answer: a.b.c.

    Explanation: An administrator should choose to suspend virtual machines when desiring to reduce startup times of other virtual machines, free up memory and CPU cycles on a XenServer host or store the memory outside the virtual disk of the virtual machine. Ensure that you do not have any suspended virtual machines if you are performing a XenServer upgrade, as they may not be able to resume after the upgrade.

    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 132

93. Scenario: After upgrading a XenServer host, an administrator realizes that one of the virtual machines was suspended and now it is stuck in that state. Which of the following operations should the administrator perform on the virtual machine?
    a. Resume
    b. Reboot
    c. Force Shutdown
    d. Start

    Answer: c.

    Explanation: Ensure that you do not have any suspended virtual machines if you are performing a XenServer upgrade, as they may not be able to resume after the upgrade. To get a suspended VM back into a usable state, you have to perform a Force Shutdown on it and then restart it.

    Source: XenServer Installation Guide 5.0.0, Page 19

94. Scenario: An administrator is planning to upgrade a XenServer host that has several virtual machines running on it. Before upgrading the XenServer, what is the first thing the administrator should do?
    a. Reboot the XenServer host
    b. Force Shutdown the virtual machines
    c. Suspend the virtual machines
    d. Orderly shutdown the virtual machines

    Answer: d.

    Explanation: Before upgrading a XenServer host, perform an orderly shutdown on all of the virtual machines. If any of the virtual machines are suspended, resume them first and then perform an orderly shutdown on them.

    Source: XenServer Installation Guide 5.0.0, Page 24

95. Scenario: Network connectivity was lost during an export operation and a virtual machine is stuck in an exporting state. What should an administrator do to free up the virtual machine?

a. Force Shutdown on the virtual machine
b. Resume the virtual machine
c. Uninstall the virtual machine
d. Delete the virtual machine

Answer: a.
Explanation: If network connectivity is lost during an export operation, the export fails and the virtual machine remains stuck in the exporting state. To free up the virtual machine, select it and click Force Shutdown.
Source: XenServer Release 3.2.0 Notes, Page 6

96. Scenario: Network connectivity was lost while a virtual machine was installing from a P2V operation. The installation failed and the virtual machine remains stuck in the installing state. What should an administrator do to free up the system and re-try the installation?
    a. Force Shutdown on the virtual machine
    b. Resume the virtual machine
    c. Uninstall the virtual machine
    d. Delete the virtual machine

    Answer: c.
    Explanation: If network connectivity is lost while a virtual machine is installing from a network installation media source or via a P2V operation, the installation fails and the virtual machine remains stuck in the installing state. To free up the system and re-try the installation, select the virtual machine and click Uninstall.
    Source: XenServer Release 3.2.0 Notes, Page 6

97. Exporting virtual machines allows for: (Choose 2)
    a. a full backup of virtual machines
    b. moving between Linux and Windows XenServer hosts
    c. compressing and securing the virtual machine images
    d. the archiving of old virtual machines that are being taken out of service

    Answer: a.d.
    Explanation: Exporting virtual machines allows for a full backup of virtual machines and the archiving of old virtual machines that are being taken out of service. It also allows for the movement of virtual machines and the creation of a library of virtual machine images.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 126

98. Scenario: The IT department has to take several virtual machines out of service as they are being replaced with virtual machines with newer operating systems, yet the IT supervisor doesn't want to delete the images. What should the administrator put in charge of the project do with the old virtual machines?
    a. Create a full backup on tape and store it offsite
    b. Uninstall the virtual machines and reinstall them on a storage archive
    c. Compress the virtual machines in an archive folder using a compression application
    d. Export the virtual machines to a storage archive

    Answer: d.
    Explanation: Exporting virtual machines allows for several options, including archiving of old virtual machines that are being taken out of service.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 126

99. Importing or exporting virtual machines can be executed from _?_ or _?_. (Choose 2)
    a. XenCenter
    b. Provisioning Server
    c. the CLI
    d. XenConvert

    Answer: a.c.
    Explanation: Importing or exporting virtual machines can be executed from XenCenter or the CLI.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 126, 128

100. When importing or exporting a virtual machine, the data is sent over _?_.
    a. SSL
    b. ICA
    c. RDP
    d. XML

    Answer: a.
    Explanation: When importing or exporting a virtual machine, the data is sent over an SSL link to the system running XenCenter or the CLI.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 126, 128

101. When importing a virtual machine, remember: (Choose 3)
    a. the virtual machine automatically gets a new unique ID and new MAC address for the network card
    b. virtual NIC settings are always preserved
    c. virtual machines from XenServer 3.2 can't be imported to 5.0
    d. the processor of the XenServer host must be from the same manufacturer the virtual machine was exported from

    Answer: a.c.d.
    Explanation: When importing a virtual machine, remember that the virtual machine automatically gets a new unique ID and new MAC address for the network card, virtual machines from XenServer 3.2 can't be imported to 5.0 -- they must first be imported to 4.1 and then they can be imported to 5.0, and a virtual machine cannot be exported on an Intel-based server then imported on an AMD-based server or vice-versa -- the processor of the XenServer host must be from the same manufacturer that the virtual machine was exported from. Also, always check that the virtual NIC settings fit the virtual machine after performing an import, as the virtual NIC settings are not preserved because the networks on different physical boxes may not match.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 128

102. How can an administrator move a virtual machine from a XenServer host in a resource pool to a XenServer host that is not in a resource pool?
    a. Clone the virtual machine in the resource pool and use XenMotion to move the virtual machine to the non-resource pool XenServer host
    b. Create a template from the virtual machine in the resource pool, export the template, import the template to the non-resource pool XenServer host and create a virtual machine from the template
    c. Clone the virtual machine in the resource pool and copy it to the non-resource pool XenServer host

d. Run XenConvert on the XenServer host in the resource pool and during the conversion process export the virtual machine to the non-resource pool XenServer host

Answer: b.
Explanation: Virtual machines can be created by converting an existing virtual machine to a template. Export and import provides a way to move a virtual machine to a XenServer host that is not part of a resource pool.
Source: XenServer Virtual Machine Installation Guide 5.0.0, Pages 2, 7

103. What are the two modes of the copy operation for cloning virtual machines? (Choose 2)
    a. Custom
    b. Full
    c. Fast
    d. Automatic

Answer: b.c.
Explanation: There are two modes of the copy operation: 'Full copy' and 'Fast clone'. The 'Fast clone' only writes modified blocks to disk. It is designed to save disk space and allow fast clones, but will slightly slow down normal disk performance. 'Fast clone' is only supported for file-backed virtual machines.
Source: XenServer Virtual Machine Installation Guide 5.0.0, Page 6

104. An administrator can make a full copy of a virtual machine to _?_.
    a. a physical machine
    b. a XenServer host
    c. a storage repository
    d. another virtual machine

Answer: c.
Explanation: A full copy of a virtual machine can be created on a storage repository.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 129

105. Scenario: An administrator is copying a virtual machine to a storage repository and she wants to delete the original virtual machine as soon as the copy finishes. Which of the following should she do?
    a. Write a script to delete the original virtual machine after the copy operation finishes
    b. Right-click and select delete on the original virtual machine after the copy operation finishes
    c. Set a scheduled task to delete the original virtual machine after the copy operation finishes
    d. Select 'Delete original VM after copy' on the Copy Virtual Machine window

Answer: d.
Explanation: To delete the original virtual machine after the copy operation finishes, select 'Delete original VM after copy' on the Copy Virtual Machine window.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 129

