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# XK0-001

### **OUESTION 1**

Which of the following file systems CANNOT be mounted by using the mount command?

A. ext2

B. vfat

C. swap

D. iso9660

Answer: C.

Explanation: The Swap file system is used as virtual memory. This is not a 'mounted' file system. The swap partition is configured during setup, and can be extended using the 'swapon' command. Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 39, 465. Incorrect Answers:

- A. You can mount an ext2 file system using the 'mount -t ext2' command.
- B. You can mount an VFAT file system using the 'mount -t vfat' command.
- D. You can mount an iso9660 file system using the 'mount -t iso9660' command (iso9660 is used for CD-ROM drives).

#### **OUESTION 2**

A Linux user has sent a report to the printer queue, but then realizes he needs to make corrections to the report. He now wants to remove the report from the printer queue. Which of the following should be done?

- A. Use the lpq command to remove the job
- B. Use the kill command to remove the report
- C. Use the lprm command to remove the report
- D. Ask the superuser to remove the report from the queue because users cannot do this.

Answer: C.

Explanation: The lprm command can be used to remove one or more print jobs from the print queue. The command is issued with the job ID to delete a print job. The print queue and job Ids can be viewed with the lpq command.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 557.

**Incorrect Answers:** 

- A. The lpq command is used to view the print queue, but not to delete print jobs.
- B. The kill command is used to end a process. It cannot be used to delete individual print jobs.
- D. A user can delete any print jobs that belong to the user.

# **QUESTION 3**

What does the lpq command do?

A. Prints a file.

- B. Removes a print job.
- C. Sets up a printer on the system.
- D. Shows status of the print queue.

Answer: D.

Explanation: The lpq command is used to display the status of the print queue. The information

displayed includes the print job IDs and owners.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 556.

Incorrect Answers:

- A. The lpr command is used to print, not the lpq command.
- B. The lprm command is used to remove a print job, not the lpq command.
- C. The /etc/printcap file can be used to set up a printer, not the lpq command.

### **QUESTION** 4

A system administrator who has forgotten his root password on a server can do which of the following to change the root password?

- A. Use the brute-force password sniffer.
- B. Edit the /etc/inittab file to load without NIS.
- C. Use the passwd command from the administrator group.
- D. Reboot the system in runlevel 1 and use "init=/bin/sh" as a boot option.

Answer: D.

Explanation: If you forget the root password, you can boot init into the shell and change the password using the following commands:

boot: Linux init=/bin/sh

bash# mount -o remount / -rw

bash# passwd root

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 466.

Incorrect Answers:

- A. A sniffer can only be used to capture a password traveling over the network.
- B. If you bypassed NIS, you would still need the local root password.
- C. There is no 'Administrator' group in Linux. The equivalent is the 'Root' group. You would still need to be logged in to change the password.

#### **OUESTION 5**

The system administrator needs to create two new groups, 'develop' and 'admin'. Which of the following should be done to accomplish this?

- A. Use the newgrp command.
- B. Use the groupadd command.
- C. Use the creategroup command.

D. Enter the group data in the /etc/group.conf file.

Answer: B.

Explanation: The groupadd command is used to create new groups. Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 270.

**Incorrect Answers:** 

- A. The newgrp command is used to change a user accounts group membership. It cannot be used to create a group.
- C. Creategroup is a non-existent command.
- D. There is no group.conf file.

# **QUESTION** 6

How would an administrator change the ownership of the directory /tmp/data/user1 from the account 'user1' to the account 'user2'?

- A. chown /tmp/data/user2 user 1
- B. chown -R /tmp/data/user1 user2
- C. chown -R user2 /tmp/data/user1
- D. chown user2 /tmp/data/user1 user2

Answer: C.

Explanation: The syntax of the chown command is 'chown <new owner> <directory/file>'. The -R option makes the command recursive meaning that the ownership will be changed on the entire contents of the directory.

Reference: Mark Minasi. Sybex, Linux for Windows NT/2000 Administrators: page 212.

Incorrect answers:

- A. The syntax is incorrect.
- B. The new owner should be entered before the directory/file name.
- D. The new owner is entered twice. It should only be entered once.

### **QUESTION** 7

A user needs to securely connect to a server. It is mandatory that encrypted passwords be used. Which of the following network utilities should be used?

A. ssh

B. rsh

C. tftp

D. telnet

Answer: A.

Explanation: SSH (Secure Shell) provides a secure connection between an SSH server and an SSH

host. All data and passwords are encrypted over the connection.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 368.

Incorrect answers:

- B. RSH (Remote Shell) is very insecure. It allows a user on one system to run programs on another system without authentication. RSH should be disabled on servers.
- C. TFTP (Trivial File Transfer Protocol) is used to transfer files over a network. It is not used to securely connect to a server.
- D. Telnet sends passwords in plain text.

### **QUESTION** 8

A user wants the script name1 to process the contents of the file "name2", then redirect the output to the program name3. Which if the following shell commands will do this?

- A.  $name1 \mid name2 > name3$
- B. name1 < name2 | name3
- C.  $name1 > name2 \mid name 3$
- D. name1 | name2 < name3

Answer: B.

Explanation: The < symbol is known as the input redirection operator. This can be used to pass the contents of a file to a program or script. To have one program or script use the output of another program of script as input, you would use the pipe symbol (|).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 656.

Incorrect Answers:

- A. To pass the contents of a file to a program or script, you should use the input redirection operator (<).
- C. The input redirection operator should point from the file to the script. In this answer, it faces the wrong way.
- D. To pass the contents of a file to a program or script, you should use the input redirection operator (<).

#### **OUESTION** 9

A system is going to have its memory and CPU upgraded. This information will be created in Linux in which of the following?

- A. The /proc directory
- B. The /etc/hwinfo.conf file
- C. The /dev/hwinfo.conf file
- D. The /usr/src/linux/devices directory

Answer: A.

Explanation: The /proc directory isn't actually a directory. It's a virtual file system created by Linux to provide information about hardware devices. For example, the command 'cat /proc/cpuinfo' will

display information about the CPU.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 476.

**Incorrect Answers:** 

- B. There is no hwinfo.conf file.
- C. There is no hwinfo.conf file.
- D. The /usr directory contains Linux documentation and program files. It doesn't contain any machine specific data.

### **QUESTION** 10

When a new user account is created, the default settings are copied from which of the following?

- A. /usr/skel
- B. /etc/skel
- C. /etc/start
- D. /etc/default

Answer: B.

Explanation: When a new user account is created, the default configuration files are copied from the /etc/skel directory.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 260.

**Incorrect Answers:** 

- A. This is the incorrect path to the default user account configuration files.
- C. This is the incorrect path to the default user account configuration files.
- D. This is the incorrect path to the default user account configuration files.

### **QUESTION** 11

Which if the following commands can be used to compare two text files to find out how they are different?

- A. comp
- B. diff
- C. compare
- D. filediff

Answer: B.

Explanation: The diff command is used to display line by line differences between pairs of text files.

Reference: http://www.numenor.demon.co.uk/ccfaq/common.htm

- A. There is no comp command.
- C. There is no compare command, although 'compare' can be used as an option for the 'tar' utility.
- D. There is no filediff command.

# **QUESTION** 12

What command, when issued from a non-root user, will remove all files from the /tmp directory by prompting the user for the root password?

A. cirtmp

B. rm -rf /tmp/\* -su

C. su "rm 'rf /tmp\*"

D. su -c "rm -rf /tmp\*"

Answer: D.

Explanation: The su command is used to switch to another user account. If no username is specified with the su command, then Linux assumes that you want to change to the root user account. The -c option tells Linux to run a command in the context of the root account. The rm command is used to remove the files. The -rf option, make the command recursive and forceful (i.e. it won't ask you to confirm the file deletion).

Reference: http://www.oreillynet.com/linux/cmd/s/su.html

**Incorrect Answers:** 

- A. There is no cirtmp command.
- B. You must use su to switch user before the remove command.
- C. You must use the -c option with su if you want it to run a command after switching user.

### **QUESTION** 13

Which of the following commands can be used to go to the 25th line of a file in vi?

A.:25

B. 25G

C. G25

D. g25

Answer: B.

Explanation: The way to go to a specific line in Vi is to use the "G" command. With a count, this command positions you at the given line number. For example, "25G" puts you on line 25. Reference: http://vimdoc.sourceforge.net/cgi-bin/vim2html2.pl?page=usr\_03.txt#03.5 Incorrect Answers:

- A. You must use the "G" command to go to a specific line.
- C. The "G" must follow the line number.
- D. The "G" is case sensitive and follows the line number.

# **QUESTION** 14

Which of the following commands can be used to create new directories?

A. rm

B. ls

C. my

D. mkdir

Answer: D.

Explanation: The mkdir command is used to create new directories. Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 523.

Incorrect Answers:

- A. The rm command is used to remove a file or directory.
- B. The ls command is used to list the contents of a directory.
- C. The my command is used to move or rename a file or directory.

#### **OUESTION** 15

A customer wants to backup her entire Website into a file. Which if the following commands would best accomplish this?

A. tar -cvf www.tar /home/httpd/

B. tar -cvf /home/httpd /dev/st0

C. tar -cvf /home/httpd/ webbackup.tar

D. tar -cvf /dev/st0/web.tar /home/httpd/

Answer: A.

Explanation: The syntax of the tar command is 'tar <options> <filename> <files to add>'. In this question, the contents of the /home/httpd directory (the default location for a website) are backed up to a file named www.tar. The -cvf options mean compressed, verbose and forceful.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 194/5.

**Incorrect Answers:** 

- B. You must specify a filename when using the tar command.
- C. The source files and destination file are in the wrong order.
- D. This command is trying to backup the files to a tape drive. However, when using 'tar' to backup to a tape drive, you must use the '--file' option.

#### **OUESTION** 16

Which of the following commands is used to set default file permissions for any newly created file?

A. mask

B. umask

C. fmask

D. createMask

Answer: B.

Explanation: When a file is created, the file has a default set of permissions. For example, the creator

of the file is the owner of the file and the group is the owners primary group. However, these default settings are known as the user mask can be changed with the umask command.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 258.

Incorrect Answers:

- A. The mask command is used when configuring the IP address of a Linux computer.
- C. Fmask is a non-existent command.
- D. Createmask is a non-existent command.

#### **OUESTION 17**

The following is an extract in a password file:

Smith: \*: 1133: 334: John Smith: /usr/people/jsmith: /bin/tcsh

What is the purpose of the "\*" IN Smith's password field?

- A. To deactivate Smith's account.
- B. To indicate that Smith is a superuser.
- C. To force Smith to change his password at his next login.
- D. To indicate that Smith's home directory is shared by other members of his group.

Answer: A.

Explanation: When you create a user account with the adduser command, the account doesn't have a password. The password field in the password file contains a "\*". To enable the account, you must specify a password with the password command. You can disable an account by placing a "\*" in the password field of the password file.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 397.

Incorrect Answers:

- B. The "\*" is in the password field and so does not indicate that the account is a superuser.
- C. The user will not be able to log in when the password field contains a "\*" because the account is disabled.
- D. The "\*" is in the password field and so is not related to the users' home directory.

#### **OUESTION** 18

A Linux system is planned to have both an Ethernet card and a modem. On each of these networks the IP addresses are dynamically assigned. Which if the following services should be considered for installation?

- A. DNS
- B. Pump
- C. SNMP
- D. Router

Answer: B.

Explanation: The pump command is used to verify that the computer is receiving DHCP information from the DHCP servers. It's output included the IP address, netmask and DHCP server address.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 628. Incorrect Answers.

- A. DNS (Domain Name System) is used to resolve host names to IP addresses. It would not be useful in this case.
- C. SNMP (Simple Network Management Protocol) is used for the monitoring of hardware devices. It would not be useful in this case.
- D. A router is used to route traffic between networks. It would not be useful in this case.

### **QUESTION** 19

Which if the following services is installed when a "workstation" installation is selected?

- A. nntpd
- B. Squid
- C. XFree86
- D. dhcpd

Answer: C.

Explanation: XFree86 provides a graphic user interface and is installed by default when a workstation installation is selected.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 22.

Incorrect Answers:

- A. NNTPd is the Network News Transfer Protocol daemon. This is a server service and is not installed in a workstation configuration.
- B. Squid is a proxy server application. This is a server service and is not installed in a workstation configuration.
- D. DHCPd is the Dynamic Host Configuration Protocol daemon. This is a server service and is not installed in a workstation configuration.

### **QUESTION** 20

Linux will be installed on a new system. Where will LILO be installed?

- A. In the /boot directory.
- B. In the /root directory.
- C. In the master boot record.
- D. In the /usr/sbin directory.

Answer: C.

Explanation: LILO (the Linux boot loader) is installed by default in the Master Boot Record (MBR).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 212.

Incorrect Answers:

A. LILO is installed by default in the Master Boot Record, not the /boot directory.

- B. LILO is installed by default in the Master Boot Record, not the /root directory.
- D. LILO is installed by default in the Master Boot Record, not the /usr/sbin directory.

#### **QUESTION 21**

Why is the Shadow Password Suite important?

- A. It provides a second level of encryption for the /etc/passwd file.
- B. It improves the encryption for all passwords in the /etc/passwd file.
- C. It moves the passwords to a separate file that has more restrictive permissions.
- D. It moves the passwords to a separate file and will also encrypt the password file.

Answer: C.

Explanation: If you are not using the Shadow Password Suite, the users' passwords are stored in the /etc/passwd file. This file can be read by anyone. When using the Shadow Password Suite, the passwords are moved to another file, which can only be read by the root user.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 117-118.

**Incorrect Answers** 

- A. The Shadow Password Suite does not change the password encryption.
- B. The Shadow Password Suite does not change the password encryption.
- D. The Shadow Password Suite does not encrypt the password file.

### **QUESTION 22**

Which if the following is the only required partition when Linux is installed?

A. /

B. /var

C. /etc

D. /boot

Answer: A.

Explanation: At a bare minimum, Linux requires just one partition to install and boot. This is the root partition, which is known as the / partition.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 37.

Incorrect Answers:

- B. Linux requires a root (/) partition, not a /var partition.
- C. Linux requires a root (/) partition, not a /etc partition.
- D. Linux requires a root (/) partition, not a /boot partition.

#### **OUESTION 23**

A DHCP server has been added to the network. The local system has been reconfigured to connect using DHCP. How could an administrator restart the network services and test that the interface and the DHCP server are functioning properly?

- A. ifconfig -test
- B. netstat -R- test
- C. route restart; ping comptia.org
- D. network restart; ping comptia.org

Answer: D.

Explanation: After configuring DHCP you need to restart the network services with the etc/rc.d/init.d/network restart command. You can verify that that your computer has received the DHCP settings by pinging and internet address such as comptia.org.

Reference: http://www.linuxheadquarters.com/howto/networking/networkconfig.shtml Incorrect Answers:

- A. If config is not the correct command to restart the network services.
- B. Netstat is not the correct command to restart the network services.
- C. Route restart is not the correct command to restart the network services.

# **QUESTION 24**

The Ethernet card fails on a Linux machine without modular support, and is replaced by one from a different manufacturer. The new card is verified as Linux compatible. When the system restarts, the operating system does not recognize the new card.

Which if the following is necessary to finish the installation?

- A. Change the network routing table.
- B. Recompile the kernel with support for the new device.
- C. Download a new driver and add it to the /dev directory.
- D. Edit the Ethernet configuration file to point to the new device.

Answer: B.

Explanation: A network card without modular support will have its drivers integrated into the kernel. If you replace the network card with one from a different vendor, you'll need to recompile the kernel to remove the old network card driver.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 211.

Incorrect Answers:

- A. The routing table is unrelated to the physical network card or its drivers.
- C. You need to recompile the kernel to remove the old network card driver.
- D. The old driver is integrated into the kernel and needs to be removed.

