

IS346_Server+_Pre-assessment

Due Apr 7 at 11:59pm

Points 40

Questions 40

Time Limit 120 Minutes

Allowed Attempts 2

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	27 minutes	30 out of 40

⚠️ Correct answers are hidden.

Submitted Apr 7 at 2:18pm

Question 1

1 / 1 pts

Which of the following is not part of the form factor of a server?

☒ Security

☐ Appearance

☐ Dimensions

☐ Size

D. Form factor refers to the physical appearance and dimensions of the server.

Question 2**1 / 1 pts**

Which function is made easier when a server has a rail kit?

- ☒ Maintenance
- ☐ Accessing
- ☐ Configuration
- ☐ Installation

B. Rail kits, when implemented, allow for the server to be slid out of the rack for maintenance.

Question 3**1 / 1 pts**

Which of the following is the unit of measurement when discussing rack components?

- ☐ C
- ☐ M
- ☐ I
- ☒ U

C. Each U is 1.75 inches (4.445 cm) high.

Question 4**1 / 1 pts**

Which of the following is another term for RAID 1?

- ☐ Duplicating
- ☒ Mirroring
- ☐ Doubling
- ☐ Duplexing

D. RAID 1 is also known as disk mirroring. This is a method of producing fault tolerance by writing all data simultaneously to two separate drives.

Question 5**1 / 1 pts**

What is the primary function of PXE?

- ☐ Secure routing
- ☐ Remote administration
- ☒ Remote booting
- ☐ Redundant connections

A. The Preboot Execution Environment (PXE) is an industry standard client/server interface that allows networked computers that are not yet loaded with an operating system to be configured and booted remotely by an administrator.

Question 6

1 / 1 pts

Shares are used to allocate which of the following in VMs?

☐ NVRAM

☒ CPU

☐ L2 cache

☐ ROM

B. There are three ways the allocation of the use of the physical CPU(s) can be controlled. These methods are as follows:

Shares: Using values such as Low, Normal, High, and Custom (in VMWare, for example), these values are compared to the sum of all shares of all virtual machines on the server. Therefore, they define the relative percentage each VM can use.

Reservation: Guaranteed CPU allocation for a VM.

Limit: Upper limit for a VM's CPU allocation.

Incorrect

Question 7

0 / 1 pts

What is the most common protocol a SAN uses?

☐ Fibre Channel

☐ IPX

☒ Ethernet

☐ IP

D. In a classic SAN, devices communicate using the Fibre Channel protocol over a fiber network of storage devices typically connected to a Fibre Channel switch.

Question 8

1 / 1 pts

Which of the following is true of a NAS?

☐ A NAS does not support high throughput.

☐ A NAS has lower latency and higher reliability than a SAN.

☒ Implementing a NAS is inexpensive.

☐ A NAS typically supports only RAID 5.

D. Implementing a NAS is inexpensive when compared to implementing a SAN.

Question 9**1 / 1 pts**

To which protocol is the term LUN related?

- ☐ IP
- ☐ FDDI
- ☒ SCSI
- ☐ SSL

A. A logical unit number (LUN) identifies a device addressed by the SCSI protocol or protocols that encapsulate SCSI, such as Fibre Channel or iSCSI.

Question 10**1 / 1 pts**

What is the role of a DHCP server in a network?

- ☒ Issues IP configurations
- ☐ Translates private to public addresses
- ☐ Authenticates users
- ☐ Resolves IP addresses to hostnames

A. DHCP servers are used to automate the process of providing an IP configuration to devices in the network. These servers respond to broadcast-based requests for a configuration by offering an IP address, subnet mask, and default gateway to the DHCP client.

Incorrect

Question 11

0 / 1 pts

The metric IOPS is used to describe the performance of which resource?

☒ Memory

☐ CPU

☐ Disk

☐ Network

B. IOPS (Input/Output Operations per Second, pronounced eye-ops) is a common disk metric that describes how fast the disk subsystem is able to read and write to the drive. Therefore, the higher this value, the better.

Question 12

1 / 1 pts

Which of the following is deleted when you execute Disk Cleanup?

☒ Temp files

☐ Routing tables

☐ Memory

☐ Pagefile

A. Manually performing a disk cleanup will allow you to get rid of these files (and many other useless files as well), but if you would like to create a batch file, you can automate the process.

Question 13

1 / 1 pts

What is the function of the command-line utility wevtutil?

☐ Manages network connections

☐ Manages memory issues

☐ Manages CPU affinity

☒ Manages log files

A. Managing log files can be done at the command line using the following command, inserting the name of log file and the maximum size in bytes:

`wevtutil sl <LogName> /ms:<MaxSizeInBytes>`

Question 14

1 / 1 pts

Which RAID version requires at least three drives?