106. Before copying a running Windows virtual machine, you must accomplish which two tasks? (Choose 2)
    a. run Sysprep
    b. suspend the virtual machine
    c. run XenConvert

d. run the New VM wizard
e. export the virtual machine
f. shut down the virtual machine

Answer: a.f.
Explanation: If the VM you want to copy is a Windows VM, run the sysprep utility to prepare it for copying. If the VM is running, you must shut it down before you can copy it.
Source: XenCenter Help

107. If you want to clone a virtual machine to a server within the same resource pool, use the _?_ operation.
a. XenConvert
b. Copy
c. Import
d. Export

Answer: b.
Explanation: To clone a virtual machine to a server within the same resource pool, use the Copy operation. Use Export and Import to copy a virtual machine to a server that is outside of the resource pool.
Source: XenCenter Help

108. XenServer allows an administrator to take a snapshot of the storage for a virtual machine and metadata when using _?_ or _?_ storage. (Choose 2)
a. NFS
b. iSCSI
c. NetApp
d. EqualLogic

Answer: c.d.
Explanation: XenServer allows an administrator to take a snapshot of the storage for a virtual machine and metadata when using NetApp or EqualLogic storage.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 264

109. _?_ snapshots are crash consistent.
a. Timeline
b. Binary
c. Regular
d. Quiesced

Answer: c.
Explanation: Regular snapshots are crash consistent. Quiesced snapshots are not crash consistent.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 264

110. _?_ snapshots are NOT crash consistent.
a. Timeline
b. Binary
c. Regular
d. Quiesced

Answer: d.

Explanation: Quiesced snapshots are not crash consistent. Regular snapshots are crash consistent.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 264

111. Which of the following steps are included in connecting a network to an external VLAN using the CLI? (Choose 4)
    a. Open XenCenter
    b. To find the UUID of the master host, use the command: xe host-list
    c. Attach virtual machine VIFs to the new network
    d. Create a new network using the command: xe network-create
    e. To find the UUID of the desired physical NIC's PIF, use the command: xe pif-list
    f. Create a VLAN object using the command: xe vlan-create

Answer: c.d.e.f.
Explanation: To connect a network to an external VLAN via the CLI: 1) Open the XenServer host text console. 2) Create a new network for use with the VLAN. The UUID of the new network is returned: xe network-create name-label=network5 3) Use the pif-list command to find the UUID of the PIF corresponding to the physical NIC supporting the desired VLAN tag. The UUIDs and device names of all PIFs are returned, including any existing VLANs: xe pif-list 4) Create a VLAN object specifying the desired physical PIF and VLAN tag on all virtual machines to be connected to the new VLAN. A new PIF will be created and plugged into the specified network. The UUID of the new PIF object is returned: xe vlan-create network-uuid=<network_uuid> pif-uuid=<pif_uuid> vlan=5 5) Attach virtual machine VIFs to the new network.
Source: XenServer Administrator's Guide 5.0.0, Pages 49, 50

112. Virtual machines use _?_ to connect to the virtual interfaces in the control domain.
    a. standard Windows drivers
    b. the virtual switch
    c. the physical NIC
    d. paravirtualized network drivers

Answer: d.
Explanation: Virtual machines use paravirtualized network drivers to connect to the virtual interfaces in the control domain. The drivers are Linux device drivers. The virtual switch controls whether the connection stays internal or connects to the physical NIC out to the external network.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 176, 177

113. The _?_ acts as a bridge to allow virtual machines to connect to the external network.
    a. virtual interface
    b. virtual NIC
    c. in-memory bus
    d. physical NIC
    e. virtual switch

Answer: e.
Explanation: The virtual switch acts as a bridge, using standard Linux bridge utilities, to allow virtual machines to connect to the external network. VLAN trunking (multiple VLANs into each NIC) is supported in this architecture.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 177

114. The _?_ passes data from the Xen hypervisor to the virtual switch.
    a. virtual interface
    b. virtual NIC
    c. in-memory bus
    d. physical NIC

    Answer: a.
    Explanation: The virtual interface passes data from the Xen hypervisor to the virtual switch.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 177

115. Using a front-end stub driver, the _?_ efficiently passes data to the Xen hypervisor which passes it to the virtual interface and on to the virtual switch.
    a. in-memory bus
    b. virtual NIC
    c. physical NIC
    d. storage repository

    Answer: b.
    Explanation: The virtual NIC, using a front-end stub driver, moves data to the Xen hypervisor in a very quick and efficient way.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 177

116. Using a ring buffer, a high speed _?_ connects virtual machines in Xen to a virtual interface in the control domain.
    a. virtual NIC
    b. physical NIC
    c. in-memory bus
    d. virtual switch

    Answer: b.
    Explanation: Virtual machines are connected over a high speed in-memory bus in Xen to a virtual interface in the control domain. The in-memory bus uses a ring buffer to point to new data without requiring a copy for each operation, which improves the speed.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 177

117. A _?_ makes it possible for the virtual switch to connect the virtual machines to the physical network.
    a. virtual interface
    b. virtual NIC
    c. in-memory bus
    d. physical NIC

    Answer: d.
    Explanation: The virtual switch connects virtual machines to the physical NIC which gives them access to the external, physical network.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 177

118. It is recommended to configure _?_ as part of the initial resource pool creation to ensure NIC resiliency for all new virtual machines that join the resource pool.
    a. an internal network
    b. NIC bonding
    c. VLANs

d. an external network

Answer: b.

Explanation: Whenever possible, create NIC bonds as part of initial resource pool creation prior to joining additional member servers to the pool or creating virtual machines. Doing so allows the bond configuration to be automatically replicated to member servers as they are joined to the pool and reduces the number of steps required. Adding a NIC bond to an existing pool requires creating the bond configuration manually on the master and each of the members of the pool. Adding a NIC bond to an existing pool after virtual machines have been installed is also a disruptive operation, as all virtual machines in the pool must be shut down.

Source: XenServer Administrator's Guide 5.0.0, Pages 51 - 54

119. An administrator can change the name and description of a virtual machine in the _?_ tab in XenCenter.
    a. Startup Options
    b. HA (High Availability)
    c. General
    d. Memory and VCPU
    e. Optimization
    f. Alerts

Answer: c.

Explanation: To change the name or description of a virtual machine, select the virtual machine in the Resources pane, click the General tab and click Properties. On the General tab in the Properties dialog box, enter the new value in the Name or Description boxes. Click OK to save your changes and close the dialog box.

Source: XenCenter Help

120. On which tab in XenCenter can an administrator change the number of virtual CPUs for a virtual machine?
    a. Startup Options
    b. HA (High Availability)
    c. General
    d. Memory and VCPU
    e. Optimization
    f. Alerts

Answer: d.

Explanation: The number of virtual CPUs and the amount of memory allocated to a virtual machine can be changed on the Memory and VCPU tab in XenCenter. To change the amount of memory allocated to a virtual machine, select the virtual machine in the Resources pane, click the General tab and click Properties. Click the Memory and VCPUs tab in the Properties dialog box and change the number in the virtual machine memory box. Click OK to save your changes and close the dialog box. You can configure up to 8 virtual CPUs (VCPUs) on a virtual machine. To change the number of VCPUs, select the virtual machine in the Resources pane, click the General tab and click Properties. Click the Memory and VCPUs tab in the Properties dialog box. Change the number in the 'Number of VCPUs' box. To tune the VCPU priority, move the slider. Click OK to save your changes and close the dialog box.