#### **QUESTION 25**

A client has downloaded the latest Linux kernel source and wants to compile and install it on a home machine. The downloaded file is named "linux-2.4.3.tar.gz". What command should be issued first?

A. tar xvf linux-2.4.3.tar.gz

- B. tar xzvf linux-2.4.3.tar.gz
- C. gzip -q linux-2.4.3.tar.gz; tar xvf linux-2.4.3.tar
- D. gzip -c linux-2.4.3.tar.gz; tar cvf linux-2.4.3.tar

Answer: B.

Explanation: The .tar.gz extension indicates that the file has been tarred and compressed (zipped) using the tar and gzip programs. The first thing to do is to extract the files using the same programs. The tar command invokes the tar program. The 'x' option means extract. The 'z' option means use gzip to uncompress the files. The 'v' option means verbose mode and the 'f' option means to force the operation with any conformation messages.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 194-195.

**Incorrect Answers:** 

- A. You need the 'z' option to invoke gzip.
- C. You need to use the tar program and invoke gzip with the 'z' option.
- D. You need to use the tar program and invoke gzip with the 'z' option.

### **QUESTION 26**

An administrator has installed a DHCP daemon. Which if the following should be run to see if the process is running?

- A. top
- B. dhcpd -restart
- C. ps aux | grep dhcpd
- D. rpm -check dhcpd

Answer: C.

Explanation: The ps aux command displays all the running processes. The pipe (|) passes the output to the grep utility. Grep is a search utility. Grep dhcpd will search for dhcpd in the output from the ps aux command.

Reference: http://www.unixgeeks.org/security/newbie/unix/man9/misc3.html#ps Incorrect Answers:

- A. The top command displays the running processes that are using the most CPU time. The DHCP daemon doesn't use much CPU time and is therefore unlikely to be displayed using the top command.
- B. The dhcpd -restart command will restart the DHCP daemon. It will not verify the process is running.
- D. The rpm command cannot be used to verify that a process is running.

#### **QUESTION 27**

What minimum permission must a directory have for a user to both enter the directory and list its contents?

A. read only

- B. execute only
- C. write and read
- D. execute and read

Answer: D.

Explanation: You can list the contents of a directory with the read permission. However, to enter the directory, you need the execute permission.

Reference: http://www.firstlinux.com/articles/cards/permissions.shtml

Incorrect Answers:

- A. The read only permission will not allow you to enter the directory.
- B. The execute permission will not allow you to list the contents of the directory.
- C. The write permission will allow to create files in the directory. This is not the minimum required permission to enter a directory and list its contents.

#### **QUESTION** 28

While a technician was installing Linux on a customer's server, the customer asked for the ability to expand the partition size, as needed. Which of the following would best provide this ability?

- A. HPFS
- B. ext2
- C. FAT32
- D. ReiserFS

Answer: B.

Explanation: There are more Linux utilities to expand an ext2 partition than partitions with a different file system.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 542.

Incorrect Answers:

- A. There are more utilities to expand an ext2 partition than partitions with the HPFS file system.
- C. There are more utilities to expand an ext2 partition than partitions with the FAT32 file system.
- D. There are more utilities to expand an ext2 partition than partitions with the ReiserFS file system.

#### **QUESTION** 29

What services would need to be installed to build a combination Web server and Domain Name Server (DNS)?

- A. Apache and BIND
- B. Apache and Squid
- C. ipchains and BIND
- D. Squid and ipchains

Answer: A.

Explanation: The Linux web server software is called Apache and the Linux DNS software is called BIND.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: page 56, 59.

Incorrect Answers:

- B. Squid is a proxy server program.
- C. IPChains is a firewall program.
- D. Squid is a proxy server program and IPChains is a firewall program.

### **QUESTION** 30

Which if the following should be done before installing Linux on a home computer?

- A. Upgrade the computer's memory to at least 64 MB.
- B. Create ext2 and swap partitions on the hard drive.
- C. Verify the hardware on the Linux hardware compatibility list.
- D. Defragment the drive using the computer's current operating system.

Answer: C.

Explanation: The first thing to do before installing any operating system is to ensure that the system hardware is compatible with the operating system.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Chapter 1.

Incorrect Answers:

- A. Linux will run on systems with less than 64 MB or RAM (memory).
- B. The partitions can be created during the installation. It is not necessary to create them before the installation.
- D. The hard drive will be partitions and formatted during the installation and therefore will not need defragmenting.

#### **OUESTION** 31

Which of the following services would need to be installed and configured in order to provide proxy and caching services to a Linux network?

- A. NFS
- B. Squid
- C. BIND
- D. ipchains

Answer: B.

Explanation: Squid is a full featured web proxy program running on Linux or Unix.

Reference: http://www.squid-cache.org/

Incorrect Answers:

A. NFS is the Linux Network File System used for sharing files over a network. It does not provide

web proxy services.

- C. BIND is the Linux DNS software. It does not provide web proxy services.
- D. IPChains is the Linux Firewall software. It does not provide web proxy services.

### **QUESTION 32**

A customer wants internal office information to be accessible by employees through a Web browser. Which of the following Linux services should be used?

- A. Squid
- B. MySQL
- C. Apache
- D. Sendmail

Answer: C.

Explanation: Apache is the Linux web server software. Web server software is needed to enable employees to access office information through their web browsers.

Reference: http://www.apache.org/

Incorrect Answers:

- A. Squid is the Linux web proxy software. It does not provide web server services.
- B. MySQL is a Linux database program. It does not provide web server services.
- D. Sendmail is a Linux email server program. It does not provide web server services.

### **QUESTION 33**

A user wants to set up his parallel port printer on the workstation's first parallel port. What device identifier needs to be used during configuration?

- A. /dev/lp0
- B. /dev/lpa
- C. /dev/lp1
- D. /dev/tty0

Answer: A.

Explanation: Hardware devices are identified in the /dev 'folder'. Parallel ports use the 'lp' identifier followed by the number of the port. The first parallel port number is zero; therefore the first parallel port would be listed as /dev/lp0.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 548/9.

**Incorrect Answers:** 

- B. Parallel ports use lp followed by a numeric identifier. The first one being zero.
- C. The first parallel port number is zero. Lp1 signifies the second parallel port.
- D. Tty signifies a modem, not a parallel port.

### **QUESTION 34**

A user has overwritten the master boot record. How could the Linux record be restored?

- A. edit fstab
- B. edit lilo.conf
- C. run "fdisk /mbr"
- D. run "/sbin/lilo"

Answer: B.

Explanation: LILO (the Linux boot loader) consists of a program that converts the lilo.conf file into an installed boot loader. Therefore, by editing the lilo.conf file, you can instruct LILO to recreate the linux boot loader in the master boot record.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 218.

**Incorrect Answers:** 

- A. The fstab file instructs Linux which partitions to mount and where to mount them. It does not restore the master boot record.
- C. Fdisk/mbr will write a new master boot record. However, it does not write a Linux boot loader into the master boot record.
- D. LILO needs to be run only after editing the lilo.conf file.

#### **OUESTION** 35

Which of the following actions will provide the greatest benefit to system administration in a large organization?

- A. Print out script source files.
- B. Update packages and kernels as updates are released.
- C. Document and log standards and changes to the systems.
- D. Install all packages from the same source type, such as RPMs.

Answer: C.

Explanation: It is highly recommended that you document the systems and company standards.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 438.

**Incorrect Answers:** 

- A. Printing out scripts would not aid system administration.
- B. Package and kernel updates should be thoroughly tested before being installed.
- D. Packages can be installed from various source types as long as the installations are documented.

# **QUESTION** 36

A new computer came preconfigured with an internal PCI modem. After Linux was installed, the modem does not respond. Which of the following is most likely the cause of the problem?

- A. The modem is not Hayes compatible.
- B. Linux does not support internal modems.
- C. The installed kernel does not support Winmodems.

D. Linux requires modems that use the Rockwell chipset.

Answer: C.

Explanation: When computers are supplied with internal PCI modems, the modems are usually

Winmodems. Linux has limited support for these modems.

Reference: http://www.linmodems.org/

**Incorrect Answers:** 

- A. Most modems are Hayes compatible and therefore, this is an unlikely situation.
- B. Linux does have limited support for internal modems.
- D. Rockwell chipsets are not a requirement for modems running under Linux.

# **QUESTION 37**

A system administrator is logged into a system as root. When trying to run the command /usr/local/bin/a.out, the administrator does the following:

root@linux> cd /usr/local/bin

root@linux> a.out

bash: a.out: command not found

What command should be issued to start the program?

A. /a.out

B. chmod o-x a.out

C. su - user, a.out

D. chown root a.out

Answer: A.

Explanation: You cannot run a command if you are in the same directory as the program. You must precede the command with "/" or "./". When you precede the command with "/", you are running the program from the root directory, so the program would need to be in the path. "./" means to go back one level in the directory structure and run the command from there. For example, in this question, "./" would go back to the /usr/local folder and run the command /bin/a.out.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 432.

Incorrect Answers:

- B. The chmod command is used to modify the permissions on a file. It is not required here.
- C. The su command is used to run a command under a different account. The question states that you are already logged in as root, so changing accounts is unnecessary.
- D. The chown command is used to change ownership of a file. This is unnecessary because you are running the command as root.

#### **OUESTION 38**

Which utility can remove, list, and add modules, as well as autoclean?

A. lsmod

B. insmod

- C. modprobe
- D. Modconfigurator

Answer: C.

Explanation: The modprobe -r command is used to remove modules. Modprobe -a lists all the modules. Modprobe with no options loads a module. Modprobe -k is used to autoclean the modules.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 573.

Incorrect Answers:

- A. Lsmod can only list the modules.
- B. Insmod can only insert a module.
- D. There is no modconfigurator command.

# **QUESTION** 39

Which command will verify that an NIS client is bound to an NIS server?

A. ypwhich

B. nisbind

C. ypconfig

D. nis.client

Answer: A.

Explanation: The ypwhich command returns the hostname of the NIS server. Without arguments,

ypwhich displays the NIS server for the local machine.

Reference: http://www.oreillynet.com/linux/cmd/y/ypwhich.html

**Incorrect Answers:** 

- B. Nisbind is not the correct command.
- C. Ypconfig is not the correct command.
- D. Nis.client is not the correct command.

#### **OUESTION** 40

Which of the following files would modify the daemon which logs system activity?

- A. /etc/syslog.conf
- B. /usr/syslog.conf
- C. /etc/systemlog.conf
- D. /usr/etc/systemlog.conf

Answer: A.

Explanation: Most system logs are maintained by the system log daemon and the kernel log daemon.

These services rely on the /etc/syslog.conf file for their configurations.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 292.

- B. The syslog.conf file is in the /etc directory, not the /usr directory.
- C. Systemlog.conf is the wrong filename.
- D. Systemlog.conf is the wrong filename.

#### **QUESTION** 41

In an Apache default installation, which of the following configuration files contains the DocumentRoot?

- A. root.html
- B. httpd.conf
- C. httpd.root
- D. apache.conf

Answer: B.

Explanation: Apache is the Linux web server software. It uses the httpd.conf file for its configuration.

The Document root parameter specifies the default location for the web pages.

Reference: http://www.redhat.com/docs/manuals/linux/RHL-7.1-Manual/ref-guide/s1-configurationconfig.

html

**Incorrect Answers:** 

- A. The DocumentRoot parameter is specified in the httpd.conf file, not the root.html file.
- C. The DocumentRoot parameter is specified in the httpd.conf file, not the httpd.root file.
- D. The DocumentRoot parameter is specified in the httpd.conf file, not the apache.conf file.

### **QUESTION** 42

How should an administrator test that Domain Name Services (DNS) are working correctly on a client workstation?

- A. ftp.comptia.org
- B. ping 168.168.168.18
- C. telnet 168.168.168.18
- D. nslookup www.comptia.org

Answer: D.

Explanation: The nslookup utility is used to query a DNS server. The command "nslookup www.comptia.org" will return the IP address of www.comptia.org if the DNS is correctly configured on the workstation and the DNS server is functioning correctly.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 195.

- A. Ftp.comptia.org is the FQDN for a machine called ftp in the comptia.org domain. It is not a command that will test DNS.
- B. Pinging an IP address will not test DNS.
- C. Telnetting an IP address will not test DNS.

# **QUESTION** 43

Review the following entry:

/dev/cdrom /cd iso9660 ro, user, noauto 0 0

What is this entry?

- A. An "fstab" entry that lets any user mount the CD-ROM.
- B. An "fstab" entry that allows only root to mount the CD-ROM.
- C. An "mtab" entry that mounts a CD-ROM as a read-only device at boot time.
- D. An "fstab" entry that mounts a CD-ROM as a read-only device at boot time.

Answer: A.

Explanation: This entry in the fstab file allows any user to mount the CD-ROM (/dev/cdrom) in the /cd directory. Iso9660 is the file system for the CD-ROM. Noauto means that the CD-ROM won't be automatically mounted when the system boots. The first '0' means that the CD-ROM shouldn't be backed up and the second '0' means that the CD-ROM file system shouldn't be checked for errors when the machine boots.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 400/1.

**Incorrect Answers:** 

- B. The 'user' option allows any user account to mount the CD-ROM.
- C. The line is from the fstab file, not the mtab file.
- D. The noauto option prevents the CD-ROM being mounted at boot time.

### **QUESTION** 44

Configuring hosts.deny and hosts.allow will protect the server from intruders that attempt which if the following?

- A. Attacks from machines using TCP.
- B. Exploitation of ICMP security holes.
- C. Attacks from machines using IPX/SPX.
- D. Exploitation of services that are started with TCP wrappers.

Answer: D.

Explanation: Inetd is a service that listens for network connection and starts a requested server service. Inetd can use a service called TCP Wrappers to start the server services. When a server service is requested, inetd hands the request to TCP Wrappers. TCP Wrappers then authenticates the request by using the hosts.deny and hosts.allow files and starts the server service if the requesting client has permission.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 363/4.

- A. TCP Wrappers use the hosts.allow and hosts.deny files, not TCP.
- B. TCP Wrappers use the hosts.allow and hosts.deny files, not ICMP.
- C. TCP Wrappers use the hosts.allow and hosts.deny files, not IPX/SPX.

# **QUESTION** 45

A user has installed and configured an internal modem to connect the workstation to the Internet. The user claims that the modem is not connecting properly. What diagnostic tool can be used to test the modem?

A. mgetty

B. minicom

C. pppconfig

D. A web browser

Answer: B.

Explanation: Minicom is a graphical utility that runs in a console, used for testing PPP connections (Modems use PPP to connect to the Internet via an ISP).

Reference: http://www.oreilly.com/catalog/debian/chapter/ch11 07.html

**Incorrect Answers:** 

- A. Mgetty is not used to test modems.
- C. PPPconfig is not used to test modems.
- D. A web browser could be used to test Internet connectivity, but it can't test the actual modem.

#### **QUESTION** 46

Which of the following commands is used to associate a logical 32-bit or 128-bit IP address with a physical Ethernet device?

A. arp

B. masq

C. mount

D. route

Answer: A.

Explanation: ARP (Address Resolution Protocol) is used to map hardware addresses (sometimes referred to as MAC addresses) to IP addresses.

Reference: http://www.oreillynet.com/linux/cmd/a/arp.html

Incorrect Answers:

- B. Masq is not used to associate hardware addresses with IP addresses.
- C. The mount command is used to mount a hardware device. It is not used to associate hardware addresses with IP addresses.
- D. The route command is used to add a static route to a routing table. It is not used to associate hardware addresses with IP addresses.

# **QUESTION** 47

A Linux system seems to be unstable, with several services unresponsive. Before rebooting, which of the following commands could be entered to help ensure the system restarts into a stable state?

- A. sync
- B. fsck
- C. lilo
- D. uptime

Answer: B.

Explanation: An unstable system could be caused by file system errors. The fsck (File System Check) command will check the file system for errors.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 461.

