Lesson 1: Installing and Upgrading Client Systems

**Multiple Choice**

1. Which of the following is a server role for Windows Server 2008 or Windows Server 2008 R2 that allows for mostly automated installation of Windows 10 over a network?

a) Windows Automated Installation Kit

b) ImageX

c) Windows Deployment Services

d) Windows Preinstallation Environment (WinPE)

Answer: c

Difficulty: Medium

Section Reference: Understanding Installation Types

Explanation: Windows Deployment Services is a server role for Windows Server 2008 or Windows Server 2008 R2. It allows a user to press the F12 key, log on, and select an image for installation. After that, the installation can be automated.

2. Which Windows edition does *not* support x64 CPUs?

a) Windows 10 Professional

b) Windows 7 Home Premium

c) Windows 10 Home Basic

d) Windows 7 Starter

Answer: d

Difficulty: Easy

Section Reference: Identifying Windows Operating System Editions

Explanation: All editions of Windows 10 support 32-bit systems, and all editions except Windows 7 Starter support 64-bit systems.

3. Which of the following statements best describes a Graphical User Interface (GUI)?

a) A GUI has been a feature of operating systems since the advent of UNIX and Microsoft DOS.

b) A GUI performs functions by using a keyboard to type commands.

c) A GUI performs functions by clicking and moving buttons, icons, and menus with a pointing device, such as a mouse or track pad.

d) None of the above

Answer: c

Difficulty: Easy

Section Reference: Understanding User Interfaces

Explanation: A GUI performs functions by clicking and moving buttons, icons, and menus with a pointing device, such as a mouse or track pad.

4. Before installing Windows, you should do a little bit of planning and ask which of the following questions?

a) Does the computer need to be portable?

b) What type of environment will the computer run in?

c) What will the computer be used for?

d) All of the above

Answer: d

Difficulty: Medium

Section Reference: Determining Appropriate Editions Per Device Type

Explanation: Before installing Windows, you should do a little bit of planning and ask the following questions: What will the computer be used for? What type of environment will the computer run in? Does the computer need to be portable?

5. Which of the following Windows 10 editions is designed for consumer-based personal computers and tablets?

a) Windows 10 Home

b) Windows 10 Pro

c) Windows 10 Enterprise

d) None of the above

Answer: a

Difficulty: Medium

Section Reference: Determining Appropriate Editions Per Device Type

Explanation: Windows 10 Home is designed for consumer-based personal computers and tablets.

6. Windows 10 Enterprise includes which of the following features?

a) AppLocker

b) DirectAccess

c) BranchCache

d) All of the above

Answer: d

Difficulty: Medium

Section Reference: Determining Appropriate Editions Per Device Type

Explanation: Windows 10 Enterprise includes AppLocker, BranchCache, and DirectAccess.

7. Which of the following is a feature that encrypts a volume to protect a system from being accessed if the system is lost or stolen?

a) BranchCache

b) BitLocker

c) AppLocker

d) Credential Guard

Answer: b

Difficulty: Medium

Section Reference: Determining Appropriate Editions Per Device Type

Explanation: BitLocker is a feature that encrypts a volume to protect a system from being accessed if the system is lost or stolen.

8. Which of the following statements are true?

a) Most programs that you install and use on a daily basis are stored in the kernel mode.

b) The kernel mode has complete and unrestricted access to the underlying hardware.

c) The user mode has direct access to the hardware or reference memory.

d) All of the above

Answer: b

Difficulty: Hard

Section Reference: Understanding Processor and Memory Architecture

Explanation: Most programs that you install and use on a daily basis are stored in the user mode. The kernel mode has complete and unrestricted access to the underlying hardware. The user mode does *not* have direct access to the hardware or reference memory.

9. Which Windows 10 installation requires System Center Configuration Manager (SCCM) for network deployments?

a) Windows Anytime Upgrade

b) HTI

c) LTI

d) ZTI

Answer: d

Difficulty: Hard

Section Reference: Understanding Installation Types

Explanation: Zero Touch Installation (ZTI) is a fully automated, “touchless” method of installing Windows. You need System Center Configuration Manager (SCCM) for ZTIs. You use SCCM to deploy and update servers, client computers, and all kinds of devices on a network.

10. Which Windows 10 installation method requires some human interaction in the early phase of the installation but uses Windows Deployment Services, among other tools, to automate the installation from that point on?

a) Windows Anytime Upgrade

b) HTI

c) LTI

d) ZTI

Answer: c

Difficulty: Hard

Section Reference: Understanding Installation Types

Explanation: Lite Touch Installation (LTI) requires some human intervention in the early phase of the installation but is automated (or unattended) from that point on. You need the Windows AIK, Windows Deployment Services, and the Microsoft Deployment Toolkit 2010 for LTIs.

11. Which of the following is true of using specific features or for optimal performance in Windows 10?

a) You should have internet access.

b) You should have audio output for music and sound.

c) You should have a compatible optical drive to burn DVDs and CDs.

d) All of the above

Answer: d

Difficulty: Medium

Section Reference: Understanding Windows 10 System Requirements

Explanation: Microsoft lists the following items (among other items) as required for using specific features or for optimal performance for Windows 10: internet access, audio output for music and sound, and a compatible optical drive to burn DVDs and CD.