Source: XenCenter Help

121. What virtual machine configurations can an administrator make in the Startup Options tab in XenCenter? (Choose 3)
    a. Auto-start on server boot
    b. Startup scheduler
    c. Boot order
    d. Operating system boot parameters

    Answer: a.c.d.
    Explanation: The available virtual machine startup options may vary, depending on the guest operating system. Select the virtual machine in the Resources pane, click the General tab and click Properties. Click the Startup Options tab in the Properties dialog box. To have the virtual machine automatically start up whenever its host server is booted, select the Auto-start on server boot check box. To change the boot order, select an item in the Boot Order list and click Move Up or Move Down. To specify additional boot parameters, enter them in the OS Boot parameters box. Click OK to save your changes and close the dialog box.
    Source: XenCenter Help

122. You can configure XenCenter to generate alerts when _?_, _?_ or _?_ go over a specified threshold on a managed server or virtual machine. (Choose 3)
    a. CPU
    b. network I/O
    c. page faults
    d. disk I/O

    Answer: a.b.d.
    Explanation: You can configure XenCenter to generate alerts when CPU, network I/O or disk I/O usage go over a specified threshold on a managed server or virtual machine. By default, the alert repeat interval is 60 minutes, but you can configure this as well.
    Source: XenCenter Help

123. Which of the following virtual machine configurations can be made on the Optimization tab in XenCenter? (Choose 3)
    a. Optimize performance for virtual machines running Citrix XenApp
    b. Manually adjust the virtual machine's shadow memory allocation
    c. Restore the defaults for shadow memory
    d. Optimize performance for virtual machines being delivered by Citrix XenDesktop

    Answer: a.b.c.
    Explanation: Click the Optimization tab in the Properties dialog box and select an optimization option: To optimize performance for virtual machines running Citrix XenApp, click 'Optimize for Citrix XenApp'. To manually adjust the virtual machine's shadow memory allocation, click 'Optimize manually' and enter a number in the 'Shadow memory multiplier' box. To restore the default settings for shadow memory, select the 'Optimize for general use' option. Click OK to save your changes and close the dialog box.
    Source: XenCenter Help

124. An administrator can configure the _?_, _?_ and _?_ of a virtual NIC in the Network Properties of the virtual machine. (Choose 3)
    a. IP address
    b. network location
    c. MAC address

d. bandwidth

Answer: b.c.d.

Explanation: To configure the network location, MAC address and bandwidth limit of a virtual NIC, select the virtual machine in the Resources pane of XenCenter, click the Network tab, and select a virtual NIC in the list on the Network tab and click Properties.

Source: XenCenter Help

125. An administrator can set the bandwidth limits of a virtual NIC in _?_.
    a. XenConvert
    b. XenMotion
    c. XenServer Tools
    d. XenCenter

Answer: d.

Explanation: To set the bandwidth limits of a virtual NIC, in XenCenter select the virtual machine in the Resources pane, click the Network tab, select a virtual NIC in the list on the Network tab and click Properties. In Network Properties, set the bandwidth limit in the Limit field and click OK.

Source: XenCenter Help

126. By default, the Performance tab in XenCenter contains graphs showing what data for virtual machines? (Choose 4)
    a. CPU
    b. memory
    c. page faults
    d. network I/O
    e. disk usage

Answer: a.b.d.e.

Explanation: The Performance tab shows performance data for the selected server or virtual machine in graph form. For virtual machines, graphs showing CPU, memory, network I/O and disk usage data are shown by default.

Source: XenCenter Help

127. Using the _?_ tab, an administrator can connect to a Windows virtual machine using RDP.
    a. Server
    b. General
    c. Performance
    d. Console

Answer: d.

Explanation: Using the Console tab, and administrator can connect to a Windows virtual machine using a Remote Desktop console (RDP) or the standard graphical console (VNC).

Source: XenCenter Help

#Managing XenServer Hosts

128. An administrator can perform which of the following using the Storage tab in XenCenter? (Choose 3)
    a. Add a storage repository to a server or pool
    b. Enable storage multipathing

c. Add a disk to a storage repository
d. Attach a disk to a virtual machine

Answer: a.c.d.

Explanation: The storage settings shown on this tab depend on the type of resource currently selected in the Resources pane. Tasks that can be accomplished on the Storage tab include editing a virtual machine's settings, adding a new disk or attaching an existing disk to a virtual machine, editing the name or description of a storage repository and attaching or detaching a storage repository to a server or pool, and adding a new disk to a storage repository.

Source: XenCenter Help

129. Which of the following storage devices can be added using the Storage tab in XenCenter? (Choose 2)
a. NetApp
b. NFS
c. LVM
d. Local

Answer: a.b.

Explanation: Any of the following storage types can be created in XenCenter: ISO, NetApp, Dell EqualLogic, NFS, Hardware HBA and LVM over iSCSI. These type of storage repositories can only be created using the XenServer CLI, but can be managed within XenCenter: Local, LVM, udev and Ext3.

Source: XenCenter Help

130. Which three tasks can be performed using the HA tab in XenCenter? (Choose 3)
a. Enable HA
b. Disable HA
c. Change host protection levels
d. Change virtual machine protection levels

Answer: a.b.d.

Explanation: Using the HA tab in XenCenter an administrator can enable HA, disable HA or change the protection level of virtual machines.

Source: XenCenter Help

131. To remove a XenServer host from a resource pool, do one of the following: (Choose 2)
a. Select it in the Resources pane and click Remove in the Server menu
b. Select the resource pool in the Resources pane, select the Servers tab, select the server from the list and click Remove
c. Right-click the server in the Resources pane and click 'Remove Server from Pool'
d. Right-click the resource pool in the Resources pane, click 'Remove a Server', select the server in the 'Remove a Server' dialog box and click Remove

Answer: a.c.

Explanation: To remove a server from a resource pool: Copy any data stored on local disks to a shared storage repository in the same resource pool. Shut down any virtual machines running on the server. In the Resources pane, select the server and do one of the following: Right-click and click 'Remove Server from Pool' in the Resources pane shortcut menu or in the Pool menu click Remove Server.

Source: XenCenter Help

132. Which tab in XenCenter can be used to backup XenServer host configurations and software?
    a. Backup
    b. General
    c. Server
    d. Storage

    Answer: c.
    Explanation: To back up your server configuration and software, select the server in the Resources pane and click Back Up Server on the Server menu. Browse to locate the folder where you want to create the backup file and enter the filename and click Save to begin the backup.
    Source: XenCenter Help

133. Scenario: A new graph needs to be set up to measure performance data on a XenServer host beyond what the default data shows. The systems administrator assigned to this project needs to include which of the following steps to set up the new graph? (Choose 2)
    a. Click the Configure Graphs
    b. Select the XenServer host in the Resources pane and select the General tab
    c. On the Tools menu, click Options and click the Performance Graphs tab
    d. Include the desired data sources

    Answer: a.d.
    Explanation: The Performance tab shows performance data for the selected server or virtual machine in graph form. To add a new graph, click Configure Graphs. On the Data Sources tab, select the check boxes for the data sources you want to include. To change the color of the graph line corresponding to a data type, right-click the data type and select a new color from the color picker. Click the Layout tab. In the list on the right of the tab, select the data sources you want to include in the new graph and click Add Graph. To move the new graph up or down, select it and click Move Up or Move Down. Click OK.
    Source: XenCenter Help

134. What will occur when a pool master is placed in Maintenance Mode?
    a. All servers in the resource pool are suspended until the pool master returns
    b. The resource pool is deleted
    c. All virtual machines in the pool are suspended until the pool master returns
    d. A new pool master is selected for the pool

    Answer: d.
    Explanation: When a pool master is placed in Maintenance Mode, a new pool master is selected from the same resource pool.
    Source: XenCenter Help

135. If a server is in a resource pool, what happens to the running virtual machines on the server when the server is placed in Maintenance Mode?
    a. They are migrated to another server in the same pool
    b. They are migrated to another server in a different pool
    c. They become corrupt and are rendered useless
    d. They automatically shutdown
    e. They automatically suspend

    Answer: a.
    Explanation: If the server is in a resource pool, when you place it in Maintenance Mode, all running virtual machines will be migrated from it to another server in the same pool.