**Incorrect Answers:** 

- A. Sync is used to ensure file system integrity when shutting down a machine. It does not check the file system for errors.
- C. Lilo is the Linux boot loader. . It does not check the file system for errors.
- D. Uptime is a utility that displays the uptime of a system (the time a system has been running).

### **QUESTION** 48

Which of the following commands searches the contents of files for a specific string?

- A. find
- B. grep
- C. search
- D. whereis

Answer: B.

Explanation: The grep command can search the contents of files for a specific string.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 653.

Incorrect Answers:

- A. The find command is used to search for files that meet specified conditions (such as type). It does not search the contents of the files for a specific string.
- C. The search command does not search the contents of the files for a specific string.
- D. The whereis command is used to locate the binary file, source code or manual pages for a specified command. It does not search the contents of the files for a specific string.

#### **OUESTION** 49

A system is built for a new employee who needs a particular application for computing critical data. The application is installed and tested. The application suddenly hangs. After killing the process, which of the following is the best course of action to take?

- A. Reinstall the application and restart X.
- B. Go to /usr/local/apps/logfile to access specific information.
- C. Go to /etc/log/<name of application>.log to read the error messages.

D. Check any error log generated by the application and the manufacturer's Website for known issues or patches.

Answer: D.

Explanation: To troubleshoot a faulty application, you should look for any error messages in the logs and go to the manufacturer's website to see if the problem is a known issue or if there is a patch (update) for the application.

Incorrect Answers:

- A. If the problem is caused by a known issue, the problem will reoccur after reinstalling the application.
- B. The application may not generate an error log in this path.
- C. The application may not generate an error log in this path.

### **QUESTION** 50

A customer reports that his server will not allow users to retrieve their email through POP3 or connect to the server via telnet. What service needs to be restarted?

- A. lmap
- B. snmp
- C. pop3
- D. inetd

Answer: D.

Explanation: POP3 and Telnet are two separate server services. These services are controlled by the inetd service. It is unlikely that the POP3 and Telnet services would both fail at the same time. It is more likely that the problem lies with the inetd service. Restarting the inetd service should rectify the problem.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 286.

Incorrect Answers:

- A. Restarting the Imap service won't affect the POP3 and Telnet services.
- B. Restarting the snmp service won't affect the POP3 and Telnet services.
- C. Restarting the POP3 service may solve the POP3 problem, but it won't affect the Telnet problem.

#### **QUESTION** 51

What are the full paths to the general log files that can be accessed to find out how a system is running?

A. /var/log/messages

/var/log/mail

/var/log/wtmp

B. /etc/bootlog.log

/var/log/install.log

/etc/boot/messages

C. /usr/local/install.log /usr/local/messages /tmp/boot.log D. /var/spool/logs/messages /var/spool/logs/dmesg /var/spool/log/install.log

Answer: A.

Explanation: Most system log files are stored in subdirectories of the /var/log directory.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 293.

**Incorrect Answers:** 

B. These are the wrong paths to the system log files.

C. These are the wrong paths to the system log files.

D. These are the wrong paths to the system log files.

#### **QUESTION** 52

A user notices some problems with his Linux system. He finds a file in his home directory that he has never seen before. It has the following permissions:

-r-sr-srwk 1 root root 531 Jan 19 02:15 shell.run

Where did the file come from?

- A. The file was generated by cron.
- B. The root account put the file there for his use.
- C. The file is included in most common distributions.
- D. This file was created when the root account security was breached.

Answer: B.

Explanation: The file is owned by the root user account and the root group account.

Reference: http://www.wbglinks.net/pages/reads/linux/filepermissions.html

Incorrect Answers:

- A. This file would not be generated by Cron.
- C. The file is not included in users' home directories in most distributions.
- D. A root account security breach would not generate this file.

# **QUESTION** 53

A customer calls the support desk and complains that her company's Web server is not responding to requests from Web clients. When asked about recent work done on the machine, she responds that the server has not been reconfigured recently and normally performs without problems. A process list on the machine gives the following result:

PID	TTY	STAT	TIME	COMMAND
1	?	S	0:04	init
444	?	S	0:00	/usr/sbin/automount " "timeout 60 /misc file /etc/auto.misc
462	?	S	0:00	/usr/sbin/automount " "timeout 60 /net yp /auto.net

526	?	S	0:00	syslogd ~m 0
579	?	S	0:00	crond
595	?	S	0:00	xinetd ~reuse ~pidfile /var/run/xinetd.pid
625	?	SW	0:00	[lockd]
636	?	SW	0:00	[rpciod]
646	?	S	0:00	rpc.statd
796	?	S	0:00	gpm -t ps/2
814	?	S	0:00	httpd-perl -f /etc/httpd/conf/httpd-perl.conf
955	?	S	0:00	httpd
956	?	S	0:00	httpd
957	?	S	0:00	httpd
958	?	S	0:00	httpd
958	?	S	0:00	httpd
958	?	S	0:00	httpd
958	?	S	0:00	httpd
958	?	S	0:00	httpd
1080	tty1	S	0:00	/sbin/mingetty tt /etc/httpd/conf/http-perl.conf
1721	pts/1	R	0:00	ps -x

What is the best way to resolve this issue?

- A. Use "/usr/sbin/httpd -r" to restart the Web server.
- B. Stop the Web server by using "killall http" and restart it using "/usr/sbin/httpd".
- C. Examine the httpd module list in /etc/httpd/modules/httpd.exp for incompatibilities.
- D. Stop the Web server by using "kill -9 <pid>" and run fsck to make sure the /home httpd partition is functioning properly.

Answer: B.

Explanation: Server service (such as HTTPd) problems can usually be resolved by restarting the service. The output above shows that there are numerous instances of the httpd service. To stop multiple instances of a process, you would use the 'killall' command.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 519.

Incorrect Answers:

- A. There are multiple instances of the httpd service that need to be stopped before restarting the service.
- C. Restarting the httpd service should be the first step to resolving the problem.
- D. The kill command is used to stop a single instance of a process. It will not stop multiple instances of a process.

#### **QUESTION** 54

A user executed a Pearl script that initiated a connection request to a server without ever completing the network connection. This was done multiple times until the server could no longer communicate on the network. What kind of attack was initiated?

- A. Spoofing
- B. Trojan horse

- C. Buffer overflow
- D. Denial of Service

Answer: D.

Explanation: A Denial of Service (DoS) attack is where multiple connection requests are made to a server without completing the connection. This loads the server which prevents it communicating on the network.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 385.

Incorrect Answers:

- A. Spoofing is sending data from a 'fake' network address. This is not described in the question.
- B. A Trojan horse is a method used to gain entry to a system. This is not described in the question.
- C. A buffer overflow is not described in the question.

### **QUESTION** 55

A user wants to have the latest version of elm installed. Which of the following will identify the currently installed version?

- A. Run "man elm"
- B. Run "rpm -q elm"
- C. Run "version elm"
- D. Check /var/log/rpm

Answer: B.

Explanation: The rpm -q command will query a package for information. The information will include the installed files and their versions.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 178.

**Incorrect Answers:** 

- A. The man elm command will display the manual pages for the elm program. It will not identify the currently installed version.
- C. The version elm command is an invalid command.
- D. Checking the log files for the rpm package will not identify the currently installed version of Elm.

#### **QUESTION** 56

What does the command "rpm -Uvh package-update-3.5.i386.rpm" do?

- A. Uninstalls the package and related hidden files.
- B. Upgrades the package and provides installation status.
- C. Allows the user to view hidden files installed with the package.
- D. Verifies that the package is installed correctly and reports errors.

Answer: B.

Explanation: The rpm -Uvh command upgrades a package. The 'v' option is for verbose mode. This provides the installation status. The package will still be installed if no previous versions exist. Reference: Michael J. Tobler. New Riders, Inside Linux: Page 340. Incorrect Answers:

- A. The 'e' option is used to uninstall a package.
- C. The command does not display hidden files.
- D. The 'vf' option is used to verify an installation.

#### **OUESTION 57**

An application is created that is called through the Web server. However, upon restarting the Web server, it is discovered that the application is not writing its error to the Web error log properly. Which of the following methods would resolve the problem?

- A. Change the application to write its error logs into the /root directory.
- B. Change the Web server user to 'root' so that applications run within it will run as root.
- C. Change the permission and ownerships of the application to match the user group of the Web server.
- D. The application does not have sufficient rights to write the directory specified, so the suid bit on the application must be set to allow it to run as root.

Answer: D.

Explanation: It is most likely that the application does not have sufficient rights to write the directory specified. Set User ID (SUID) is used to run a program as the user who owns the program (usually root) rather than the user running the program.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 254.

**Incorrect Answers:** 

- A. It would need root permissions to write to the root directory. Also, it is desirable to have applications writing their error logs to the usual log file location.
- B. It is a security risk to have the entire web server running as root. Only the application within it needs to run as root.
- C. The application needs to run as root.

# **QUESTION** 58

Based on best practices, where is the best location to maintain documentation of work performed on Linux servers at a site?

- A. In a binder in the server room.
- B. Off-site at a different facility.
- C. In a text file kept on a Linux file server.
- D. In a text file on the local machine where the changes were made.

Answer: A.

Explanation: The documentation should be kept in a safe place, easily accessible by the network administrators.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 438.

Incorrect Answers:

- B. The documentation should be easily accessible by the network administrators.
- C. The documentation should not be kept on a computer, in case the computer fails.
- D. The documentation should not be kept on a computer, in case the computer fails.

### **QUESTION** 59

A system administrator has written a script that scans the password file for "unusual" things. For which of the following should the script check?

- A. A user with an unusual account name.
- B. A user with the default group of 'wheel'.
- C. A user ID number that has been set to zero.
- D. A group ID number that has been set to zero.

Answer: C.

Explanation: Intruders usually create a user account with the ID number set to zero. A user account with a user ID of zero has root privileges.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 245.

Incorrect Answers:

- A. An unusual name does not create a security risk.
- B. A group account of 'wheel' does not pose a security risk.
- D. A group account with an ID of zero is a root group. However, it would be better to look for user accounts with an ID of zero.

#### **QUESTION** 60

Which of the following would correctly format a 3.5" diskette?

- A. mkfs /dev/fd0
- B. fdisk /dev/fd0
- C. mount -f /mnt/floppy
- D. mkfs -t vfat /mnt/floppy

Answer: A.

Explanation: The mkfs (make file system) command is used to format a disk. /dev/fd0 is the first floppy disk on a Linux system.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 459-460.

- B. Fdisk is used for partitioning a hard disk, not formatting a floppy disk.
- C. The mount command is used to mount a drive, not to format a floppy disk.
- D. Vfat is the wrong file system for a floppy disk. You should use the msdos option.

# **QUESTION** 61

The administrator wants to use /sbin/special.sh to do a backup every Friday the 13th. What would be a solution?

A. Run

at "Fri, 13" < /sbin/special.sh

B. Run

at 'date | cut -d -e \f3' /sbin/special.sh

C. Add "5 1 13 \* 5 /sbin/spcial.sh " to his crontab

D. Add "1 1 13 \*\* if [ 'date' == "Frid" ]; then /sbin/special.sh fi " to his crontab

Answer: C.

Explanation: The crontab is used to schedule a program such as a backup program. The first 5 signifies 5 minutes past the hour. The 1 signifies 01:00 (1.00 a.m.). The 13 signifies the date of the month. The \* signifies any month. The 5 signifies a Friday. This means that if the 13th day of a month is a Friday, the program will run at 01:05 (5 past 1 in the morning).

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 408/9.

Incorrect Answers:

- A. The 'at' command can schedule a program, but it will only run once. Also, the syntax is incorrect.
- B. The 'at' command can schedule a program, but it will only run once. Also, the syntax is incorrect.
- D. The syntax is incorrect.

### **QUESTION** 62

Which of the following commands is used to determine if network interfaces are up and running?

A. cksum

B. netcfg

C. siginit

D. ifconfig

Answer: D.

Explanation: The ifconfig command will display detailed information about an interface. The information will include the operational status of the interfaces.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 335.

- A. Cksum is used to calculate a Cyclic Redundancy Check to check a file for errors. It is not used to determine if network interfaces are up and running.
- B. Netcfg is not used to determine if network interfaces are up and running.
- C. Siginit is not used to determine if network interfaces are up and running.

### **OUESTION** 63

Which of the following is LEAST affected by electromagnetic interference (EMI)?

- A. Fiber Optic Cable
- B. Encrypted Wireless
- C. RG-68 Coaxial Cable
- D. Shielded Twisted Pair (STP)

Answer: A.

Explanation: Fiber Optic cable uses pulses of light along a glass fiber to transmit data. As it uses no copper wires, it is immune to electromagnetic interference.

Reference: http://www.erg.abdn.ac.uk/users/gorry/course/phy-pages/fibre.html

**Incorrect Answers:** 

- B. Wireless data transmission is susceptible to electromagnetic interference.
- C. Coaxial Cable uses copper wires and is therefore susceptible to electromagnetic interference.
- D. Shielded Twisted Pair (STP) cable uses copper wires and is therefore susceptible to electromagnetic interference. It is less susceptible to EMI than UTP (unshielded twisted pair) because the copper wires are shielded.

#### **OUESTION** 64

If the Linux installation process continuously locks up, which of the following should be done?

- A. Repartition the drive.
- B. Remove all unnecessary hardware.
- C. Enable power management in the BIOS.
- D. Ensure that the network card is installed prior to the installation.

Answer: B.

Explanation: If a Linux installation continuously locks up, it is likely that a hardware device is incompatible with Linux. To troubleshoot this, you should remove all unnecessary hardware, and add the hardware one device at a time, to discover the incompatible device.

**Incorrect Answers:** 

- A. Repartitioning the drive will not resolve the problem.
- C. Power management is more likely to cause problems, than resolve them.
- D. It is not necessary to install the network card prior to an installation.

### **QUESTION** 65

Under which of the following hardware upgrades would a system NOT have to be rebooted?

- A. Upgrading the CPU.
- B. Replacing a PS/2 mouse.
- C. Adding a USB CDROM drive.
- D. Installing additional RAM.

Answer: C.

Explanation: One of the features of USB devices is that they are 'hot swappable'. This means that you can disconnect and reconnect USB devices without needing to reboot the system.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 402.

**Incorrect Answers:** 

- A. The CPU can only be changed when the system is shut down.
- B. A PS/2 mouse may not work if it has been replaced without rebooting the machine.
- D. RAM can only be installed when the system is shut down.

### **OUESTION** 66

Which of the following connectors is hot pluggable?

- A. Serial port
- B. Parallel port
- C. IEEE-1394 port
- D. Ultra2 SCSI external connector

Answer: C.

Explanation: An IEEE-1394 port is a firewire port. This is a relatively new technology provide high

data transfer rates and is hot pluggable.

Reference: http://www.apple.com/firewire/

**Incorrect Answers:** 

- A. Serial ports are not hot pluggable.
- B. Parallel ports are not hot pluggable.
- D. Ultra2 SCSI ports are not hot pluggable.

### **QUESTION** 67

When SCSI, video and I/O boards are installed in a PC, which of the following allows the installed card to be integrated with the current system on a hardware level?

- A. CMOS
- B. POST
- C. BIOS
- D. Boot strap

Answer: A.

Explanation: The CMOS chip is the 'configurable' part of the BIOS. When the computer boots, the BIOS reads configuration information from the CMOS. The BIOS and CMOS are hardware and are not related to the operating system which is software.

Reference: http://www.wimsbios.com/

**Incorrect Answers:** 

- B. The POST (power on self test) is the process of the BIOS checking the system for installed hardware during system boot up.
- C. The BIOS cannot be directly configured. It reads its configuration information from the CMOS.
- D. Boot Strap is the process of a computer booting up.