- ☐ RAID 1
- ☐ RAID 10 (1+0)
- ☐ RAID 0
- ☒ RAID 5

C. A minimum of three drives is required for RAID 5.

Question 15

1 / 1 pts

As the number of users assigned to a printer increases, which resource should be increased?

- ☐ CPU
- ☐ Disk
- ☒ Memory
- ☐ Network

D. Print servers need lots of memory to hold the print jobs waiting in the print queue. The exact amount will depend on the number of users assigned to the printers being managed by this print server.

Incorrect

Question 16

0 / 1 pts

Which of the following statements is true with respect to safes?



Those that are fire resistant will protect a backup tape from being damaged.



Consumer Reports assigns ratings to safes that you can use to assess the suitability of the safe.



When considering a safe, you should focus on two items: the cost and the size.



No safes are fireproof.

A. With respect to fire, no safe is fireproof. Many are fire resistant and will protect a document from being destroyed, which occurs at a much higher temperature than many of the other items (such as backup tapes and CDs) can tolerate without damage. For these reasons, items such as backup tapes should be stored offsite.

Question 17

1 / 1 pts

Which of the following is true of an HIDS?



Encrypted packets can be analyzed.



A high number of false negatives can cause a lax attitude on the part of the security team.



An HIDS cannot address authentication issues.



An HIDS monitors only traffic destined for the machine on which it is installed.

D. A host-based system is installed on the device (for purposes of our discussion, a server) and the system focuses solely on identifying attacks on that device only.

Question 18

1 / 1 pts

The MBSA vulnerability scanner works on which operating system only?



Mac



Windows



Unix



Linux

B. For your Windows servers, an excellent tool is the Microsoft Baseline Security Analyzer (MBSA). This tool can identify missing security patches, weak passwords, and other security issues that are specific to installed products.

Question 19

1 / 1 pts

Which of the following would Joe use to digitally sign a document so that Sally can verify his signature?

- ☐ Joe's public key
- ☐ Sally's public key
- ☒ Joe's private key
- ☐ Sally's private key

A. Since Sally will use Joe's public key to verify the signature, he must sign it with his private key.

Question 20

1 / 1 pts

Which authentication mechanism is an example of something you are?

- ☒ Retina scan
- ☐ Username
- ☐ Smartcard
- ☐ Password

D. While passwords and usernames are examples of something you know and a smartcard is an example of something you possess, a retina scan provides something you are.

Incorrect

Question 21

0 / 1 pts

What is a common host-based firewall on Linux-based systems?

- ☐ nessus
- ☒ tripwire
- ☐ scannow
- ☐ iptables

A. On Linux-based systems a common host-based firewall is iptables, which replaces a previous package called ipchains. It has the ability to accept or drop packets.

Incorrect

Question 22

0 / 1 pts

Which of the following can be accomplished using port security?

- ☐ Set the maximum number of MAC addresses that can be seen on a port
- ☐ Set the minimum number of MAC addresses that can be seen on a port
- ☒ Define exactly which MAC addresses are not allowed on the port
- ☐ Set the maximum number of IP addresses that can be seen on a port

D. It is possible to specify a maximum number of MAC addresses allowed on a port.

Question 23**1 / 1 pts**

When discussing 802.1x, which of the following roles is played by the user's computer?

- ☒ Supplicant
- ☐ Authenticator
- ☐ Authentication server
- ☐ Imperative

A. The user's computer is the supplicant, the access device (WAP, Dial in the server or VPN server) is the authenticator, and the RADIUS or TACACS + server is the authentication server.

Question 24**1 / 1 pts**

Which is the minimum category of cable required for 100 Mbps transmissions?

- ☐ CAT3
- ☐ CAT6
- ☒ CAT5

☐ CAT5e

B. CAT5 transmits data at speed up to 100 Mbps and specifies cable lengths up to 100 meters.

Question 25

1 / 1 pts

Which of the following services uses port number 443?

☐ HTTP

☐ NTP

☐ SFTP

☒ HTTPS

D. HTTPS is a secure form of HTTP that uses port 443.

Incorrect

Question 26

0 / 1 pts

What issue does the 802.1ax-2008 standard address?

☐ MIMO

☐ Secure DNS

☒ Deterministic routing

☐ NIC teaming

A. Combining physical links can be done using proprietary methods, and there is also an IEEE standard for the process called 802.3ad, later replaced by 802.1ax-2008.

Incorrect

Question 27

0 / 1 pts

Which of the following parts of a MAC address is unique for each interface made by a vendor?

☐ UAA

☒ OUI

☐ EUI-64

☐ BAA

A. Each part of this address communicates information. The left half of the address is called the Organizationally Unique Identifier (OUI). It identifies the vendor who made the interface. The right half is called the Universally Administered Address (UAA). It will be unique for each interface made by the vendor. Together they make a globally unique MAC address.