Source: XenCenter Help

136. Which of the following can an administrator do to lighten the load on a primary management NIC?
    a. Create a NIC bond with another management NIC
    b. Configure another management NIC and dedicate it to storage traffic
    c. Change the NIC to full-duplexing mode
    d. Create a virtual NIC and configure it as a shadow-NIC to take on extra traffic

    Answer: b.
    Explanation: A normal NIC can be configured as a management NIC to be used to reduce the load on the primary management NIC by being dedicated to secondary management tasks, such as remote storage.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 180

137. Scenario: An IT department has three 1Gbps NICs available for the new XenServer host that is going to be installed. They already know that they are going to need 1Gbps dedicated to storage traffic and 1Gbps dedicated to application traffic. Which of the following configurations makes the most sense for the IT department to implement with the equipment that they already have?
    a. Bond two of the NICs together to create a virtual secondary management NIC dedicated to storage traffic and application traffic, and configure the other NIC as the primary management NIC
    b. Bond all three of the NICs together to take care of all of the management, storage and application traffic
    c. Use one NIC for the primary management NIC, configure the second NIC as a secondary management NIC dedicated to storage traffic and configure the third NIC as a secondary management NIC dedicated to application traffic
    d. Use one NIC for the primary management NIC, configure the second NIC as an internal-only network dedicated to storage traffic and configure the third NIC as an external-only NIC dedicated to application traffic

    Answer: c.
    Explanation: Normal NICs can be configured as secondary management NICs to be used to reduce the load on the primary management NIC by being dedicated to secondary management tasks, such as storage traffic and application traffic.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 180

138. A normal NIC can be configured as a management NIC and _?_ to lighten the load on the primary management NIC.
    a. bonded to the primary management NIC
    b. configured for an internal-only network
    c. configured for full-duplexing mode
    d. dedicated to storage traffic

    Answer: d.
    Explanation: A normal NIC can be configured as a management NIC to be used to reduce the load on the primary management NIC by being dedicated to secondary management tasks, such as storage traffic.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 180

139. Scenario: An administrator needs to design a network that will restrict virtual machines from accessing resources on the company's physical network by not allowing them to connect to a physical NIC. The administrator should create what type of network?
    a. internal-only
    b. external-only
    c. bonded NIC
    d. management dedicated

    Answer: a.
    Explanation: Internal networks have no association to a physical network interface, and can be used to provide connectivity only between the virtual machines on a given server, with no connection to the outside world.
    Source: XenCenter Help

140. Scenario: An administrator is planning a network that will connect virtual machines to a physical NIC to access resources on the company's physical network. The administrator is planning what type of network?
    a. internal-only
    b. external-only
    c. bonded NIC
    d. management dedicated

    Answer: b.
    Explanation: External networks have an association with a physical NIC and provide a bridge between a virtual machine and the physical network interface connected to the network, enabling a virtual machine to connect to resources available through the server's physical network interface card.
    Source: XenCenter Help

#Determining Storage

141. Scenario: A storage repository unexpectedly appears as broken in XenCenter. What can an administrator do first to try and diagnose and resolve the problem?
    a. Run some common network commands like PING and NETSTAT to verify a connection to the storage repository
    b. Detach and reattach the storage repository
    c. Run the Repair Storage Repository tool
    d. Try connecting to the storage repository using the Console tab

    Answer: c.
    Explanation: You may be able to diagnose and resolve some common storage repository connection problems using the Repair Storage Repository tool. In the Resources pane, select the storage resource, right-click and click Repair Storage Repository on the shortcut menu. The available storage repositories are listed, and you can see their status. Click Repair to have XenCenter attempt to repair the storage. Progress and results are displayed within the Repair Storage Repository dialog box.
    Source: XenCenter Help

142. Scenario: You notice that a storage repository appears broken in XenCenter. You right-click the storage repository and select Repair Storage Repository. In the Repair Storage Repository dialog

box, the storage repository's status is listed as 'Connection missing'. What is the next thing you should do?

a. Physically reboot the storage device
b. Try pinging the storage repository
c. Try connecting to the storage repository using the Console tab
d. Click Repair

Answer: d.

Explanation: You may be able to diagnose and resolve some common storage repository connection problems using the Repair Storage Repository tool. In the Resources pane, select the storage resource, right-click and click Repair Storage Repository on the shortcut menu. The available storage repositories are listed, and you can see their status. The statuses include: 1) Connected, which means the connection between the storage repository and the server is working normally and the storage provided by the storage is currently available. 2) Unplugged, which means the storage is unavailable because the PBD is currently unplugged. 3) 'Connection missing', which means the storage is unavailable because the PBD cannot be found. Click Repair to have XenCenter attempt to repair the storage. Progress and results are displayed within the Repair Storage Repository dialog box.

Source: XenCenter Help

143. During the initial setup of XenServer on two local storage repositories, which of the following is the best storage repository option?

a. The virtual machine storage repository is installed on the same disk as XenServer and on the additional disk
b. The virtual machine storage repository is installed on the same disk as XenServer and the in-place upgrade partition is installed on the additional disk
c. The virtual machine storage repository is installed on the same disk as the control domain and the hypervisor is installed on the additional disk
d. The virtual machine storage repository is installed on one disk and XenServer is installed on the additional disk

Answer: d.

Explanation: During the initial setup of XenServer on more than one local disk, it is a best practice to install the virtual machine storage repository on one disk and XenServer (which includes the control domain, hypervisor and in-place upgrade partition) is installed on the other. This way the XenServer disk can be set up as RAID 1 for reliability and the storage repository can be set up as RAID 5 for performance and reliability.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 75, 76

144. Local storage support includes: (Choose 2)

a. Dell EqualLogic
b. Fibre Channel SAN
c. IDE and SATA
d. iSCSI SAN
e. SCSI and SAS
f. NFS
g. NetApp Filer using OnTap
h. iSCSI SAN using Hardware Host Bus Adapters (HBA)

Answer: c.e.