#### **QUESTION** 68

A user has three SCSI devices (two internal and one external) connected to his computer. He adds another external device, and this device and one of the internal devices do not work. Which of the following is the most likely cause?

- A. An ID conflict
- B. AN IRQ conflict
- C. A memory conflict
- D. A driver is not installed

Answer: A.

Explanation: SCSI devices use SCSI identifiers (IDs). Each device must have a unique SCSI ID to function correctly. If two devices have the same ID, none of the two devices will work.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 32.

**Incorrect Answers:** 

- B. The SCSI devices don't have separate IRQs. The SCSI controller (to which the SCSI devices are attached) uses one IRQ.
- C. A memory conflict is less likely than an ID conflict.
- D. If the driver wasn't installed, only the recently added device would not work. The previously added devices would still work.

#### **QUESTION** 69

After the failed memory has been replaced, the PC does not boot and beeps several times. The beep code indicates there is no memory. The technician observes that the old SIMMs use 9 chips while the new SIMMs only use 8 chips. What is most likely the problem?

- A. EDO memory is required
- B. Parity memory is required
- C. Fast Page Mode memory is required
- D. Unregistered SDRAM memory is required

Answer: B.

Explanation: Parity memory boards have an extra chip for parity checking.

Reference: http://www.anandtech.com/showdoc.html?i=113&p=6

**Incorrect Answers:** 

A. The extra chip indicates parity memory, not EDO memory.

- C. The extra chip indicates parity memory, not Fast Page Mode memory.
- D. The extra chip indicates parity memory, not SDRAM memory.

### **QUESTION** 70

All of the following are common BIOS options EXCEPT

- A. mouse type
- B. parity/non parity
- C. floppy drive type
- D. hard drive auto-detect

Answer: A.

Explanation: The mouse type is not a common BIOS option although the PS/2 mouse PORT is often mentioned.

**Incorrect Answers:** 

- B. The option to disable or enable parity checking is common.
- C. The floppy drive type, (3.5 inch or 5.25 inch) is a common option.
- D. The option to disable or enable hard drive auto detection is common.

### **QUESTION** 71

A user has just installed a new 3.5" diskette drive in his desktop computer. He turns the computer on and discovers that the diskette drive light stays on all the time. What is the most likely reason the light stays on?

- A. The system BIOS is misconfigured.
- B. The light on diskette drive is broken.
- C. The power cable has not been connected properly.
- D. The ribbon cable is inserted backwards in the drive.

Answer: D.

Explanation: Inserting the ribbon cable backwards is an easy mistake to make and often causes the symptoms mentioned in this question.

Reference: http://www.computerhope.com/issues/ch000278.htm

Incorrect Answers:

- A. The only configurable floppy drive option is the size. The BIOS default would most likely have the correct size (3.5 inch) configured.
- B. If the light was broken, it wouldn't come on at all.
- C. If the power cable wasn't connected, the light wouldn't come on at all.

# **QUESTION 72**

Which network interface card has BNC connector on it?

A. IR

- B. Thinnet
- C. Fiber optic
- D. Twisted pair

Answer: B.

Explanation: Thinnet (otherwise known as 10Base2) uses the BNC connector.

Reference: http://searchnetworking.techtarget.com/sDefinition/0,,sid7\_gci211681,00.html

Incorrect Answer:

- A. IR (infra-red) is a wireless technology and therefore uses no connectors.
- C. Fiber Optic does not use BNC connectors.
- D. Twisted Pair does not use BNC connectors.

### **QUESTION 73**

On a Plug-and-Play system, some legacy hardware (non-Plug-and-Play) is required. Which of the following should be done to ensure the proper operation of all hardware on the system?

- A. Enable IRQ routing in the BIOS.
- B. Replace the BIOS with a non-Plug-and-Play BIOS.
- C. Reserve the resources in CMOS for the legacy hardware.
- D. Replace the legacy devices with current Plug-and-Play devices.

Answer: C.

Explanation: The resources for the legacy devices should be reserved in the CMOS. This will prevent the resources being dynamically assigned to plug and play devices, which would cause a resource conflict.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 30.

Incorrect Answers:

- A. It is not necessary to enable IRQ routing in the BIOS.
- B. It is not necessary to replace the BIOS.
- C. It is not necessary to replace the devices.

#### **QUESTION 74**

A battery fails in a Linux workstation. Which of the following will need to be reconfigured to get the system working after replacing the battery?

- A. MBR settings
- B. CMOS settings
- C. POST settings
- D. Data on each partition

Answer: B.

Explanation: The CMOS relies on a battery to 'remember' its configuration. If the battery fails, the CMOS will need to be reconfigured.

Reference: http://www.pcmech.com/show/motherboards/80/

Incorrect Anwers:

- A. The MBR settings are written to the hard disk and do not rely on battery power.
- C. The POST settings are in the BIOS which does not rely on battery power.
- D. The data on each partition is written to the hard disk and does not rely on battery power.

#### **QUESTION** 75

A user adds a new CD-RW to an existing system with a diskette drive, single IDE hard disk drive, and CDROM drive. The user then reports the system is taking longer to load applications. Which of the following will most likely resolve the problem?

- A. Switch the CD-RW to cable select.
- B. Install CD-R accelerator software.
- C. Replace the CD-RW drive, as it is damaged.
- D. Move the CD-RW to the secondary IDE controller.

Answer: D.

Explanation: Most systems come with two IDE controllers. The hard disk is always on the primary IDE controller. System performance can be improved by installing CD devices on the secondary IDE controller so that they are separate to the hard drive.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 31.

Incorrect Answers:

- A. Using cable select will not improve system performance.
- B. Moving the CD device to the secondary IDE controller will improve performance without the need for extra software. CD-R accelerator software may improve the CD-R performance, but it won't improve the overall system performance.
- C. It is unlikely that a faulty CD-RW would degrade the system performance.

### **QUESTION** 76

A system's serial device is not operating correctly. Which of the following IRQs is likely to be conflicting and causing the problem?

A. 4

B. 5

C. 7

D. 13

Answer: A.

Explanation: Serial devices use COM ports. COM ports 1 and 3 use IRQ 4.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 137.

**Incorrect Answers:** 

- B. IRQ 5 is commonly used by sound cards.
- C. IRQ 7 is commonly used by the parallel port.
- D. IRQ13 is used by the Math co-processor.

### **QUESTION 77**

A user has just hot-swapped the CDROM with the diskette drive in his mobile system. Now the diskette drive is not responding. Which of the following actions will correct the problem?

- A. Reboot the system.
- B. Reinstall the driver.
- C. Remove the drive and reinstall it.
- D. Set up hot-swapping capabilities in CMOS.

Answer: C.

Explanation: If a device doesn't work after hot plugging it into a mobile system, the first troubleshooting step would be to remove the device and reinstall it. Incorrect Answers:

- A. It may not be necessary to reboot the system. Try refitting the device first.
- B. If the device worked before, then the driver is already installed and does not need reinstalling.
- D. Laptop PCMCIA devices are hot swappable. This does not need to be configured in the CMOS.

#### **OUESTION** 78

Which if the following IDs should be avoided when assigning IDs to SCSI peripherals?

- A. 2
- B. 4
- C. 5
- D. 7

Answer: D.

Explanation: SCSI devices need separate SCSI IDs. The SCSI controller itself uses a SCSI ID. This is usually ID 7.

Reference: http://cmtunix.tstc.edu/database/hardware/scsi.html

Incorrect Answers:

- A. The SCSI controller usually uses SCSI ID 7, not 2.
- B. The SCSI controller usually uses SCSI ID 7, not 4.
- C. The SCSI controller usually uses SCSI ID 7, not 5.

### **QUESTION** 79

Which device commonly uses the ATAPI interface?

- A. Modem
- B. CD-ROM
- C. Video card
- D. Network card

Answer: B.

Explanation: CD-ROM devices commonly use the ATAPI interface. Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 24.

Incorrect Answers:

- A. Modems commonly use the serial interface, not the ATAPI interface.
- C. Video Cards commonly use the AGP interface, not the ATAPI interface.
- D. Network cards commonly use PCI interfaces, not the ATAPI interface.

### **QUESTION** 80

A user believes that his telecommunications software is not dialing his modem properly. Which of the following AT commands can be used to have the modem dial 432-3604?

- A. AT4323604
- B. ATM4323604
- C. ATDT4323604
- D. AT4323604DT

Answer: C.

Explanation: The ATDT<number> command is used to have a modem dial a number.

Reference: http://www.option.co.za/hayesat.htm#Hayes%20AT%20Commands

**Incorrect Answers:** 

- A. You need the ATDT command, not the AT command.
- B. You need the ATDT command, not the ATM command
- D. You need the ATDT command, not the AT command

## **QUESTION** 81

A Linux vendor has recently come out with a necessary patch to the server software to improve security on the server. Which of the following is the best practice, if any, for updating this patch on a production system?

- A. Never apply patches on production servers, because they may introduce errors and conflicts.
- B. Apply the patch during business hours, to validate the patch under normal system operation.
- C. Apply the patch onto a secondary system to test the patch before installing it on a production machine.
- D. Apply the patch immediately to the production system, because security patches need to be installed right away.

Answer: C.

Explanation: Any new software or software patch should be installed on a secondary system and thoroughly tested before installation of production systems.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 203.

Incorrect Answers:

- A. A patch may introduce errors and conflicts, but this is why should test it first on a secondary system.
- B. A patch should be tested on a secondary system before installation on a production system.
- D. Security patches should be installed as soon as possible, but not before testing on a secondary system.

# **QUESTION** 82

A Linux system crashes every day at the same time and needs to be rebooted. Which of the following would provide evidence of what was happening on the system at that time?

- A. Run dmesg
- B. Run uptime
- C. Look in /etc/shutdown
- D. Look in /var/log/messages

Answer: D.

Explanation: Most applications write error messages to files in the /var/log/messages directory. You should look here to see if you can discover what is causing the system to crash.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 613.

Incorrect Answers:

- A. Dmesg is a utility that displays the text that is displayed during system startup. You need find out what caused the system to crash before the reboot was necessary.
- B. Uptime is a utility that displays how long the system has been running for.
- C. Error messages are not written to this file or directory.

### **QUESTION** 83

After installing Linux onto a dual-processor machine, the administrator suspects that only one processor initialized successfully during the boot process. How could this be verified?

- A. Run cpuinfo
- B. Check /var/log/messages for errors.
- C. Run dmesg to review the log file.
- D. Run ps to see if both CPUs appear.

Answer: A.

Explanation: Cpuinfo is a utility that displays information about all running processors on a system. If

the output contains information about only one processor, then only one processor is working.

Reference: http://www.cpan.org/modules/by-category/04\_Operating\_System\_Interfaces/Linux/Linux-Cpuinfo-1.5.readme

**Incorrect Answers:** 

- B. A non-functional processor would generate any error messages in the error logs.
- C. Dmesg displays the text that was displayed when the system booted. This will not contain any information about a non-functional processor.
- D. Ps lists the running processes, not the processors.

### **OUESTION 84**

A system has a utility that is regularly updated with new versions. Rather than overwriting the older versions, they need to be retained for testing purposes. Therefore, they keep older versions in the following format utility1.3 utility1.4 utility1.5 What is the best way the system can be set up so that users cam simply type "utility" to run the latest version of the application?

- A. Copy the latest version of the utility to "utility".
- B. Move the latest version of the utility to "utility".
- C. Make a symbolic link "utility" to the latest version.
- D. Make a symbolic link from the latest version to "utility.lnk".

Answer: C.

Explanation: A symbolic link is like a shortcut. A symbolic link named utility will open the file (program/utility) that the link points to, when a user types 'utililty'.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 134.

Incorrect Answers:

- A. A copy of the latest version of the program should not be renamed 'utility' because other files that the program uses, might have links to the original program name.
- B. The latest version of the program should be renamed 'utility' because other files that the program uses, might have links to the original program name.
- D. The symbolic link needs to point to the latest version of the program.

## **QUESTION** 85

A machine that usually executes its tasks very quickly becomes remarkably slow. What information from the ps command would suggest that a process is problematic and must be killed?

- A. A high CPU time.
- B. A high process ID.
- C. A high load average.
- D. A high memory percentage.

Answer: A.

Explanation: The PS command is used to display information about the running processes. A faulty

process can be recognized by having a high CPU time. This means that a high percentage of the processor time is spent trying to run the process. This can usually be fixed by restarting the process. Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 514. Incorrect Answers:

- B. The process ID is just an identifier for the process. A high ID would not slow the machine.
- C. The PS command does not display the load average for the processor.
- D. The PS command does not display information about the memory.

### **QUESTION** 86

When dial-up users are able to connect to the dial-in Linux server but are unable to authenticate, which of the following should be done?

- A. Reboot the server.
- B. Check spooler for errors.
- C. Check that RAS is running.
- D. Check that RADIUS is running.

Answer: D.

Explanation: RADIUS stands for Remote Authentication Dial In User Service. It is a service that is used to authenticate dial in users.

Reference: http://www.gnu.org/software/radius/radius.html

Incorrect Answers:

- A. It is not necessary to reboot the server; just start the RADIUS service.
- B. The spooler is for printing, not authentication.
- C. If RAS wasn't running, the users would not be able to dial in.

### **QUESTION** 87

The system administrator is asked to install a file called zope-2.2.5-0.rpm. The administrator downloads the file and attempts to install it. While installing the file the following error is displayed:

failed to open /var/lib/rpm/packages.rpm: Permission denied

error: cannot open /var/lib/rpm/packages.rpm

What has to be done before the program will work?

- A. Run "rpm -i zope-2.2.5-0" as root.
- B. Change ownership of file to 'root'
- C. Run "rpm -i --nodeps zope-2.2.5-0" to bypass the error.
- D. Return to the Website to receive an uncorrupted .rpm file.

Answer: A.

Explanation: You must be logged in as root to install a program.

Incorrect Answers:

B. The file does not need to be owned by root, to enable its installation.

- C. You cannot bypass a 'permission denied' error message.
- D. The system was able to read the permissions, which means the file is not corrupted.

### **QUESTION** 88

A Linux machine is not booting after a power outage. No rescue/boot disk is readily available. Where could a rescue/boot disk be found?

- A. In /boot
- B. In /root
- C. From linuxdocs.org
- D. At the distribution's Website.

Answer: D.

Explanation: You can download a rescue/boot disk from the distributions Website.

For example, you can download Redhat Linux boot disk images from:

ftp://ftp.redhat.com/pub/redhat/linux/7.3/en/os/i386/images/

Incorrect Answers:

- A. There are no boot disk images in /boot.
- B. There are no boot disk images in /root.
- C. Linuxdocs.org contains documentation, not boot disk images.

### **QUESTION** 89

Why is "netstat -nr" used in substitution of the route command when a network connection is not functioning correctly?

- A. "netstat -nr" displays the routing table without performing reverse name lookup.
- B. Route requests the network driver for data, but "netstat -nr" will display the kernel's routing table.
- C. The route command can be used if the network is functional. The "netstat -nr" displays only the local machine.
- D. Route will attempt to contact and verify the connections to each host in the routing table using ping.

If the network fails, route will stop responding.

Answer: C.

Explanation: The Route command is used to display the routing table. If the network is not functional, the routing table will only contain static routes; it will not contain any dynamic routes. The netstat command displays information about the local machine whether the network is functional or not. Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 373/4.

Incorrect Answers:

A. Netstat is used rather than route because netstat displays information about the local machine.

- B. Netstat is used rather than route because netstat displays information about the local machine.
- D. Route does not attempt to contact and verify the connections to each host.

### **QUESTION** 90

In order to control runaway processes, an administrator creates a cron job. Which of the following commands should be run so that he can scan the logs later?

A. ps

B. sar

C. top

D. tail

Answer: C.

Explanation: A 'runaway' process is a process that is using a high amount of CPU time. The 'top' command displays the processes that use the highest amount of CPU time.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 668.