12. Which of the following statements are true regarding upgrading to Windows 10?

a) If you need to upgrade from Windows 7 or Windows 8/8.1 to Windows 10, you cannot use a Windows 10 bootable DVD or bootable USB drive.

b) You can upgrade Windows 10 by using the Windows 10 Media Creation tool.

c) Because of advances in Windows technology, you no longer need to ensure that your software will run on Windows 10.

d) None of the above

Answer: b

Difficulty: Medium

Section Reference: Upgrading to Windows 10

Explanation: If you need to upgrade from Windows 7 or Windows 8/8.1 to Windows 10, you can use a Windows 10 bootable DVD or bootable USB drive. You can also upgrade Windows 10 by using the Windows 10 Media Creation tool. Before you upgrade to Windows 10, you need to ensure that your software will run on Windows 10.

13. Which of the following statements are *false* regarding upgrading to Windows 10?

a) If you have Windows 7 Starter, Windows 7 Home Basic, Windows 7 Home Premium, Windows 8, or Windows 8.1, you can upgrade to Windows 10 Home.

b) If you have Windows 7 Enterprise or Windows 8/8.1 Enterprise, you can upgrade to Windows 10 Enterprise.

c) If you have Windows 7 Pro, Windows 7 Ultimate, Windows 8.1 Pro, or Windows 8.1 Pro for Student, you cannot upgrade to Windows 10 Pro.

d) If you want to migrate to a different edition (such as from Windows 8.1 Pro to Windows 8.1 Enterprise), you will have to perform a clean installation.

Answer: c

Difficulty: Hard

Section Reference: Upgrading to Windows 10

Explanation: If you have Windows 7 Starter, Windows 7 Home Basic, Windows 7 Home Premium, Windows 8, or Windows 8.1, you can upgrade to Windows 10 Home. If you have Windows 7 Pro, Windows 7 Ultimate, Windows 8.1 Pro, or Windows 8.1 Pro for Student, you can upgrade to Windows 10 Pro. If you have Windows 7 Enterprise or Windows 8/8.1 Enterprise, you can upgrade to Windows 10 Enterprise. If you want to migrate to a different edition (such as from Windows 8.1 Pro to Windows 8.1 Enterprise), you will have to perform a clean installation.

14. Which of the following methods can be used to determine whether your computer is running a 32-bit or 64-bit version of Windows 10? (Choose all that apply.)

a) Run Windows 10 Upgrade Advisor.

b) Open the System window.

c) Open the Computer window.

d) Run the System Information utility.

Answer: b, d

Difficulty: Hard

Section Reference: Understanding Processor and Memory Architecture

Explanation: See the step-by-step exercise entitled " Determine If Your PC Is Running 32-Bit Windows or 64-Bit Windows."

15. Which of the following is a command-line tool that migrates user data from a previous installation of Windows to a new installation of Windows?

a) HTI

b) ZTI

c) Windows 10 Migration tool

d) USMT

Answer: d

Difficulty: Medium

Section Reference: Migrating to Windows 10 from Previous Versions of Windows

Explanation: USMT is a command-line tool that migrates user data from a previous installation of Windows to a new installation of Windows.

**Fill in the Blank**

1. To communicate with the operating system running on the computer, each device also requires a software element called a \_\_\_\_\_.

Answer: device driver

Difficulty: Easy

Section Reference: Understanding Drivers

Explanation: To communicate with the operating system running on the computer, each device also requires a software element called a device driver.

2. \_\_\_\_\_ is a fully automated, touchless method of installing Windows.

Answer: Zero Touch Installation or ZTI

Difficulty: Medium

Section Reference: Understanding Installation Types

Explanation: Zero Touch Installation (ZTI) is a fully automated, “touchless” method of installing Windows. You need System Center Configuration Manager (SCCM) for ZTIs. You use SCCM to deploy and update servers, client computers, and all kinds of devices on a network.

**Short Answer**

1. What does “the cloud” generally refer to?

Answer: It refers to the internet or a server accessible over the internet.

Difficulty: Easy

Section Reference: Understanding Installation Types

Explanation: The cloud generally refers to the internet or to a server accessible over the internet. You can install Windows 10 from the cloud in addition to using other methods.

2. Describe the three-step process for using USMT.

Answer: You should plan the migration, collect the files and settings from the source computer, and then prepare the destination computer and restore the files and settings.

Difficulty: Medium

Section Reference: Migrating to Windows 10 From Previous Versions of Windows

Explanation: When using USMT, you need to follow a three-step process of planning the migration, collecting the files and settings from the source computer, and then preparing the destination computer and restore the files and settings.

3. Describe the general features of Windows 10 Pro.

Answer: Windows 10 Pro is designed for personal computers and tablets for small and medium-sized businesses and for advanced users. It is similar to Windows 10 Home, but has extra features to meet the needs of small businesses. It includes BitLocker, EFS, domain join, and Group Policy management.

Difficulty: Medium

Section Reference: Determining Appropriate Editions Per Device Type

Explanation: Windows 10 Pro is designed for personal computers and tablets for small and medium-sized businesses and for advanced users. It is similar to Windows 10 Home, but has extra features to meet the needs of small businesses. It includes BitLocker, EFS, domain join, and Group Policy management.