Explanation: Local storage support includes IDE, SATA, SCSI and SAS.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 192

145. XenServer Enterprise Edition 5.0 supports remote storage repositories, which include: (Choose 6)
    a. Dell EqualLogic
    b. Fibre Channel SAN
    c. IDE and SATA
    d. iSCSI SAN
    e. SCSI and SAS
    f. NFS
    g. NetApp Filer using OnTap
    h. iSCSI SAN using Hardware Host Bus Adapters (HBA)

    Answer: a.b.d.f.g.h.
    Explanation: Remote storage is supported by XenServer Enterprise Edition 5.0. Remote storage devices include: Dell EqualLogic, Fibre Channel SAN, iSCSI SAN, NFS, NetApp Filer using OnTap and iSCSI SAN using Hardware Host Bus Adapters (HBA).
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 192

146. When installing XenServer, how much disk space is required for the control domain and the guest virtual machine storage repository?
    a. 16 GB
    b. 8 GB
    c. 4 GB
    d. 32 GB

    Answer: a.
    Explanation: XenServer installation requires 16 GB of disk space, where 8 GB is used for the control domain and 8 GB is reserved for the guest virtual machine storage repository.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 74

147. Scenario: Remote storage traffic is taking up much too much of the management NIC's resources on a XenServer host. It is decided that a dedicated NIC bond is going to be used for remote storage traffic. What are the basic steps the administrator in charge of the project must take to dedicate the bonded NIC to storage traffic? (Choose 3)
    a. Enable multipathing on the NIC bond
    b. Dedicate the IP address to remote storage traffic
    c. Assign the NIC bond a separate IP address
    d. Configure the NIC bond to management mode

    Answer: b.c.d.
    Explanation: To configure a dedicated NIC bond to remote storage, configure the NIC bond to management mode, assign the NIC bond a separate IP address and dedicate the IP address to remote storage traffic.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Pages 215, 216

148. All storage repository types erase any existing data on the specified storage target except _?_, which create a new directory on the filer leaving existing storage repositories as they were.
    a. NetApp
    b. NFS
    c. EqualLogic

d. Fibre Channel

Answer: b.

Explanation: For most storage repository types, creating a new storage repository involves erasing any existing data on the specified storage target. The exception is NFS storage repositories, which create a new directory on the filer leaving existing NFS storage repositories as they were.

Source: XenServer Administrator's Guide 5.0.0, Page 22

149. When you _?_ a storage repository, the contents of the virtual disks are preserved and the meta-information used by virtual machines to access the virtual disks is also preserved.
    a. Forget
    b. Destroy
    c. Detach
    d. Format

Answer: c.

Explanation: Detaching a storage repository breaks the association between the storage device and the pool or server, and its virtual disks become inaccessible. The contents of the virtual disks are preserved, however, and the meta-information used by virtual machines to access the virtual disks is also preserved.

Source: XenCenter Help

150. To remove a storage repository without losing any data on the virtual disks: (Choose 2)
    a. forget the storage repository
    b. destroy the storage repository
    c. detach the storage repository
    d. suspend the virtual machines
    e. put the XenServer host in Maintenance Mode
    f. shut down the virtual machines

Answer: c.f.

Explanation: All data on the virtual disks is preserved when a storage repository is detached. To detach a storage repository using XenCenter: Shut down any virtual machines using the storage repository. Select the storage repository in the Resources pane and then do one of the following: Right-click and click Detach Storage Repository on the Resources pane shortcut menu or on the Storage menu, click Detach Storage Repository. Click OK to confirm.

Source: XenCenter Help

151. Dynamic multipathing is available for which of the following storage types? (Choose 2)
    a. NFS
    b. NetApp
    c. Fibre Channel
    d. iSCSI

Answer: c.d.

Explanation: Dynamic multipathing support is available for Fibre Channel and iSCSI storage backends.

Source: XenServer Administrator's Guide 5.0.0, Page 39

152. To enable multipathing, the first step is to:
    a. click the Multipathing tab in the properties of the server

b. export the virtual machines on the server
c. detach the storage repository
d. put the server into Maintenance Mode

Answer: d.

Explanation: To enable multipathing: In the Resources pane of XenCenter, select the server and put it into Maintenance Mode. When the server reappears in the Resources pane with the icon, on the General tab, click Properties and click the Multipathing tab. Select the 'Enable multipathing on this server' check box. Click OK to apply the new setting and close the dialog box.

Source: XenCenter Help

153. Which of the following steps should an administrator take to enable multipathing? (Choose 3)
a. On the XenServer host's General tab, click Properties and select the Multipathing tab
b. Select 'Enable multipathing on this server'
c. Detach the storage repository
d. Put the server into Maintenance Mode

Answer: a.b.d.

Explanation: To enable multipathing: In the Resources pane of XenCenter, select the server and put it into Maintenance Mode. When the server reappears in the Resources pane with the icon, on the General tab, click Properties and click the Multipathing tab. Select the 'Enable multipathing on this server' check box. Click OK to apply the new setting and close the dialog box.

Source: XenCenter Help

154. Which of the following are true of multipathing? (Choose 3)
a. It uses round robin mode load balancing
b. It is supported by NFS and NetApp storage devices
c. It can be enabled in XenCenter or command line
d. Place the server in Maintenance Mode to configure it

Answer: a.c.d.

Explanation: Dynamic multipathing support is available for Fibre Channel and iSCSI storage backends. By default, it uses round robin mode load balancing, so both routes will have active traffic on them during normal operation. Multipathing can be enabled in XenCenter or on the command line. Place the server in Maintenance Mode to configure multipathing.

Source: XenServer Administrator's Guide 5.0.0, Page 39 and XenCenter Help

155. Which of the following steps should an administrator take to configure a shared LVM over Fibre Channel and iSCSI storage repository? (Choose 3)
a. Click New Storage in XenCenter to launch the New Storage Repository dialog box
b. Select the Hardware HBA option to query all available LUNs and select the desired LUN
c. Place the server in Maintenance Mode
d. Zone in one or more LUNs to the XenServer hosts

Answer: a.b.d.

Explanation: To configure a shared LVM over Fibre Channel and iSCSI storage repository: 1) Zone in one or more LUNs to the XenServer hosts. 2) Click New Storage in XenCenter to launch the New Storage Repository dialog box. 3) Select the Hardware HBA option to query all available LUNs. 4) Select the desired LUN. 5) Click Finish.

Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 218

156. Which of the following storage types allows access to the file system over the network?
    a. NFS
    b. Fibre Channel SAN
    c. iSCSI SAN
    d. NetApp

    Answer: a.
    Explanation: NFS allows access to the file system over the network.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 194

#Working with Pools

157. Which of the following are true about resource pools? (Choose 3)
    a. Shared storage is a requirement
    b. Consist of one pool master and up to 15 additional members
    c. Allow the live migration of virtual machines with XenMotion
    d. All pool resources can be managed as a single entity with a single IP address
    e. Must have HA enabled

    Answer: b.c.d.
    Explanation: Resource pools require one master and can have up to 15 additional members. Using XenMotion, virtual machines can be migrated between the servers in a pool without a noticeable loss of availability. Physical servers, virtual machines, memory, disk and networking resources can be organized and managed as a single entity with a single IP address. Shared storage is a benefit of resource pools, but is not required. High-availability (HA) can be enabled to provide more benefits to the pool, but it is not required.
    Source: XenCenter Help

158. What are some of the requirements of a server joining a resource pool? (Choose 3)
    a. It must have a static IP address
    b. It must have shared storage configured
    c. It's system clock must be synchronized to the pool master
    d. It must be a member of another resource pool
    e. It can have no running or suspended virtual machines

    Answer: a.c.e.
    Explanation: Before it can join a XenServer resource pool, a server must all satisfy the following constraints: It must have a static IP address. Its system clock must be synchronized to the pool master. It cannot be a member of an existing resource pool. It can have no shared storage configured. It can have no running or suspended virtual machines; all virtual machines must be shut down before a server can join a pool.
    Source: XenCenter Help

159. All the servers in a XenServer resource pool must have compatible _?_.
    a. memory
    b. CPUs
    c. NICs
    d. hard disks

    Answer: b.