Incorrect Answers:

- A. The ps command displays all processes. We just need the processes with the highest amount of CPU time.
- B. There is no sar command.
- C. The tail command displays the processes with the lowest amount of CPU time.

### **OUESTION** 91

After setting up a cron job to backup a system to tape, the first few backups on the tape cartridge are successful. They then fail, reporting the "device is full." What could be the cause of the problems?

- A. Tapes can only be used once.
- B. The tape is not being erased.
- C. The tape drive needs to be replaced.
- D. Incremental backups need to be used.

Answer: B.

Explanation: If you're using a single tape to run scheduled backups, then the cron job will need to be configured to erase the tape before performing the backup.

Incorrect Answers:

- A. Tapes can be used many times.
- C. It is unlikely that the tape drive is faulty and therefore does not need to be replaced.
- D. Incremental backups back up only the files that have changed since the last backup. These backups use less tape space but the tape will eventually fill up if it isn't erased.

### **QUESTION** 92

A new user has been issued a Linux system that automatically boots to an X login, but would rather have the system automatically boot to the console login. How should the system be configured to accommodate the user?

- A. By typing "init 3" in an xterm.
- B. By running the Xbootmgr utility.
- C. By editing /etc/lilo.conf and adding the line:

boot = console

D. By changing the line in /etc/inittab that reads:

id:5:initdefault:

to read:

id:3:initdefault:

Answer: D.

Explanation: The inittab file specifies the default runlevel for the machine. Run level 5 will automatically boot to an X login. Runlevel 3 will boot to a console login.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 410, 399.

Incorrect Answers:

- A. Init 3 will change the runlevel to runlevel 3, but the default boot runlevel won't be changed.
- B. Xbootmgr will not change the default runlevel of the machine.
- D. The is an incorrect use of the boot command in a lilo.conf file.

# **QUESTION** 93

A user complains that they can send and receive mail on the Internet, but cannot browse the Web. They have tried using different Web browsers in X. Working offline is disabled. What is most likely to be the problem?

- A. The user is not typing the Web address correctly.
- B. Web support was not added during the initial installation.
- C. X dropped Web access to the browser and needs to be restarted.
- D. There is a proxy sever that the browsers have not been configured to use.

Answer: D.

Explanation: If you have a proxy server configured on the network, the client computers need to be configured to use it to access the internet.

Reference: http://www.squid-cache.org/

**Incorrect Answers:** 

- A. An incorrect web address would return a page not found error or a different website.
- B. Web support is added by default in most installations.
- C. This is not something that X can do.

### **QUESTION** 94

A user-defined cronjob is configured incorrectly and is slowing down a server. What is the best way to address this issue?

- A. Use "cron-d\*" to delete each user's cron jobs.
- B. Use "userdel <user>" to delete the user to prevent additional cron jobs.
- C. Use "crontab -u <user> -l" for each user to find out who has the incorrect crontab.
- D. Prevent cron from launching any additional processes by using "killall -9 crond".

Answer: C.

Explanation: You need to find out which users' cron job is causing the problem and stop the cron job.

Reference: http://www.oreillynet.com/linux/cmd/c/crontab.html

Incorrect Answers:

- A. It is not necessary to delete all the users' cron jobs.
- B. It is not necessary to delete any user accounts.
- D. Cron is already running a troublesome process. Killing any additional processes won't help.

### **QUESTION** 95

Which of the following tasks cannot be accomplished with the touch command?

- A. Create a new file.
- B. Change a file's modification time.
- C. Change a file's access time.
- D. Change a file's creation time.

Answer: D.

Explanation: The touch command is used to display information about a file, including its modification and last access times. If the file doesn't exist, touch will create it. It cannot modify a file's creation time.

Reference: http://www.oreillynet.com/linux/cmd/t/touch.html

**Incorrect Answers:** 

- A. If a file doesn't exist, touch can create it.
- B. You can change a files modification time with the touch command.
- C. You can modify a files access time with the touch command.

### **QUESTION** 96

A site administrator instructs the technician to install Linux as a secondary OS on an existing workstation. He wants to use the boot loader of the primary OS. When requested where to place LILO, the technician should select which location?

- A. BIOS
- B. /etc/disktab

- C. Master boot record
- D. Partition superblock

Answer: B.

The default location for a Linux boot loader is in the Master Boot Record. However, if you want to use the boot loader of another operating system, you'll need to put the Linux boot loader into a directory in a Linux partition such as /etc/disktab.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 213.

**Incorrect Answers:** 

- A. You cannot put a Linux boot loader into the BIOS.
- C. If you want to use the boot loader of another operating system, you'll need to put the Linux boot loader into a directory in a Linux partition such as /etc/disktab.
- D. You cannot put a Linux boot loader into the partition superblock.

## **QUESTION** 97

A network administrator attempted to configure the Ethernet interface. He issued the insmod command along with the driver's object file. However, insmod reports errors about unresolved symbols. Which of the following is the cause of the problem?

- A. A driver of that type has already been installed.
- B. The latest version of insmod is not installed.
- C. The compiled driver is incompatible with the kernel.
- D. The module is designed for a device of another type.

Answer: C.

Explanation: Unresolved symbol errors are usually caused by attempting to install a module/driver which is incompatible with the kernel.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 571.

Incorrect Answers:

- A. This would not cause an unresolved symbol error.
- B. It is not necessary to have the latest version on insmod installed.
- D. The module would still load if it were designed for another device. The device just wouldn't work.

### **QUESTION** 98

A computer has a FAT32 partition that takes up the entire 16 GB hard driver. Another operating system is currently installed, but only uses 8 GB of the partition. What is the best way to install Linux without removing the other operating system?

- A. Run FIPS
- B. Run rsize
- C. Run fdisk
- D. Run format

Answer: A.

Explanation: To install Linux, you need to reduce the size of the FAT32 partition to free up enough space to create a Linux partition. FIPS is a utility that can resize partitions without losing data.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 43.

**Incorrect Answers:** 

- B. Rsize is the incorrect command.
- C. Fdisk creates partitions but it cannot resize them.
- D. Format will erase everything on the partition, not resize it.

## **QUESTION** 99

A client terminal requires the BOOTP protocol in order to access the server. Which protocol must be installed on the BOOTP server to communicate with the client terminal?

A. SMB

B. IGRP

C. OSPF

D. TCP/IP

Answer: D.

Explanation: BootP is an IP protocol, commonly used with diskless workstations.

Reference: http://www.webopedia.com/TERM/B/BOOTP.html

Incorrect Answers:

A. SMB is a NetBIOS protocol used for communication with Windows computers. It is not used with BootP.

B. IGRP is a routing protocol. It is not used with BootP.

C. OSPF is a routing protocol. It is not used with BootP.

### **OUESTION** 100

Where is the first place to look for error messages while installing and testing an application?

- A. /tmp/boot.log
- B. /var/log/dmesg
- C. /var/log/messages
- D. /var/log/kernel/errors

Answer: C.

Explanation: Most applications write messages to error logs stored within /var/log/messages.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 613.

**Incorrect Answers:** 

A. This is not the default location for application error messages.

- B. This is not the default location for application error messages.
- D. This is not the default location for application error messages.

### **QUESTION** 101

A new shell command is installed and does not perform correctly. It generates too much diagnostic output to read on the screen and does not write to a log file. Which of the following would capture the output for evolution?

- A. Run the command as a daemon.
- B. Make the changes to /etc/syslog.conf
- C. Run the command in the background.
- D. Add redirection to the command line.

Answer: D.

Explanation: By redirecting the output to a command line in a console, you could read the output by scrolling up the window.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 656.

Incorrect Answers:

- A. Running the command as a daemon would not capture the output.
- B. Making changes to the syslog.conf file won't help because the program doesn't write to a log file.
- C. Running the command in the background would not capture the output.

## **QUESTION** 102

Which runlevel only grants root access?

- A. 0
- B. 1
- C. 2
- D. 3

Answer: B

Explanation: Runlevel 1 is 'single user maintenance mode'. In the mode, only the root user can log in to the system.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 410.

**Incorrect Answers:** 

- A. Runlevel 0 shuts down the computer.
- C. Runlevel 2 is a multiuser mode in which any user can log in.
- D. Runlevel 2 is a multiuser mode in which any user can log in.

### **QUESTION** 103

A new employee having a problem with account login has the following enter in the /etc/passwd file:

User1:\*:51:501:John Doe:/home/user1:/bin/bash What is wrong with this entry in the /etc/passwd file?

- A. The UID is not valid.
- B. The account is locked.
- C. The UID and GID must match.
- D. Spaces are not permitted between the first and last name.

Answer: B.

Explanation: The second field is the password field. This account has no password as indicated by the

'\*'. This means that the account is locked.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 397.

**Incorrect Answers:** 

- A. The user ID is valid.
- C. The User ID and Group ID do not have to be the same.
- D. Spaces are permitted between the first and last name. (note: This is not the login name).

### **QUESTION** 104

What command is used to remove an rpm package from Linux?

- A. rpm -e <package name>
- B. rm -rf <package name>
- C. rpm -m <package name>
- D. rpm --remove <package name>

Answer: A.

Explanation: The rpm -e <package name> command is used to remove an rpm package.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 178.

Incorrect Answers:

- B. This is the command used to delete a directory. You would need to delete every file installed by the package if you were to use this command.
- C. There is no -m option in the rpm program.
- D. There is no --remove option in the rpm program.

### **OUESTION** 105

In order to prevent monitor damage when configuring X, all of the following must be configured correctly EXCEPT

- A. RAMDAC
- B. Video RAM
- C. Refresh rate
- D. Resolution capability

Answer: D.

Explanation: The resolution capability is a graphics card setting. However, this setting when

incorrectly configured would not damage a monitor.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 135.

**Incorrect Answers:** 

- A. The RAMDAC must be configured.
- B. The Video RAM must be configured.
- C. The refresh rate must be configured.

# **QUESTION** 106

The following is an example of a ".forward" file found in user Audrey's home directory. /audrey,audrey@comptia.org

Which of the following best describes what the mail handler will do when user "audrey" receives mail?

- A. It forwards a copy to comptia.org and does not keep a local copy.
- B. It saves a copy of the mail locally and forwards a copy of the mail to audrey@comptia.org.
- C. It runs a program audrey that is found in the root directory and forwards the mail to audrey@comptia.org.
- D. It runs a program called audrey that is found in the root directory and forwards the program's results to comptia.org.

Answer: B.

Explanation: A .foward file is used to tell an email client what to do with received email. You can have multiple entries in the file, separated by commas. /Audrey will keep a copy in a directory called /Audrey. Audrey@comptia.org will forward a copy of the email to that address.

Reference: Bryan Costales, O-Reilly Press. Sendmail. Page 429.

Incorrect Answers:

- A. It will save a copy in the /Audrey directory.
- C. It does not run a program called Audrey.
- D. It does not run a program called Audrey.

#### **QUESTION** 107

What file should be edited to add two additional gettys to runlevel 3?

- A. /etc/inittab
- B. /etc/termcap
- C. /etc/rc.dlinit.d/inittab
- D. /usr/local/etc/getty.conf

Answer: A.

Explanation: The /etc/inittab file contains the default configuration information for the various runlevels.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 400.

**Incorrect Answers:** 

- B. /etc/termcap does not contain configuration information for the various runlevels.
- C. /etc/rc.dlinit.d/inittab does not contain configuration information for the various runlevels.
- D. /usr/local/etc/getty.conf does not contain configuration information for the various runlevels.

### **QUESTION** 108

Which of the following programs can be reconfigured to boot Linux?

- A. Minix
- **B. FIPS.EXE**
- C. Disk Druid
- D. LOADLIN.EXE

Answer: D.

Explanation: There are various boot loaders for Linux such as LILO, Grub and LOADLIN.EXE.

LOADLIN.EXE is a DOS program that can load Linux.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 490.

Incorrect Answers:

- A. Minix is an old UNIX operating system, not a Linux boot loader.
- B. Fips is a partition resizing utility, not a Linux boot loader.
- C. Disk Druid is a hard disk partitioning utility, not a Linux boot loader.

### **OUESTION** 109

A Linux machine has a local address of 192.168.1.1 with a subnet mask of 255.255.255.0. At this time, all services are denied. Which of the following lines would be appended to the hosts.allow file to permit access to the Web service on the local subnet?

A. httpd: 192.168.1.

B. ALL: 192.168.1.255/24

C. ALL except httpd: 192.168.1.1/24D. 192.168.1.255/255.255.255.0:httpd

Answer: A.

Explanation: To permit access to the Web service, you need to permit access to the HTTP daemon (httpd). You then need to specify which IP addresses can access it. 192.168.1.0 is the network address of a host with an IP address of 192.168.1.1. The statement 'httpd: 192.168.1.' (without the 0) will allow all machines in the 192.168.1.0 subnet access to the Web service.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 364.

Incorrect Answers:

B. The ALL statement is invalid. It can only be used in the client list to mean 'all' IP addresses.

- C. The ALL statement is invalid. It can only be used in the client list to mean 'all' IP addresses.
- D. The server service come before the client list.

### **QUESTION** 110

A server has the following Class C IP address:

192.168.1.2

What are the default network and broadcast addresses?

A. Network: 192.0.0.1; Broadcast: 192.0.0.2
B. Network: 192.0.0.0; Broadcast: 192.168.1.0
C. Network: 192.168.1.1; Broadcast: 192.168.1.0
D. Network: 192.168.1.0; Broadcast: 192.168.1.255

Answer: D.

Explanation: The first three octets of a Class C address are the network address. The last octet is the host portion of the address. The network address has a zero as the host portion (e.g. 192.168.1.0). The broadcast address has 255 as the host portion (255 = all 1s in binary). This gives us 192.168.1.255 as the broadcast address.

**Incorrect Answers:** 

- A. These are incorrect network and broadcast addresses.
- B. These are incorrect network and broadcast addresses.
- C. These are incorrect network and broadcast addresses.

# **QUESTION** 111

A new video card is added to a Linux workstation. Which of the following files is used to configure X?

- A. /usr/conf/Xconfig
- B. /etc/X11R6/Xconfig
- C. /etc/X11/XF86Config
- D. /root/Xwindows/Xconf

Answer: C.

Explanation: XF86Config is the configuration file for X. It resides in the /etc/X11 directory.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 124.

**Incorrect Answers:** 

- A. This is not the correct file to configure X.
- B. This is not the correct file to configure X.
- D. This is not the correct file to configure X.

## **QUESTION** 112

What command is used to remove a kernel module?

- A. rmmod
- B. rm module
- C. rm -rf <module name>
- D. /uninstall <module name>

Answer: A.

Explanation: The 'rmmod' (remove module) command is the correct command to remove a module.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 574.

Incorrect Answers:

- B. The command rm module would delete a file called module from the current directory.
- C. The rm -rf command would delete all files in a directory called <module name>.
- D. This is a non-existent command.

### **OUESTION 113**

The root user types "echo \$path" and sees the following output:

.:/bin:/usr/bin:sbin:/usr/X11R6/bin:/usr/src

Which part of this path is considered to be a security risk?

- A. .
- B. /sbin
- C. /usr/src
- D. /usr/X11R6/bin

Answer: A.

Explanation: The current directory indicator (.) in the path poses a security risk because someone could create a malicious program with the name of some other program (like ls) and trick the user into running it just by typing the name of the program.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 408.

**Incorrect Answers:** 

- B. Having /sbin in the path does not pose a security risk.
- C. Having /usr/src in the path does not pose a security risk.
- D. Having /usr/X11R6/bin in the path does not pose a security risk.

#### **QUESTION** 114

Which of the following contains system user default configuration files and directories?

- A. /etc/skel
- B. /usr/config
- C. /usr/local/bin
- D. /etc/user.conf

Answer: A.

Explanation: The default configuration files for user accounts are in /etc/skel. These settings are copied when a user account is first created.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 260.