Question 28

1 / 1 pts

How many sets of backup tapes are used in the GFS system?

☐ 4☒ 3☐ 2☐ 5

B. In the Grandfather-Father-Son (GFS) backup scheme, three sets of backups are defined. Most often these three definitions are daily, weekly, and monthly.

Question 29

1 / 1 pts

When creating a backup, what function can be used to verify the integrity of the results?

☐ Digital signatures☐ Transaction logs☒ Checksums☐ Encryption

A. If you create the backup using checksums (which is an option with many utilities), it will allow you to check that the data has not changed since it was made or that it has been corrupted or damaged.

Question 30**1 / 1 pts**

If you perform a full backup once a week and use a differential backup scheme the rest of the week, how many tapes are required for a restore four days after the Full backup is taken?

☐ 1☐ 3☒ 2☐ 4

B. You will need the last full backup tape and the last differential tape. Each differential tape contains all changes that occurred since the last full backup.

Question 31**1 / 1 pts**

Which of the following components is the one you most likely would measure with a multimeter?

☒ Power supply☐ Hard drive☐ CPU☐ NIC

C. With a multimeter you can measure voltage, current, and resistance.

Question 32**1 / 1 pts**

What can be the result of high humidity?

- ☐ RFI
- ☐ ESD
- ☐ EMI
- ☒ Corrosion

A. It is a balancing act to keep humidity at the right level since low humidity causes ESD and high humidity causes moisture condensation.

Incorrect**Question 33****0 / 1 pts**

Which of the following is not true about server backplanes?

- ☐ They provide data and control signal connectors for CPU.
- ☐ You should implement redundant backplanes.
- ☒ Backplane failures are uncommon.
- ☐ They can be a single point of failure.

B. Backplanes are advantageous in that they provide data and control signal connectors for the hard drives. They also provide the interconnection for the front I/O board, power and locator buttons, and system/component status LEDs. Unfortunately, this creates a serious single point of failure because if the backplane fails, we lose communication with the servers to which it is connected.

Question 34

1 / 1 pts

Which of the following steps in the CompTIA troubleshooting method come first?

- ☐ Verify full system functionality and, if applicable, implement preventive measures.
- ☐ Perform a root cause analysis.
- ☒ Identify the problem and determine the scope.
- ☐ Document findings, actions, and outcomes throughout the process.

C. The steps in order are:

1. Identify the problem and determine the scope.
2. Establish a theory of probable cause.
3. Test the theory to determine the cause.
4. Establish a plan of action to resolve the problem and notify impacted users.
5. Implement the solution or escalate as appropriate.
6. Verify full system functionality and, if applicable, implement preventive measures.
7. Perform a root cause analysis.
8. Document findings, actions, and outcomes throughout the process.

Question 35

1 / 1 pts

Which command is used on a Windows computer to identify the path taken to a destination network?

- ☐ trace
- ☐ ipconfig/trace
- ☐ traceroute
- ☒ tracert

B. The tracert command (traceroute in Linux and Unix) is used to trace the path of a packet through the network on routers.

Incorrect

Question 36

0 / 1 pts

On which type of device is port security used?

- ☒ Router
- ☐ Switch
- ☐ Multiplexer
- ☐ Hub

B. Some of the things you can specify using this feature are the only MAC address or addresses allowed to send traffic in the port, the total number of MAC addresses that can transmit on the port, and an action to be taken when a violation occurs (either shut the port down or prevent transmissions by the guilty MAC address).

Incorrect

Question 37

0 / 1 pts

You receive a destination unreachable message with a source IP address. Where is it coming from?

- ☒ The local router
- ☐ A remote router
- ☐ A remote DNS server
- ☐ A local DNS server

A. If the message comes with no source IP address, that means the message is coming from the local router (the default gateway of the sender). If it has a source IP address of the sender, then it is another router in the path.

Question 38**1 / 1 pts**

The sudo fdisk -l command lists the partitions on what type of system?

- ☐ Mac
- ☒ Linux
- ☐ Novell
- ☐ Windows

D. The sudo fdisk -l command lists the partitions on a Linux system.

Question 39**1 / 1 pts**

In Linux, what is fstab used for?

- ☐ To format a partition
- ☐ To create partitions
- ☐ To defragment a drive

- ☒ To mount partitions in boot

A. fstab (File System Table) is a file used by Linux operating systems to mount partitions on boot.

Question 40

1 / 1 pts

What component locates the operating system in Linux?

☐ NTLDR

☐ Bootmgr

☒ GRUB

☐ boot.ini

B. In Linux this handled by GRUB.