Explanation: All the servers in a XenServer resource pool must have compatible processors, that is: Each CPU must be from the same vendor (in particular AMD-V and Intel VT CPUs cannot be mixed). Each CPU must be the same model (except for stepping). Each CPU must have the same feature flags. In practice, it is often difficult to obtain multiple servers with exactly the same CPUs, and so minor variations are permitted. In addition, for running HVM (Windows) virtual machines, all the CPUs must have virtualization enabled.
Source: XenCenter Help

160. Network settings should be similar among all pool members, including: (Choose 2)
    a. NICs must connect to the same networks
    b. Virtual machines must have the same number of NICs
    c. NICs must be in the same order on each system
    d. NICs must be the same speed and come from the same vendor

Answer: a.c.
Explanation: Network settings should be similar among all pool members, including: NICs must connect to the same networks, virtual machines do not need the same number of NICs, NICs must be in the same order on each system and NICs should be the same speed but are not required to come from the same vendor.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 242

161. A resource pool master: (Choose 3)
    a. allows for a single control point for all servers in the pool
    b. keeps track of all configuration data for the pool
    c. handles distributed locking for shared storage
    d. configures other pool masters in the pool

Answer: a.b.c.
Explanation: A resource pool master allows for a single control point for all servers in the pool, keeps track of all configuration data for the pool, handles distributed locking for shared storage and configures other pool members in the pool.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 239

162. Shared configuration data in a resource pool includes: (Choose 3)
    a. virtual machine metadata
    b. administrator privileges
    c. storage settings
    d. network settings

Answer: a.c.d.
Explanation: Shared configuration data in a resource pool includes virtual machine metadata, storage settings and network settings.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 240

163. Each XenServer host in a resource pool requires: (Choose 2)
    a. a unique XenServer Enterprise Edition license
    b. the same version of XenServer software
    c. the same operating system and service pack level
    d. a NIC bond

Answer: a.b.

Explanation: Each XenServer host in a resource pool requires a unique XenServer Enterprise license and the same version of XenServer software.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 242

164. A resource pool must have _?_ configured before allowing the migration of virtual machines between servers.
    a. high-availability (HA)
    b. a NIC bond
    c. shared storage
    d. 15 members

Answer: c.
Explanation: A resource pool must have shared storage configured before allowing the migration of virtual machines between servers.
Source: XenCenter Help

165. A XenServer host can only join a pool if the management NIC to which it is joining is _?_.
    a. DHCP-enabled
    b. not part of a NIC bond
    c. set to half-duplex
    d. HA-enabled

Answer: b.
Explanation: A XenServer host can only join a pool if the management NIC to which it is joining is not part of a NIC bond.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 243

166. In the event of a master server failure in a resource pool without HA enabled: (Choose 2)
    a. virtual machines on the secondary servers will cease to function
    b. virtual machines on the secondary servers continue to run without interruption
    c. a new master server will be assigned automatically
    d. no configuration changes can be made until the master server is restored or until a new master server is assigned

Answer: b.d.
Explanation: In the event of a master server failure in a resource pool without HA enabled, virtual machines on the secondary servers will continue to run without interruption and no configuration changes can be made until the master server is restored or until a new master server is assigned. A new master server would be assigned automatically if the resource pool was HA-enabled.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 246

167. In a resource pool where HA is not enabled, when the master server fails:
    a. a new master server will be assigned automatically
    b. virtual machines on the secondary servers will cease to function
    c. secondary servers will go into emergency mode
    d. secondary servers will connect to a master server in a different resource pool

Answer: c.
Explanation: In a resource pool where HA is not enabled, when the master server fails, the secondary servers will retry the connection to the master for 1 minute and then go into emergency mode if the master is still unreachable. A new master must be manually assigned or

the master server must be restored for the secondary servers to exit emergency mode. Virtual machines on the secondary servers will continue to run without interruption when the master server is down.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 246

168. In a resource pool, in order to move virtual machines from one XenServer host to another, the source and target servers: (Choose 2)
    a. need to have access to the same shared storage
    b. must not be connected to an internal network
    c. must be connected to the same networks
    d. must have HA enabled

    Answer: a.c.
    Explanation: In a resource pool, in order to move virtual machines from one XenServer host to another, the source and target servers need to have access to the same shared storage and must be connected to the same networks.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 248

169. In a resource pool, a virtual machine cannot be moved if: (Choose 2)
    a. it is located on local storage
    b. it is located on non-shared storage
    c. it needs to be connected to an internal-only network
    d. HA is not enabled

    Answer: b.c.
    Explanation: In a resource pool, a virtual machine cannot be moved if it is located on a non-shared (local or remote) storage or if it needs to be connected to an internal-only network.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 248

170. Automatic virtual machine placement is only available _?_.
    a. with a XenServer Platinum license
    b. when the XenServer hosts are in Maintenance Mode
    c. in HA-enabled resource pools
    d. in resource pools

    Answer: d.
    Explanation: Automatic virtual machine placement is only available in resource pools.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 248

171. To prepare a secondary server to be added to a resource pool: (Choose 4)
    a. enable HA
    b. disconnect any shared storage
    c. halt all running virtual machines
    d. ensure that NICs are connected to the same networks in the same pool in the same order
    e. ensure that the system has access to the shared storage in the existing pool
    f. place it in Maintenance Mode

    Answer: b.c.d.e.
    Explanation: To prepare a secondary server to be added to a resource pool, disconnect any shared storage, halt all running virtual machines, ensure that NICs are connected to the same

networks in the same pool in the same order and ensure that the system has access to the shared storage in the existing pool.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 244

172. Scenario: An administrator is going to add a XenServer host to a resource pool. Which of the following tasks should the administrator perform before adding the server to the pool?
    a. Backup any virtual machines hosted on the server
    b. Place the server in Maintenance Mode
    c. Enable HA on the server
    d. Create a NIC bond on the server

    Answer: a.
    Explanation: You should back up any virtual machines hosted on a server before attempting to add it to a pool.
    Source: XenCenter Help

173. Scenario: An administrator must configure updates for a group of XenServer hosts using XenCenter. The administrator wants to enable pre-checks and post-installation actions during the configuration. Which of the following tasks must the administrator carry out to complete this configuration? (Choose 5)
    a. Select the servers to update
    b. Enter the location of the update files
    c. On the Tools menu, click Install New Updates
    d. Review a summary and apply the update
    e. Select Manual Mode
    f. Select Automatic Mode

    Answer: a.b.c.d.f.
    Explanation: To configure updates with pre-checks and post-installation actions for a group of XenServers, on the Tools menu, click Install New Update and then follow the steps in the Install New Update wizard: Select the servers you want to update and click Next. Enter the location of the update files and click Next. Select Automatic mode if you want the wizard to carry out pre-checks before applying the update, any post-installation actions, like restarting the servers, and to be sure the servers can be updated. (Select Manual mode if you want the wizard to attempt to apply the update without carrying out any pre-checks or post-installation actions.) After the pre-checks, carry out any required remedial actions and click Next. Review the summary of selected servers and updates to be applied and click Next. When the update has been applied to all selected servers, click Finish to close the wizard.
    Source: XenCenter Help

174. Scenario: An administrator must create a new resource pool. Which of the following steps should the administrator take to create the new pool? (Choose 3)
    a. Select the storage repository
    b. Start the New Pool wizard
    c. Name the pool
    d. Nominate the pool master