**Incorrect Answers:** 

- B. The default user configuration files are not stored in the /usr/config directory.
- C. The default user configuration files are not stored in the /usr/local/bin directory.
- D. The default user configuration files are not stored in the /etc/user.conf file.

### **QUESTION** 115

A new printer has been installed and the printcap file has been edited. Is the printer ready to use?

- A. No, because the printer daemon must be restarted.
- B. No, because there is also a spool daemon that will need to be restarted.
- C. Yes, because the printer configuration files are read every time the printer spool is used.
- D. Yes, because it is necessary to run the program called printcap which creates a separate file used by the printer daemon.

Answer: A.

Explanation: After making changes to the printcap file, you need to restart the printer daemon to activate the changes.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 550.

Incorrect Answers:

- B. There isn't a separate spool daemon that needs to be restarted.
- C. The printer is not ready for use without restarting the printer daemon.
- D. The printer is not ready for use without restarting the printer daemon.

### **QUESTION** 116

Which of the following protocols is used while configuring a workstation to dial into and connect to a new ISP?

- A. PPP
- B. UDP
- C. UUCP
- D. SNMP

Answer: A.

Explanation: PPP (point-to-point) protocol is the protocol used to connect to an ISP (Internet Service Provider).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 339.

**Incorrect Answers:** 

- B. UDP is not used to connect to an ISP.
- C. UUCP is not used to connect to an ISP.
- D. SNMP is not used to connect to an ISP.

## **QUESTION** 117

An Internet Web server is being installed. No DHCP server is available. What is the proper method to obtain a valid Internet IP address?

- A. Use ping.
- B. Use netstat.
- C. Use nslookup.
- D. Contact the Internet Service Provider (ISP).

Answer: D.

Explanation: When installing an Internet Web server, you'll need to contact the Internet Service

Provider to find out what IP address to assign to the Web server.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 346.

Incorrect Answers:

- A. Ping is used to test IP connectivity, not to obtain an IP address.
- B. Netstat is used to troubleshoot network connectivity, not to obtain an IP address.
- C. Nslookup is used to test DNS, not to obtain an IP address.

### **OUESTION** 118

Which of the following tasks is the most important best practice when performing a new installation of Linux for a customer?

- A. Document all configuration settings used during the installation.
- B. Apply the latest patches and updates to the operating system and applications.
- C. Use a single distribution for the operating system, utilities, and applications.
- D. Use default settings during the installation and make custom changes after the operating system is running and validated.

Answer: A.

Explanation: When installing Linux for a customer, it is good practice to document all configuration settings used during the installation. This will make it easier to troubleshoot any problems that may occur in the future.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 438.

Incorrect Answers:

- B. Applying the latest patches is important, but documentation is more important.
- C. Using a single distribution is a good idea, but documentation is more important.
- D. Using default settings may make the installation easier, but this is not required and is not the most important 'best practice'.

### **QUESTION** 119

A user has just connected a SCSI scanner device to his computer. After installing the vendor's drivers, the scanner cannot be correctly used by the software. All of the following are possible reasons EXCEPT

- A. The scanner device is damaged.
- B. The SCSI ID is set incorrectly.
- C. The last device is not terminated.
- D. There is an IRQ conflict between the scanner and another device.

Answer: D.

Explanation: SCSI devices don't use IRQs. They use SCSI IDs to differentiate between devices. Only

the SCSI controller to which the SCSI devices connect uses an IRQ.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 565.

**Incorrect Answers:** 

- A. It is possible that the scanner is damaged.
- B. It is possible that the SCSI ID is not set correctly.
- C. It is possible that the last SCSI device on the SCSI chain is not terminated.

## **QUESTION** 120

What may happen if a network cable and a power cable are too close together?

- A. EMI may occur.
- B. Jabber may occur.
- C. Crosstalk may occur.
- D. Power surges may occur on the network cable.

Answer: A.

Explanation: All power cables produce an electro magnetic field around them. This magnetic field can interfere with data traveling along a network cable if the network cable is close to the power cable. This is known as EMI (Electro Magnetic Interference).

Reference: http://www.kemcointernational.com/newcoatings.htm

Incorrect Answers:

- B. Jabber can be caused by a faulty network card, not by a power cable.
- C. Crosstalk can occur when network cables are close together. It is not caused by a power cable.
- D. Power surges would not occur on a network cable, if it was close to a power cable.

#### **QUESTION** 121

What is the advantage of using an extended capabilities port (ECP) over an enhanced parallel port (EPP)?

- A. Daisy chaining capability.
- B. Bi-directional communication.
- C. Omni-directional communication.
- D. Direct memory access (DMA) capability.

Answer: D.

Explanation: Extended Capabilities Ports support direct memory access (DMA). This is not supported

by Enhanced Parallel Ports.

Reference: http://www.fapo.com/ecpmode.htm

**Incorrect Answers:** 

- A. Daisy chaining is support by both types of parallel port.
- B. Bi-directional communication is support by both types of parallel port.
- C. Omni-directional communication is support by both types of parallel port.

### **QUESTION** 122

A technician booted a PC and noted that none of the four ATA devices were detected. He verified that the devices were cabled properly, physically connected to the ATA controller and power supply, and jumpered correctly. Which of the following is the most likely problem?

- A. No PC can support four ATA devices.
- B. The CMOS setup is set to ignore all ATA devices.
- C. The BIOS does not appear to support ATA devices.
- D. ATA devices have not been set up with the configuration diskette.

Answer: B.

Explanation: ATA devices are usually auto-detected by the CMOS during system boot up. However, this can be disabled. As all the devices are correctly fitted, this is the most likely cause of the problem. Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 31.

Incorrect Answers:

- A. All modern PCs can support at least four ATA devices.
- C. All modern BIOSs support ATA devices.
- D. ATA devices do not need to be set up with a configuration diskette.

## **QUESTION** 123

A technician wants to replace a system processor. What should he do before beginning the work?

- A. Properly ground the PC.
- B. Remove the CMOS battery.
- C. Properly ground himself.
- D. Ensure that the humidity is below 5%.

Answer: C.

Explanation: When working with components in a PC, it is important to ground yourself to prevent static electricity shocks which can destroy PC components. A common way to do this is to wear a strap that fits to your wrist and connects to the metal case of the computer.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 563/4.

Incorrect Answers:

- A. You should ground yourself, not the PC.
- B. You don't need to remove the CMOS battery to change the processor.
- D. It is not necessary to ensure that the humidity is below 5%.

### **QUESTION** 124

Enabling Init13h support on a SCSI controller card enables use of which of the following devices?

- A. Scanner
- B. Printer
- C. Tape drive
- D. Hard drive

Answer: D.

Explanation: To use a SCSI hard disk, you need to ensure that Init13h support is enabled on the SCSI controller.

Incorrect Answers:

- A. Init13h support enables the use of a SCSI hard disk, not a scanner.
- B. Init13h support enables the use of a SCSI hard disk, not a printer.
- C. Init13h support enables the use of a SCSI hard disk, not a tape drive.

### **QUESTION** 125

How can an ATA-66 hard drive be utilized with an UDMA-33 controller?

- A. Flash the BIOS.
- B. Install the hard drive normally.
- C. An ATA-66 controller must be installed.
- D. Reconfigure the jumper settings on the motherboard.

Answer: B.

Explanation: An ATA-66 hard drive can run on a UDMA-33 controller. Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 30-31. Incorrect Answers:

- A. It is not necessary to flash the BIOS.
- C. It is not necessary to install a new controller.
- D. It is not necessary to reconfigure the jumper settings on the motherboard.

### **QUESTION** 126

A single SCSI device is not recognized during SCSI BIOS initialization. Which of the following has most likely caused this?

A. The SCSI bus is not properly terminated.

- B. External SCSI devices are not supported by Linux.
- C. More than one device is required for proper SCSI operation.
- D. The cable is over the 2-foot limit for the type controller.

Answer: A.

Explanation: It is most likely that the SCSI bus is incorrectly terminated. It is possible that the bus was terminated at the device before the unrecognized device.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 579.

Incorrect Answer:

- B. External SCSI devices are supported by Linux.
- C. You don't need more than one device on a SCSI chain for proper SCSI operation.
- D. There is no 2 foot limit on a SCSI chain.

## **QUESTION** 127

What is the Media Access Control (MAC) address of an Ethernet interface?

- A. The encryption key used for IPSEC.
- B. An identifier used when forwarding packets between routers.
- C. A 32-bit address that is often associated with a logical name.
- D. A hexadecimal number that makes a network interface card unique.

Answer: D.

Explanation: Every network card has a 96 bit unique identifier 'burned' into the card. The 48 bits signify the vendor of the card and the last 48 bits are unique for every card sold by the vendor. The 96 bit number is usually displayed as a hexadecimal number.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 327.

**Incorrect Answers:** 

- A. The MAC address is unrelated to IPSEC.
- B. The MAC address is a hardware address. Routers use software addresses such a IP addresses.
- C. The 32 bit address is the IP address, not the MAC address.

## **QUESTION** 128

After having worked for several months, a PC fails to boot and indicates that the HDD has bad sectors. Which is the first action to take?

- A. Reboot the system to remove the message.
- B. Run the manufacturer's Diagnostic Utility.
- C. Replace the defective HDD and reload the system.
- D. Run Scandisk and Defrag to repair the damaged sectors.

Answer: B.

Explanation: The best course of action would be to test the hard drive with the manufacturer's diagnostic utility to confirm that the hard disk has bad sectors. Incorrect Answers:

- A. If the PC failed to boot to due a bad hard disk, it will fail again if you try to reboot.
- C. It may not be necessary to replace the hard drive.
- D. Defrag does not repair bad sectors and Scandisk is a Windows utility.

# **QUESTION** 129

What is the maximum bandwidth of 100BaseTX in half-duplex mode?

- A. 10 Mbps
- B. 50 Mbps
- C. 100 Mbps
- D. 200 Mbps

Answer: C.

Explanation: The 100 in 100BaseTX stands for 100 Mbps. In full duplex mode, this speed is doubled.

Reference: http://www.wikipedia.com/wiki/100baseTX

**Incorrect Answers:** 

- A. The 100 in 100BaseTX stands for 100 Mbps, not 10.
- B. The 100 in 100BaseTX stands for 100 Mbps, not 50.
- D. The 100 in 100BaseTX stands for 100 Mbps. 200Mbps can be achieved in full duplex mode.

# **QUESTION** 130

Exhibit:



Based on the exhibit, in which type of system would the device most commonly be used?

- A. Network switch.
- B. Network firewall.
- C. Stand-alone server.
- D. Mobile workstation.

Answer: D.

Explanation: The exhibit shows a PCMCIA card. These are commonly used in laptops.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 589.

Incorrect Answers:

- A. This is not a network switch.
- B. This is not a network firewall.
- C. This is not a stand-alone (or any other) server.

### **QUESTION** 131

During boot, the system reports a configuration error. The technician fixes the BIOS settings and the problem is solved. After a cold reboot, the system reports the same configuration error. The CMOS battery tests good. What is the most likely problem?

- A. Bad BIOS chip.
- B. Bad system board.
- C. Bad system memory.
- D. Bad or missing command interpreter.

Answer: B.

Explanation: When configuring the BIOS, you are actually configuring the CMOS. The BIOS reads the information in the CMOS during boot up. The CMOS is remembering the configuration settings and the battery is good, which suggest a bad system board (motherboard).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 12.

Incorrect Answers:

- A. The fact that you received the same error after configuring the CMOS suggests that the BIOS was able to read the CMOS. Therefore, the BIOS chip is functional.
- C. The system memory (RAM) is unrelated to the BIOS or CMOS.
- D. A bad command interpreter would cause problems when running programs, not startup problems.

## **QUESTION** 132

Which type of memory not only detects, but also corrects single-bit errors?

- A. EDO
- B. ECC
- C. Parity
- D. RAMDAC

Answer: C.

Explanation: Parity RAM can correct errors.

Reference: http://www.anandtech.com/showdoc.html?i=113&p=6

Incorrect Answers:

A. EDO RAM does not detect errors.

- B. ECC memory can detect errors but it cannot correct them.
- D. RAMDAC is used with video adapters and does not perform error checking.

### **QUESTION** 133

What AT command is used to reset a modem?

- A. ATX
- B. ATZ
- C. ATDT
- D. ATM0

Answer: B.

Explanation: The ATZ command is the correct command to reset a modem. Reference: http://www.option.co.za/hayesat.htm#Hayes%20AT%20Commands

**Incorrect Answers:** 

- A. The ATX command does not reset a modem.
- C. The ATDT command does not reset a modem.
- D. The ATM0 command does not reset a modem.

### **QUESTION** 134

Which IRQ is used by most FDD controllers?

- A. 0
- B. 2
- C. 6
- D. 8

Answer: C.

Explanation: Floppy disk drive controllers commonly use IRQ 6.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 565.

**Incorrect Answers:** 

- A. IRQ 0 is used by the system timer, not the FDD controller.
- B. IRQ 2 is not used by any system devices but is used to enable the use of extra IRQs.
- D. IRQ 8 is available for use by a device added to the system.

### **QUESTION 135**

What command would allow an administrator to add an existing user's phone number to the system as a comment?

- A. usermod -c 555-1234 bsmith
- B. modinfo -u bsmith 555.1234
- C. useradd -u bsmith -c 555-1234

D. echo bsmith:x:502:555-1234:/home/chris:/bin/bash>/etc/passwd

Answer: A.

Explanation: The usermod command is used to modify a user's settings. The -c option allows you to add a comment. The comment should be followed by the username of the account that you are modifying.

Reference: http://www.oreillynet.com/linux/cmd/u/usermod.html

**Incorrect Answers:** 

- B. Modinfo is the wrong command to modify a user account.
- C. Useradd is the wrong command to modify a user account.
- D. Echo is the wrong command to modify a user account.

## **QUESTION** 136

A group of users would like accounts created for them. They want to access a particular application on the server. The group requires sharing the files created using the application. What method would be used to accomplish these goals?

- A. As root, edit the /etc/group file and include all the users to the 'users' group.
- B. As root, run the adduser command to create the shared group, then adduser to create the user accounts.
- C. As root, run the adduser command to create the users' accounts, then edit the /etc/passwd file to change each users GID.
- D. As root, run the groupadd command to create the shared group, and then use the adduser command to create the user accounts.

Answer: D.

Explanation: The best way to enable users to share files is to put the users into a shared group. The group must be created before the user accounts.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 270.

**Incorrect Answers:** 

- A. The users that require access to the files should be placed into a separate group, not the 'users' group.
- B. You need to run the groupadd command to create a group.
- C. You need to create a shared group before you can add the users to it.

#### **OUESTION** 137

On a Linux system, where is the compiled kernel typically located?

- A. /bin
- B. /dev
- C. /boot
- D. /root

Answer: A.

Explanation: The /bin directory typically contains the binary files used by the system. This includes the kernel

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 169.

Incorrect Answers:

- B. The kernel is not typically located in the /dev directory.
- C. The kernel is not typically located in the /boot directory.
- D. The kernel is not typically located in the /root directory.

### **OUESTION 138**

Which of the following is the most dangerous command to run as root at the root prompt?

A. df\*

B. fsck

C. rm-rf\*

D. unmount -a

Answer: C.

Explanation: The rm command is used to delete files or directory. The -rf options make the command recursive and forceful. This means that the contents of any subdirectories will be deleted without giving any confirmation messages. This command when run from the root prompt will effectively delete every file on the system.

Reference: http://www.oreillynet.com/linux/cmd/r/rm.html

**Incorrect Answers:** 

- A. The df command reports the amount of free disk space. This is not dangerous.
- B. The fsck command checks the file system for errors. This is not dangerous.
- D. The unmount command unmounts a disk drive or remote share. This is not dangerous.

## **QUESTION** 139

What command in vi quits without saving changes?

