Question 1

A technician is setting up a new workstation at a customer's office. The office network has one public IP address and utilizes NAT for the internal network. In addition, DHCP is not used, so

all IP addresses are manually provisioned. Which of the following IP addresses should the technician assign to the workstation?

Options:

A- 172.15.65.10

B- 175.16.20.3

C- 192.168.1.56

D- 193.167.35.4

Answer:

C

Explanation:

The IP address 192.168.1.56 is within the private IP address range (192.168.0.0 to 192.168.255.255) and is appropriate for use in an internal network utilizing NAT (Network Address Translation). The other IP addresses provided (172.15.65.10, 175.16.20.3, and 193.167.35.4) are either public IP addresses or not in the private IP range suitable for an internal network using NAT.

Question 2

A technician needs to configure a firewall to enable network printing. Which of the following network ports should be opened? (Select two).

Options:

A- 3389 (RDP)

B- 23 (Telnet)

C- 25 (SMTP)

D- 515 (LDP)

E- 631 (IPP)

F- LPT1

Answer:

D, E

Explanation:

For network printing, the required ports are typically those used by printing protocols. Port 515 is used by the Line Printer Daemon (LPD) protocol, and port 631 is used by the Internet Printing Protocol (IPP). These ports need to be opened in the firewall to allow print jobs to be sent to and from network printers.

Question 3

Question Type: MultipleChoice

After replacing a hot-swappable hard drive in a RAID 5 array, a technician notices decreased disk performance for approximately 12 hours. Which of the following is the most likely cause of

the performance issue?

A- Losing a drive caused data loss.

B- Data is being written to the new drive.

C- The array is repairing corrupt data sectors.
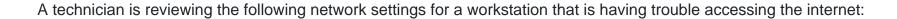
D- Another drive has gone offline.

Answer:

C

Explanation:

After replacing a hot-swappable hard drive in a RAID 5 array, the array must rebuild the data onto the new drive. This process involves reading data from the remaining drives and writing it to the new drive to restore full redundancy. The performance decrease is due to the intensive read and write operations necessary to rebuild the RAID array, which can take several hours depending on the size of the drives and the amount of data.

Question 4

Question Type: **MultipleChoice**

A technician is reviewing the following network settings for a workstation that is having trouble accessing the internet:

```
IPv4 address . . . . . . . .: 192.168.10.5
Netmask . . . . . . . . . . : 255.255.255.0
Gateway . . . . . . . . . . : 192.168.1.1
```

Which of the following is causing the issue?

Options:

A- Networking was not configured using DHCP.

B- IPv6 should be used instead of IPv4.

C- The netmask is wrong.

D- The workstation has the incorrect gateway.

Answer:

D

Explanation:

The IPv4 address (192.168.10.5) and the gateway address (192.168.1.1) are on different subnets. With a netmask of 255.255.255.0, the network part of the IPv4 address is 192.168.10.x, while the network part of the gateway address is 192.168.1.x. For the workstation to correctly route traffic to the gateway, both must be on the same subnet. The correct gateway address should be within the same subnet as the IPv4 address, such as 192.168.10.1.

Question 5

Question Type: MultipleChoice

A laptop is displaying vertical lines in different colors on the screen. Which of the following components should a technician replace to most likely correct this issue?

Options:

A- Inverter

B- Motherboard

C- Low-voltage differential signaling cable

D- Liquid crystal display

Question 6

Question Type: **MultipleChoice**

A user regularly travels to multiple sites to take pictures with a mobile device and transfers those pictures to a computer via a removable SD card. Recently, the SD card was damaged and

had to be replaced. Now, the user is unable to save pictures to the new SD card. Which of the following should the user verify first so pictures can be saved to the SD card?

Options:

A- The card is correctly formatted.

B- The card is a storage device.

C- The card is not locked.

D- The card is initialized.

Answer:

C

Explanation:

When a user is unable to save pictures to a new SD card after replacing a damaged one, the first thing to check is whether the card is locked. Many SD cards have a physical switch on the side that can be toggled to a 'locked' position, which prevents data from being written to the card. Ensuring the switch is in the 'unlocked' position allows the device to save data to the SD card.

Question 7

Question Type: **MultipleChoice**

A VM was set up to deny access to the host computer and any network resources. Which of the following describes this scenario?

Options:

A- Sandbox

B- Cross-platform virtualization

C- Legacy application

D- Hypervisor

Answer:

A

Explanation:

A sandbox is an isolated environment created for testing or running code without affecting the host system or other network resources. In this scenario, the virtual machine (VM) is set up to deny access to the host computer and any network resources, effectively creating a contained and secure space where actions within the VM do not impact the rest of the system or network. This is a key feature of sandbox environments used for testing and security purposes.

Question 8

Question Type: **MultipleChoice**

A technician is upgrading memory on a laptop that is experiencing performance issues. Which of the following RAM types should most likely be specified for installation?

Options:

A- ECCDIMMDDR5

B- High latency DDR5

C- Registered DIMM DDR5

D- SODIMM DDR5

Answer:

D

Explanation:

For laptops, the most common type of RAM used is Small Outline Dual Inline Memory Module (SODIMM) due to its smaller size compared to DIMMs used in desktops. DDR5 is the latest generation of RAM, offering higher speed and efficiency. ECC (Error-Correcting Code) DIMM DDR5 and Registered DIMM DDR5 are typically used in servers and high-end workstations for error correction and stability, not in standard laptops. High latency DDR5 is not a desirable specification for RAM as lower latency is preferred for faster performance.

CompTIA A+ Core 1 Exam Objectives Section 3.2: Given a scenario, install the appropriate RAM.