    Answer: b.c.d.
    Explanation: To create a new pool, start the New Pool wizard by doing one of the following: Click New Pool In the Pool menu, click New Pool in the Resources pane or right-click a server and click Add to Pool > New Pool. On the first page of the wizard, enter the name of the new pool. The

pool name appears in the Resources pane. You must specify a name to continue with pool creation. Provide a description of the new pool if desired and click Next. On the second page of the wizard, nominate the pool master and add other servers to the pool. Click Finish to create the new pool and close the wizard.
Source: XenCenter Help

#Supporting a XenServer Enterprise Edition 5.0 Implementation

175. A Server Status Report zip file contains: (Choose 2)
    a. Control domain configuration files
    b. PIF and VIF files
    c. A folder containing reports for each server
    d. XenCenter log files

    Answer: c.d.
    Explanation: The Server Status Report gets packaged as a single zip file that can be stored and/or emailed. The size of the report you generate varies, depending on which items you choose to include. The zip file includes: A folder for each server, containing the report types you select in the wizard and XenCenter log files.
    Source: XenCenter Help

176. A Server Status Report gets packaged in a _?_ file which can be stored and emailed.
    a. Tar
    b. Zip
    c. GZ
    d. Cab

    Answer: b.
    Explanation: A Server Status Report gets packaged in a Zip file which can be stored and emailed.
    Source: XenCenter Help

177. The _?_ wizard provides a convenient way to collect and package a comprehensive snapshot of a specific XenServer installation for troubleshooting purposes.
    a. Configure HA
    b. Import
    c. Server Status Report
    d. Graphs

    Answer: c.
    Explanation: The Server Status Report wizard provides a convenient way to collect and package a comprehensive snapshot of a specific XenServer installation for troubleshooting purposes.
    Source: XenCenter Help

178. Scenario: An administrator needs to collect a snapshot of a XenServer installation for troubleshooting purposes. In order to do this, she is going to generate a Server Status Report using the Server Status Report wizard. What steps will she take to generate the report? (Choose 3)
    a. Select the servers from which to collect data
    b. Select the data to include in the report
    c. Click Tools > Get Server Status Report
    d. Select the type of file in which to save the report

Answer: a.b.c.
Explanation: To generate a Server Status Report, on the Tools menu of XenCenter, click Get Server Status Report and follow the steps in the Server Status Report wizard:
Select the servers for which you want to collect report data. All available managed servers are listed. If a server not listed, you may be able to add it to the list by clicking Add New Server. Select the data to include in the report and then click Next. The progress of the report compilation is shown and any problems with the data collection are reported. Click Next when the report compilation is complete. Browse to locate the folder where the report will be saved and then click Finish to save the report files to the specified folder and close the wizard.
Source: XenCenter Help

179. Which command is used in the CLI to promote a secondary member of a resource pool to the master server?
    a. xe pool-recover-slaves
    b. xe pool-emergency-reset-master
    c. xe pool-ha-enable
    d. xe pool-emergency-transition-to-master
Answer: d.
Explanation: To promote a secondary member of a resource pool to the master server, use the CLI command: xe-pool-emergency-transition-to-master
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 247

180. Which command is used in the CLI for secondary member servers to recognize a newly promoted master server in a resource pool?
    a. xe pool-recover-slaves
    b. xe pool-emergency-reset-master
    c. xe pool-ha-enable
    d. xe pool-emergency-transition-to-master
Answer: a.
Explanation: For secondary member servers to recognize a newly promoted master server in a resource pool use the CLI command: xe-pool-recover-slaves
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 247

181. What command should an administrator use to enable HA in a resource pool?
    a. xe pool-recover-slaves
    b. xe pool-emergency-reset-master
    c. xe pool-ha-enable
    d. xe pool-emergency-transition-to-master
Answer: c.
Explanation: To enable HA in a resource pool, use the CLI command: xe pool-ha-enable
Source: XenServer Administrator's Guide 5.0.0, Page 9

182. What command should an administrator use to tell a secondary server where the new master server is in a resource pool?
    a. xe pool-recover-slaves
    b. xe pool-emergency-reset-master
    c. xe pool-ha-enable
    d. xe pool-emergency-transition-to-master

Answer: b.
Explanation: To tell a secondary server where the new master server is in a resource pool, use the CLI command: xe pool-emergency-reset-master
Source: XenServer Administrator's Guide 5.0.0, Page 10

183. In a resource pool, to force the master server to contact each of the member servers with the master's new IP address, use which of the following commands?
    a. xe pool-emergency-transition-to-master
    b. xe pool-recover-slaves
    c. xe pool-restore-ipaddress
    d. xe pool-master-address

Answer: b.
Explanation: In a resource pool, to force the master server to contact each of the member servers with the master's new IP address, use the CLI command: xe pool-recover-slaves.
Source: XenServer Administrator's Guide 5.0.0, Page 57

184. To reset the MTU on a virtual NIC to use jumbo frames, use the command:
    a. xe vif-create uuid=<vif_uuid> \ other-config:mtu=9000
    b. xe vif-param-set uuid=<vif_uuid> \ other-config:mtu=9000
    c. xe vif-create uuid=<vif_uuid> \ other-param:mtu=9000
    d. xe vif-param-set uuid=<vif_uuid> \ other-param:mtu=9000

Answer: b.
Explanation: Use the following command to reset the MTU on a virtual NIC to use jumbo frames: xe vif-param-set uuid=<vif_uuid> \ other-config:mtu=9000
Source: XenServer Administrator's Guide 5.0.0, Page 110

185. What are two ways that an administrator can restore virtual machine metadata from a backup? (Choose 2)
    a. Run the command xe-restore-metadata script in the control domain
    b. Select the option Restore Virtual Machine Metadata in the Local Console
    c. Right-click a XenServer host in the Resources pane of XenCenter and select Restore Virtual Machine Metadata from the menu
    d. Import the metadata from the virtual machine archive

Answer: a.b.
Explanation: To restore virtual machine metadata from a backup, an administrator can either run the xe-restore-metadata script in the control domain or select the option Restore Virtual Machine Metadata in the Local Console. Restoring virtual machine metadata cannot be done from XenCenter at this time.
Source: XenServer Administrator's Guide 5.0.0, Pages 12, 13

186. What are two ways that an administrator can backup virtual machine metadata? (Choose 2)
    a. Run the command xe-backup-metadata script in the control domain
    b. Right-click a XenServer host in the Resources pane of XenCenter and select Backup Virtual Machine Metadata from the menu
    c. Select the option Backup Virtual Machine Metadata in the Local Console
    d. Export the metadata to the virtual machine archive

Answer: a.c.