A.:ZZ

B. :q!

C.:QQ

D. Esc-q

Answer: B.

Explanation: To exit Vi without saving your changes, you would use the :q! command.

Reference: http://www.bris.ac.uk/is/selfhelp/documentation/vi-r2/vi-r2.htm

**Incorrect Answers:** 

A. This is the incorrect command to exit Vi.

- C. This is the incorrect command to exit Vi.
- D. This is the incorrect command to exit Vi.

### **QUESTION** 140

A user has just completed an important document, and wishes to save it to his diskette drive and remove the disk. How should the user unmount the diskette that is mounted on /floppy to ensure that the data is saved on the disk?

- A. umount /floppy
- B. mount -u /floppy
- C. unmount /dev/floppy,
- D. Simply eject the disk and the system will unmount the disk.

Answer: A.

Explanation: Care should be taken when ejecting floppy disks because Linux caches access to them. To save the cached data to disk, you must use the umount command followed by the device name or mount point.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 469-470.

**Incorrect Answers:** 

- B. Mount is the wrong command.
- C. /dev/floppy is the wrong mount point. The question states that the floppy is mounted as /floppy.
- D. If you eject the disk without unmounting it, you will lose the cached data.

## **QUESTION** 141

Which of the following commands can be used to generate a list of all errors recorded during the month of March?

- A. grep
- B. find
- C. more
- D. syslogd

Answer: A.

Explanation: Grep is a very useful tool for searching the contents of files based on various search criteria. For example, you could return every line of text that contains the word 'March'.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 433.

**Incorrect Answers:** 

- B. Find is used to find files, not search the contents of files.
- C. More is used to find files, and display them one screen at a time.
- D. Syslogd is used to generate TCP/IP error messages and write them to a file as specified in the syslog.conf file.

## **QUESTION** 142

The recommended minimum size of the swap partition is \_\_\_\_\_ MB?

Answer: 16.

Explanation: The swap partition should ideally be twice the amount of physical RAM, although a

minimum of 16 MB is recommended.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 13.

### **QUESTION** 143

The maximum size of the swap partition is \_\_\_\_\_ MB?

Answer: 128 (?)

Explanation: The maximum size of a Linux swap partition is 128MB, although Linux supports up to

16 swap partitions.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 17.

Comment, possible incorrect answer: in the kernel archive, the limit is 8 files of 2 gig for an

maximum of 32 gig for the 2.4 and 2.6 kernel. [Andrew Morton] (the linuxhacker)

http://www.ussg.iu.edu/hypermail/linux/kernel/0306.0/1685.html

### **QUESTION** 144

You have a computer with Windows 95 installed and want to install Linux on it. However, there is no free space available. How could you manage to install Linux on this computer with the least amount of effort?

- A. Use fips to resize the partition containing the Windows 95.
- B. Repartition the hard drive; reinstall Windows 95.
- C. You cannot run Windows 95 and Linux on the same computer.
- D. Create a directory under Windows 95 and install Linux in that directory.

Answer: A.

Explanation: FIPS is a partition resizing tool. It can reduce the size of the Windows 95 partition

without losing any data, thus freeing up enough space to create a Linux partition.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 43.

Incorrect Answers:

- B. It is not necessary to reinstall Windows 95.
- C. You can run Windows 95 and Linux on the same computer.
- D. You cannot install Linux into a subdirectory in Windows 95.

### **QUESTION 145**

You are partitioning your second SCSI hard drive. What command should you use?

- A. fdisk sda2
- B. fdisk sdb
- C. fdisk hdb
- D. fdisk hda2

Answer: B.

Explanation: SCSI hard drives use the sd<letter> notation with the first drive being letter a (sda) and

the second drive being letter b (sdb).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 463.

**Incorrect Answers:** 

- A. SCSI hard drives use letters, not numbers.
- C. SCSI hard drives use sd not hd.
- D. SCSI hard drives use sd not hd.

### **OUESTION** 146

While using fdisk what command would you use to see the partition table?

A. w

B. m

C. a

D. p

Answer: D.

Explanation: The p option used with fdisk is used to display the partition table.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 457.

**Incorrect Answers:** 

- A. The w option is used to write the changes, not display the partition table.
- B. The moption is used to display the main menu, not the partition table.
- C. The a option is used to toggle a bootable flag on a partition, not display the partition table.

### **OUESTION** 147

What type would you set on a partition to make it a swap partition?

A. 0x82

B. 0x83

C. s

D. swap

Answer: A.

Explanation: Swap partitions use the type code 0x82.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 541.

Incorrect Answers:

- B. 0x83 is the type code for a file system partition.
- C. S is not a partition type code.
- D. Swap is not a partition type code.

# **QUESTION** 148

You have a new, empty hard drive that you will use for Linux. What is the first step you use?

- A. Create an extended partition to be used for the data.
- B. Format the hard drive to use the ext2 filesystem.
- C. Create a swap partition of type 82.
- D. Create a primary partition using fdisk.

Answer: D.

Explanation: The first step to installing Linux on a new hard disk is to create a primary partition. (This can also be done as part of the installation process).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 457.

Incorrect Answers:

- A. Linux needs a primary partition to boot from, not an extended partition.
- B. You need to create a partition before you can format it.
- C. Linux needs a primary partition to boot from, not a swap partition.

## **OUESTION** 149

You have created a primary partition, a swap partition and an extended partition.

You can format the primary partition but when you try to format the extended partition it fails.

What is the problem?

- A. You should have created another primary partition instead of an extended partition.
- B. Your syntax is wrong for the format command when attempting to format the extended partition.
- C. You cannot format an extended partition.
- D. You have to use the fdformat command to format extended partitions.

Answer: C.

Explanation: The purpose of an extended partition is to house logical partitions. For this reason, you cannot format an extended partition (you must create a logical partition first).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 458.

**Incorrect Answers:** 

- A. You don't need to create two primary partitions.
- B. You successfully formatted the primary partition, so the syntax is likely to be correct.
- D. There is no special command to format extended partitions.

#### **OUESTION** 150

When you create a new partition, you need to designate its size by defining the starting and ending

Answer: cylinders.

Explanation: When creating a new partition, you are prompted to enter the starting and ending cylinders (although you can specify a size in bytes, kilobytes, megabytes or gigabytes).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 459.

### **QUESTION** 151

In order to apply a filesystem to your new partitions you must format them. What command would you use to create the ext2 filesystem?

Answer: mkfs.

Explanation: The command used to format a partition (which creates a file system) is mkfs (make file

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 459.

### **OUESTION** 152

When formatting your partition with the mkfs command, you can also pass to the command the type of filesystem and the number of \_\_\_\_\_?

Answer: blocks.

Explanation: When formatting a partition with the mkfs command, you can specify the number of blocks although this isn't necessary because mkfs can calculate this based on the size of the partition. Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 459.

### **OUESTION** 153

You have new documentation that you wish to install so that it will be available to your users. Which directory would be the most appropriate to use for these files?

- A. /tmp
- B. /usr
- C. /lib
- D. /mnt

Answer: B.

Explanation: Most documentation including man pages is kept in the /usr directory.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 469.

Incorrect Answers:

- A. /tmp is not the usual location for documentation.
- C. /lib is not the usual location for documentation.
- D. /mnt is not the usual location for documentation.

## **QUESTION** 154

Each inode contains extensive information on a file. Which of the following is not contained in the

inode?

- A. File size.
- B. Filename.
- C. File's owner.
- D. Number of links to the file.

Answer: B.

Explanation: An inode contains the type (for example, plain file, directory, symbolic link, or device file) of the file; its owner, group, and public access permissions; the owner and group ID numbers; its size in bytes; the number of links (directory references) to the file; and the times of last access and last modification to the file. However, an inode does not contain the name of the file.

Reference: http://perl.plover.com/yak/ext2fs/slide019.html

Incorrect Answers:

- A. An inode does contain the file size.
- C. An inode does contain the file's owner.
- D. An inode does contain the number of links to a file.

## **OUESTION** 155

When you issue the command ls -1, the first character of the resulting display represents the file's

Answer: type.

Explanation: The first character displayed in the output of the ls -l command represents the file's type.

For example, d represents a directory.

Reference: http://www.firstlinux.com/articles/cards/permissions.shtml

#### **OUESTION** 156

In order to run fsck on the root partition, the root partition must be mounted as \_\_\_\_\_.

Answer: read only.

Explanation: Fsck must only be run on unmounted or read only partitions. This is because any changes to the file system during normal read/write operations can confuse fsck and cause file system corruption.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 462.

#### **QUESTION** 157

You cannot mount /dev/hdb1 and suspect that the superblock is bad. How do you fix this?

- A. Use the mkfs command.
- B. Use the fsck command with the -f option.
- C. Use the e2fsck to replace the superblock with a copy saved to another location on your disk.

D. Restore the superblock from your tape backup.

Answer: C.

Explanation: The e2fsck utility can be used to replace the superblock with a copy saved to another

location on the disk.

Reference: http://www.mandrakeuser.org/docs/admin/arecov3.html

**Incorrect Answers:** 

- A. The mkfs command will format the disk causing data loss.
- B. Fsck cannot be used to restore the superblock.
- D. You cannot restore the superblock from a tape backup because you cannot mount the drive.

# **QUESTION** 158

Why should you track the amount of free space on your disk?

- A. If there is no free space, you will not be able to write to that filesystem.
- B. If there is no free space, you will not be able to install new applications.
- C. If the amount of free space becomes less then 50 percent, then your system will slow down.
- D. If the amount of free space is too low, you system will not boot.

Answer: A.

Explanation: If there is no free space on a disk, you will not be able to write to that disk.

**Incorrect Answers:** 

- B. You will not be able to install new applications, but that is less of a problem than not being able to write to the disk.
- C. Disk space of less than 50% will not slow the system down.
- D. Low disk space will not prevent the system booting.

#### **OUESTION** 159

You want to know how much space is being occupied by your user's home directories. Which of the following will provide you with this information?

A. du -l/home

B. du -b /home

C. du -m /home

D. du -c /home

Answer: D.

Explanation: The du (disk usage) command with the -c option will display the total used space in the specified directory.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 477.

Incorrect Answers:

- A. The -l option is used to count the size of all files, whether or not they have already appeared (i.e., via a hard link).
- B. The -b option is used to display the size in bytes of all the files in the specified directory.
- C. The -m option is used to display the size in megabytes of all the files in the specified directory.

## **QUESTION** 160

You also need to know the amount of free space on the partition containing the user's home directories. Which of the following commands will provide this information?

- A. df /home
- B. df -i /home
- C. df --sync
- D. df-T

Answer: A.

Explanation: The df (disk free) command is used to display the free space in the specified partition or directory.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 471.

**Incorrect Answers:** 

- B. The -i option is used to display information about the inodes, not the free space.
- C. You need to specify the /home directory. Also, the -sync option is incorrect.
- D. You need to specify the /home directory. Also, the -T option is incorrect.

## **QUESTION** 161

You notice that the amount of free space is getting low. When you check the contents of the /tmp directory, you find several hundred files so you delete them. After deleting these temp files, you check the amount of free space, however, it has not increased. What should you do?

- A. Move the /tmp directory to another partition.
- B. Delete the partition containing the /tmp directory, recreate it and restore its contents.
- C. Delete the /tmp directory and recreate it.
- D. Run fsck on the filesystem containing the /tmp directory.

Answer: C.

Explanation: The easiest way to fix this is to delete and recreate the /tmp directory (it's easy because the directory is empty).

**Incorrect Answers:** 

- A. It is not necessary to move the /tmp directory to another partition.
- B. There are no contents to restore as they have been deleted.
- D. Fsck is time consuming and hence unnecessary.

## **QUESTION** 162

You have the /var directory on its own partition. You have run out of space. What should you do?

- A. Reconfigure your system to not write to the log files.
- B. Use fips to enlarge the partition.
- C. Delete all the log files.
- D. Delete the partition and recreate it with a larger size.

Answer: B.

Explanation: FIPS is a partition resizing tool. It can reduce or enlarge a partition without losing data.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 43.

Incorrect Answers:

- A. You should not prevent the system writing log files.
- C. You should not delete all the log files.
- D. It is unnecessary to delete the partition, which would require restoring the data.

### **QUESTION** 163

You can start Linux in many different ways. Which of the following is not one of these?

- A. Type linux from a DOS prompt under Windows 95.
- B. Using a boot loader such as LILO.
- C. From a floppy disk.
- D. Type linux at the boot: prompt.

Answer: A.

Explanation: 'Linux' is not a DOS command and so cannot be used to start Linux.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 213/4.

**Incorrect Answers:** 

- B. You can boot Linux using a boot loader such as LILO.
- C. You can boot Linux with a Linux boot floppy disk.
- D. You can boot Linux by typing Linux at the Linux boot prompt.

### **OUESTION** 164

When the kernel is loading, it writes any messages to the file.

Answer: /var/log/boot.messages.

Explanation: When the kernel is loading, it writes any messages to the /var/log/boot.messages file.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 615.

#### **OUESTION** 165

What command can you use to see the boot messages?

A. dmesg

B. cat kernel.messages

C. logview

D. man logs

Answer: A.

Explanation: The dmesg utility displays all the boot messages that were displayed during system boot up.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 615.

Incorrect Answers:

- B. The boot messages are not stored in the kernel.messages file.
- C. Logview is the incorrect command to view the boot messages.
- D. Man logs would display the man files for a program named logs.

# **QUESTION** 166

After the kernel is loaded, it calls the \_\_\_\_\_ daemon which is responsible for creating new processes.

- A. inittab
- B. sys.conf
- C. init
- D. syslog

Answer: C.

Explanation: The init daemon (initd) is sometimes known as a "super server", because it is responsible for starting all the other services (processes).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 393.

**Incorrect Answers:** 

- A. Inittab is the configuration file for the init daemon.
- B. Sys.conf is not a daemon.
- D. Syslog is not a daemon.

# **QUESTION** 167

Each entry in the /etc/inittab file contains four fields the third of which is the Action field. What is the purpose of this field?

- A. Identifies the entry.
- B. Specifies the command to execute.
- C. Defines how to handle the entry.
- D. Defines which runlevels this line applies to.

Answer: C.

Explanation: The inittab file is the configuration file for the init daemon. The purpose of the action field is to tell the init daemon what to do with each process. The format of each entry in the inittab file

is ID: runlevel: action: process.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 399.

Incorrect Answers:

- A. The ID field identifies the entry.
- B. The process field specifies the command to execute.
- D. The runlevel field defines which runlevels this line applies to

#### **QUESTION** 168

Which file should you examine to determine the defined runlevels for your system?

Answer: /etc/inittab

Explanation: The inittab file is the configuration file for the init daemon. This file contains the defined

runlevels on a Linux system.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 399.

## **QUESTION** 169

How does single user mode differ from other runlevels?

A. Init does not read the /etc/inittab file.

- B. Users can only log into the system across the network.
- C. Network services are disabled.
- D. All processes are stopped and the root filesystem is mounted as read-only when in single user mode.

Answer: C.

Explanation: Single user mode (sometimes known as single user maintenance mode or runlevel 1) is used to carry out maintenance to a system. In this mode, network services are disabled and only the root user can log in.

Reference: http://www.redhat.com/docs/manuals/linux/RHL-7.3-Manual/custom-guide/s1-

rescuemode-booting-single.html

**Incorrect Answers:** 

- A. Init does read the inittab file.
- B. Users cannot log in to the system; only root can log in.
- D. Not all processes are stopped and the file system is not mounted in read only mode.

## **QUESTION** 170

What should you type to change the runlevel of your system?

- A. init [runlevel]
- B. halt [runlevel]
- C. /etc/inittab
- D. sys.init [runlevel]

Answer: A.

Explanation: The correct command to change the runlevel of a Linux system is 'init [runlevel]'.