Explanation: To backup virtual machine metadata, an administrator can either run the xe-backup-metadata script in the control domain or select the option Backup Virtual Machine Metadata in the Local Console. Backing up virtual machine metadata cannot be done from XenCenter at this time.
Source: XenServer Administrator's Guide 5.0.0, Pages 12, 13

#Using XenServer Command Line Interface

187. Which of the following command line arguments would an administrator use so that he can authenticate without typing a password?
    a. -u
    b. -pw
    c. -pwf
    d. -p
    e. -s

    Answer: c.
    Explanation: By using the command line argument -pwf, the administrator would authenticate by typing the location of a file that contains the password instead of having to type the password. The other arguments are: -u for username; -pw for password; -p for port; and -s for server.
    Source: XenServer Administrator's Guide 5.0.0, Pages 66, 67

188. If a CLI command is executed remotely, which of the following arguments are required? (Choose 3)
    a. username
    b. password
    c. port
    d. server

    Answer: a.b.d.
    Explanation: If a CLI command is executed remotely, the server command, which specifies IP address or hostname, and username and password arguments are required. Port is optional.
    Source: XenServer Administrator's Guide 5.0.0, Page 13

189. What is the purpose of the Local Console?
    a. Enables scripts for automating system administration tasks
    b. Provides additional functionality over XenCenter
    c. To connect to a virtual machine via RDP
    d. Provides common XenServer functions

    Answer: d.
    Explanation: The Local Console provides common XenServer functions without entering CLI commands or the installation of XenCenter.
    Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 273

190. What is the purpose of the command line interface (CLI)? (Choose 2)
    a. Enables scripts for automating system administration tasks
    b. To connect to a virtual machine via RDP
    c. Provides additional functionality over XenCenter
    d. Enables access to common XenServer functions

Answer: a.c.
Explanation: The CLI provides additional functionality over XenCenter. The CLI enables scripts for automating system administration tasks and allows integration of XenServer into an existing IT infrastructure.
Source: CXS-200-1I Implementing Citrix XenServer Enterprise Edition 5.0, Page 272

191. Which of these CLI commands are legitimate commands? (Choose 2)
    a. xe pool-emergency-reset-slaves
    b. xe pool-emergency-reset-master
    c. xe pool-ha-enable
    d. xe pool-bond-enable

Answer: b.c.
Explanation: The command xe pool-ha-enable is used to enable high availability (HA) in a resource pool. The command xe pool-emergency-reset-master is used to tell a XenServer host where the new master server is in the resource pool.
Source: XenServer Administrator's Guide 5.0.0, Page 10

#Business Continuity (HA and VM Recovery)

192. When _?_ is enabled in a resource pool, if the pool master server fails, a new server will be automatically selected to take over as master, so you can continue to manage the pool.
    a. high availability (HA)
    b. NIC bonding
    c. XenMotion
    d. shared storage

Answer: a.
Explanation: When high availability (HA) is enabled in a resource pool, if the pool master server fails, a new server will be automatically selected to take over as master, so you can continue to manage the pool.
Source: XenCenter Help

193. What are the three high availability protection levels? (Choose 3)
    a. Protected
    b. Secured
    c. Restart if possible
    d. Do not restart

Answer: a.c.d.
Explanation: When you configure HA, you set a protection level for each virtual machine in the pool that reflects how important it is to have the machine automatically restarted when failure occurs. You can choose one of three different values: Protected, 'Restart if possible' and 'Do not restart'. Virtual machines with 'Do not restart' will not be restarted. Virtual machines that have restart priorities Protected and 'Restart if possible' are guaranteed to be restarted if sufficient resources are available within the pool. Protected virtual machines will be restarted first.
Source: XenCenter Help

194. Scenario: A server in an HA-enabled resource pool needs to be removed from the pool. The administrator is trying to shut down the virtual machines on the server so that he can remove it.

The virtual machines keep restarting. What should the administrator do to shut down the virtual machines?

a. Kill the virtual machine with Task Manager in Windows
b. Change the HA protection level to 'Do not restart'
c. Perform a forced shutdown via XenCenter
d. Run the CLI command: xe vm-shutdown

Answer: b.
Explanation: You can change the HA protection level at anytime in XenCenter. By changing the HA protection level to 'Do not restart', the virtual machines will not restart when the administrator shuts them down.
Source: XenCenter Help

195. Which two ways can the HA protection level be configured for virtual machines? (Choose 2)

a. With XenConvert
b. With the Local Console
c. With the CLI
d. With XenCenter

Answer: c.d.
Explanation: HA protection level can be configured in the HA wizard of XenCenter or by using the CLI command: xe vm-param-set
Source: XenServer Administrator's Guide 5.0.0, Page 9 and XenCenter Help

196. To enable HA on a resource pool, at least one shared storage device must either be _?_ or _?_. (Choose 2)

a. iSCSI
b. Fibre Channel
c. NFS
d. NetApp

Answer: a.b.
Explanation: In order to enable HA on a resource pool, at least one shared storage device must either be iSCSI or Fibre Channel. Only the heartbeat storage repository needs to be one of these types. Storage devices for the virtual disks can be any type of shared storage.
Source: XenCenter Help

197. In a resource pool with high availability, at least one heartbeat storage repository must exist. The heartbeat storage repository must be either _?_ or _?_.

a. EXT
b. LVM
c. iSCSI
d. Fibre Channel

Answer: c.d.
Explanation: In a resource pool with high availability, at least one heartbeat storage repository must exist. The heartbeat storage repository must be either iSCSI or Fibre Channel. Any type of shared storage can be used elsewhere in the resource pool.
Source: XenCenter Help

198. To enable HA on a resource pool, use either _?_ or _?_.

a. XenCenter

b. XenMotion
c. the CLI
d. the Local Console

Answer: a.c.
Explanation: To enable HA on a resource pool, use either the HA tab in XenCenter or the CLI command: xe pool-ha-enable
Source: XenServer Administrator's Guide 5.0.0, Page 9 and XenCenter Help

199. An HA-enabled resource pool is _?_ if some of the virtual machines that are currently running could not be restarted elsewhere in the pool.
a. unprotected
b. in Maintenance Mode
c. overcommitted
d. missing its IP address

Answer: c.
Explanation: A pool is overcommitted if some of the virtual machines that are currently running could not be restarted elsewhere in the pool, for example, if there was not enough free memory across the pool to run those virtual machines following a failure. There are also more subtle changes which can make HA guarantees unsustainable: changes to virtual disks and networks can affect which virtual machines may be restarted on which servers. HA protection levels are used to determine which virtual machines should be given highest restart priority when a pool is overcommitted.
Source: XenCenter Help

200. If an HA-enabled resource pool is overcommitted at the time of a XenServer host failure, a protected virtual machine might _?_.
a. be automatically placed in a suspended state
b. cause other XenServer hosts to fail
c. lose it's internal network connection
d. fail to start on the other XenServer hosts in the pool

Answer: d.
Explanation: When an HA-enabled resource pool is overcommitted, some of the virtual machines might not be able to start on the other hosts in the pool until more resources become available.
Source: XenCenter Help

201. In a resource pool with high availability, which of the following are requirements of the heartbeat storage repository? (Choose 2)
a. Must be either NetApp or NFS
b. Must be either iSCSI or Fibre Channel
c. Must be empty
d. Must have 356 MB or greater of disk space

Answer: b.d.
Explanation: In a resource pool with HA, the heartbeat storage repository must be either iSCSI or Fibre Channel and it must have 356 MB or greater of disk space.
Source: XenCenter Help

202. What steps must an administrator take to configure high availability for an existing resource pool? (Choose 4)
    a. Choose a heartbeat storage repository
    b. Install Platinum licenses for each host in the pool
    c. Place all of the hosts in Maintenance Mode
    d. Set the protection level of the virtual machines
    e. On the pool's HA tab, select Enable HA
    f. Configure a heartbeat storage repository

    Answer: a.d.e.f.

    Explanation: To enable HA, ensure that the HA requirements are satisfied. Select the pool in the Resources pane, click the HA tab, click Enable HA and follow the steps in the wizard. XenCenter scans for a shared iSCSI or Fibre Channel LUN to be used as the heartbeat storage repository. If none are found, you must configure a heartbeat storage repository. Choose the heartbeat storage repository from the list and click Next. Set the protection level for the virtual machines and click Next. Review the HA configuration. Click Back to go back and change any of the settings. Click Finish to close the wizard and enable HA for the pool.

    Source: XenCenter Help