Reference: http://www.oreillynet.com/linux/cmd/i/init.html

**Incorrect Answers:** 

B. Halt is the incorrect command.

C. /etc/inittab is not a command. It is a configuration file for the init daemon.

D. sys.init is not a command.

# **QUESTION** 171

Where are the startup scripts defined?

A. /etc/init.d

B. /etc/scripts

C. /etc/start

D. /etc/inittab

Answer: A.

Explanation: When a system starts up, the init daemon starts the scripts defined in the /etc/init.d folder according to the configuration in the inittab file.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 394.

**Incorrect Answers:** 

- B. This is the incorrect folder.
- C. This is the incorrect folder.
- D. Inittab is the configuration file for the init daemon.

#### **QUESTION** 172

Which of the following tasks is not controlled by one of the rc startup scripts?

- A. Backup user's directories.
- B. Run fsck.
- C. Mount files ystem.
- D. Load modules.

Answer: A.

Explanation: The init daemon runs the rc startup scripts to start various processes when the system boots. Backing up user directories is not controlled by one of these scripts.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 411-412.

**Incorrect Answers:** 

- B. There is a script to run fsck.
- C. There is a script to mount the file system.
- D. There is a script to load modules.

### **QUESTION** 173

Modules are pieces of kernel code that you can load or unload. What file do you use to pass parameters to a module?

- A. /etc/conf.mod
- B. /etc/modules
- C. /etc/inittab
- D. /etc/conf.modules

Answer: D.

Explanation: The /etc/conf.modules file is used to associate a module (driver) with hardware device.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 402.

**Incorrect Answers:** 

- A. /etc/conf.mod is not the name of the module configuration file.
- B. /etc/modules is not the name of the module configuration file.
- C. The /etc/inittab file is used by the init daemon.

## **QUESTION** 174

You have installed a new UPS (Uninterruptible Power Supply) and the powerd daemon. Which file should you use to define the steps to be taken in the case of a power failure?

- A. /etc/ups.conf
- B. /etc/inittab
- C. /etc/power.conf
- D. /etc/conf.ups

Answer: B.

Explanation: The init daemon is responsible for starting processes. The configuration file for the init daemon is /etc/inittab. This file should be edited to instruct the system to run the powerd daemon in the event of a power failure.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 399.

**Incorrect Answers:** 

- A. The /etc/inittab file, not the /etc/ups.conf file, is used to configure the init daemon which is used start the powerd daemon.
- C. The /etc/inittab file, not the /etc/power.conf file, is used to configure the init daemon which is used start the powerd daemon.
- D. The /etc/inittab file, not the /etc/conf.ups file, is used to configure the init daemon which is used start the powerd daemon.

#### **OUESTION 175**

You have made changes to the /etc/inittab after installing your UPS. How do you institute these configuration changes without having to reboot your computer or have your users log off?

- A. Issue the command source /etc/inittab.
- B. Change the runlevel to single user mode.
- C. Issue the init q command.
- D. The init daemon only reads its configurations file during boot.

Answer: C.

Explanation: The init q command is used to instruct the init daemon to reread the /etc/inittab file and carry out the instructions in the file.

Reference: http://www.oreillynet.com/linux/cmd/i/init.html

**Incorrect Answers:** 

- A. Source is the incorrect command.
- B. It is not necessary to change the runlevel.
- D. The init daemon can be instructed to read its configuration file at any time.

#### **OUESTION** 176

Which of the following statements is not true about LILO?

- A. It can be used on a floppy to boot Linux.
- B. It must replace the master boot record on your hard drive.
- C. It will work with other operating systems such as DOS and Windows.
- D. It can specify up to 16 different boot images.

Answer: B.

Explanation: The default location for the Linux boot loader is in the Master Boot Record (MBR), but this isn't a requirement. It can be located elsewhere.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 213.

Incorrect Answers:

- A. LILO can be used on a floppy disk to install Linux.
- C. LILO will work with other operating systems such as DOS and Windows.
- D. LILO can be used to specify up to 16 different boot images.

#### **QUESTION** 177

You boot your system using LILO. Although you have four different boot images on your system, you cannot remember what you named them and you do not want to boot your default image. What should you do?

- A. At the boot: prompt, press the Alt key.
- B. Hold the shift key down when booting until you get a prompt.
- C. At the boot: prompt, press the Tab key.
- D. You have to boot your default image and then look at the configuration file.

Answer: C.

Explanation: At the LILO boot prompt, you can use the tab key to toggle between the various boot

images on the system.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 374.

**Incorrect Answers:** 

- A. You need to press the tab key, not the Alt key.
- B. You don't need to hold the shift key down whilst booting.
- D. You can choose any installed boot image, you don't have to boot the default image.

## **QUESTION** 178

You have made changes to the LILO configuration file but you are not sure the changes will work. How can you test the new configuration without installing it?

A. LILO -t

B. LILO -c filename

C. LILO -s filename

D. LILO

Answer: A.

Explanation: The -t option used with LILO is used to test the LILO configuration file (/etc/lilo.conf).

Reference: http://www-ugrad.cs.colorado.edu/udp/admin/linux-howto.html

Incorrect Answers:

- B. You need the -t option to test the configuration, not the -c option.
- C. You need the -t option to test the configuration, not the -s option.
- D. The LILO command without any options will install LILO without testing the configuration file.

# **QUESTION** 179

What is the complete name of the default configuration file for LILO?

Answer: /etc/lilo.conf

Explanation: The LILO configuration file is /etc/lilo.conf.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 216.

### **QUESTION** 180

Part of your /etc/lilo.conf file is as follows:

boot=/dev/hda

map=/boot/map

install=/boot/boot.b

image=/boot/vmlinuz-2.0.36.0.7

label=linux

root=dev/dha1

You would like to start in a single user mode but you do not get a boot: prompt. What changes

should you make to the /etc/lilo.conf file to make a prompt appear every time you boot your system?

- A. Add a line containing prompt.
- B. Add a line containing a timeout.
- C. Add a line containing prompt=30.
- D. Change the label to boot: instead of linux.

Answer: A.

Explanation: To configure LILO to display a boot prompt, you need to add a line containing the word prompt to the lilo.conf file. You must then run the LILO command to activate the changes.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 216/7.

**Incorrect Answers:** 

- B. There is no timeout option for the lilo.conf file.
- C. The line should contain just prompt, not prompt=30.
- D. The label is just the displayed name of the operating system.

### **QUESTION** 181

You have changed /etc/lilo.conf to cause a boot: prompt to show, however, when you restart your computer you still do not have a prompt. What should you do?

- A. Rename your configuration file to /etc/lilo.conf.new.
- B. Install the configuration changes by issuing the command /sbin/lilo.
- C. Install the configuration changes by issuing the command /sbin/lilo -t.
- D. Install the configuration changes by issuing the command /sbin/lilo -u.

Answer: B.

Explanation: After making changes to the lilo.conf file, you must run the lilo command to activate the changes.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 218.

Incorrect Answers:

- A. You must not rename the configuration file.
- C. The -t option will test the configuration but not activate the changes.
- D. You need to run the lilo command without any options to activate the changes.

#### **OUESTION 182**

When booting your system after installing LILO you see LIL- and then nothing happens. What could be the problem?

- A. LILO loaded successfully but the kernel is corrupt.
- B. LILO is not installed properly.
- C. LILO could only complete the first stage, usually media failure.
- D. LILO could not load the map file, usually a geometry mismatch.

Answer: D.

Explanation: If you only see LIL- when booting the system, it means that LILO could not load the map file.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 634.

**Incorrect Answers:** 

- A. If LILO loaded successfully, you would see the word LILO during boot up.
- B. If LILO wasn't installed properly, you wouldn't see any part of the work LILO during boot up.
- C. If LILO could only complete the first stage, you would see the word LI during boot up.

### **OUESTION** 183

You are going to install a new hard disk in your system. Which of the following commands will halt your system so you can install the new hardware?

- A. shutdown -k now
- B. shutdown -h now
- C. shutdown -r now
- D. shutdown -t now

Answer: B.

Explanation: The shutdown -h command will shut down your system properly. The -h option issues the halt command as part of the shutdown process.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 420/1.

Incorrect Answers:

- A. The -k option would display a warning message, but would not actually shut down the system.
- C. The -r option would cause the system to restart.
- D. The -t option is used to delay the shutdown.

#### **OUESTION** 184

You have a technician who will come in after hours to install new hardware in your system. You do not want to give him the root password, but he needs to be able to shutdown the system. How can you accomplish this?

- A. You cannot do this, only root can run the shutdown command.
- B. Add his username to the /etc/shutdown.conf file.
- C. Add his username to the /etc/shutdown.allow file.
- D. Give him the root password and change it when you arrive the next morning.

Answer: C.

Explanation: The /etc/shutdown.allow file contains the names of the user accounts that are permitted to shutdown the system.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 420/1. Incorrect Answers:

- A. Any user listed in the shutdown.allow file can shutdown the system.
- B. Shutdown.conf is the wrong file.
- D. It is not necessary or desirable to give the technician the root password.

# **QUESTION** 185

You are going to reboot your system but want to warn your users to log off. Which of the following commands will send a message to the users?

- A. init
- B. halt
- C. reboot
- D. shutdown

Answer: D.

Explanation: When using the shutdown command, you can enter a message that will be displayed to users before the system shuts down.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 420/1.

**Incorrect Answers:** 

- A. The init command does not send a message to users.
- B. The halt command does not send a message to users.
- C. The reboot command does not send a message to users.

#### **OUESTION** 186

You want to review the man page on the files used to control host access, however, when you enter man hosts\_access you get the man page for routines used to programmatically manipulate access. What is the problem?

- A. The page you are looking for does not exist on your system.
- B. The page you are looking for resides in a directory that is searched later.
- C. You typed the name of the page incorrectly.
- D. The installation of man pages on your system is corrupt.

Answer: C.

Explanation: You typed the command incorrectly. The files used to control host access is hosts.allow, not hosts\_access. The correct command would be man hosts.allow.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 364.

**Incorrect Answers:** 

A. If a page didn't exist, you would get an error saying so. You wouldn't get a different page.

- B. If the directory was searched later, you would still get the correct page eventually.
- D. If the installation of the man pages is corrupt, you wouldn't receive any man pages.

## **QUESTION** 187

You want to find how to set the manpath variable so you type man man. What would you type while displaying the page to find the location where manpath is discussed?

- A. grep manpath
- B. find manpath
- C. /manpath
- D. locate manpath

Answer: C.

Explanation: To search for text within a man page, you would use the / command followed by the word you were looking for.

**Incorrect Answers:** 

- A. You could use the grep command, but you would have to come out of the man program to use it.
- B. Find is not a man program command. Furthermore, the find command cannot search for text. It is used for locating files.
- D. You could use the locate command, but you would have to come out of the man program to use it.

#### **QUESTION** 188

You wish to find the man page that discusses how to change a password. You type man password but you get the message that no manual entry for password exists.

Which command will find the appropriate page?

- A. man -C password
- B. man -k password
- C. man -c password
- D. man -q password

Answer: B.

Explanation: The man -k command is used to search the man pages for a specified string.

Reference: http://www.oreillynet.com/linux/cmd/a/apropos.html

Incorrect Answers:

- A. -C is the wrong option to search the man pages for a specified string.
- C. -c is the wrong option to search the man pages for a specified string.
- D. -q is the wrong option to search the man pages for a specified string.

# **QUESTION** 189

You have installed an additional set of man pages but in Spanish. You have one user who wishes to use the Spanish pages rather then English ones. What should you do to accomplish this?

- A. Edit the man.config file located in that user's home directory.
- B. Instruct the user in how to reset the MANPATH variable whenever he logs in.
- C. Edit the .profile file located in that user's home directory.
- D. You can only have one version of man pages installed on your system at a time.

Answer: C.

Explanation: The manpath variable can be set in the .profile file and is used to instruct the man program where to look for the man pages. You would need to edit this variable to point to the Spanish man pages.

Reference: http://www.uic.edu/depts/accc/hardware/borg/profile.html

**Incorrect Answers:** 

- A. You need to edit the .profile file, not the man.config file.
- B. It is unnecessary to reset the manpath variable every time the user logs in. You only need to set it once in the .profile file.
- D. You can have multiple versions of man pages installed on a system.

## **QUESTION** 190

You know that the info utility provides easier to understand documentation but you have never used it. How can you access a tutorial on using info?

A. man info

B. info

C. info info

D. info help

Answer: C.

Explanation: Info pages are easier to understand than the sometimes complex man pages. The info info command is used to access a tutorial on the info program.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 657.

**Incorrect Answers:** 

- A. Man info would display the man pages for the info program. Info info is used to access a tutorial on the info program.
- B. The info command would run the info program, but not display a tutorial about it.
- D. Info help would display documentation on the help command.

#### **QUESTION** 191

There is considerable documentation covering various tasks provided as HOWTOs. These documents are normally installed in which directory?

A. /etc/HOWTO

B. /usr/doc/HOWTO

C. /usr/HOWTO

D. /usr/lib/HOWTO

Answer: B.

Explanation: The default location for the HOWTO documents is /usr/doc/HOWTO.

Note: /usr/share/doc/HOWTO deserves attention.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 657.

Incorrect Answers:

- A. The HOWTO documents are not located in the /etc/HOWTO directory.
- C. The HOWTO documents are not located in the /usr/HOWTO directory.
- D. The HOWTO documents are not located in the /usr/lib/HOWTO directory.

# **QUESTION** 192

What does FAQ stand for?

Answer: frequently asked questions

Explanation: Frequently asked questions are often referred to as FAQs. Reference: Michael J. Tobler. New Riders, Inside Linux: Page 8.

#### **QUESTION** 193

When you install a new application, documentation on that application is also installed. Where would you look for the documentation after installing an application called MyApp?

- A. /usr/MyApp
- B. /lib/doc/MyApp
- C. /usr/doc/MyApp
- D. In the same directory where the application is installed.

Answer: C.

Explanation: The default location for application documentation is in the /usr/doc/<application name>

directory.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 657.

Incorrect Answers:

- A. Application documentation is located in the doc subdirectory of the /usr directory.
- B. Application documentation is not located in the /lib/doc directory.
- D. Application documentation is not located in the same directory where the application is installed.

## **QUESTION** 194

You need to update your HOWTOs. Where should you go to acquire the latest version?

A. Linux Mall and order a new CD.

- B. Your local Linux User Group should have a copy.
- C. The web site for your distribution.
- D. Linux Documentation Project.

Answer: D.

Explanation: The Linux Documentation Project has all the latest HOWTOs. They can be found at

www.tldp.org.

Reference: http://www.tldp.org/

Incorrect Answers:

- A. You don't need to order a CD. The HOWTOs can be downloaded from the Linux Documentation Project website.
- B. Your local Linux User Group may have a copy or they may not.
- C. The website for your distribution will have HOWTOs relating to your distribution but not all the applications that you may have installed.

## **QUESTION** 195

You have a problem installing an older CD-ROM drive on one of your Linux servers. You have checked the HOWTOs and FAQs but have not found your answer.

Where could you go to search the newsgroups to look for a solution?

- A. http://www.deja.com
- B. http://www.news.com
- C. http://www.linux-help.com
- D. http://www.lug.com

Answer: A.

Explanation: www.deja.com is the Google search engine specifically designed to search for news groups.

Reference: http://www.deja.com

Incorrect Answers:

- B. You would not search for news groups at this site.
- C. You would not search for news groups at this site.
- D. You would not search for news groups at this site.

#### **OUESTION** 196

The whereis command is helpful in finding the location of a command as well as its related man page. What is the disadvantage of using it?

- A. Since it searched the entire directory tree, the whereis command can take an excessive amount of time.
- B. The whereis command will not find source files located on your system.
- C. You have to update the whereis database in order to keep it current.
- D. The whereis command only searches known directories that are hard coded into the command.

Answer: D.

Explanation: The whereis command searches for files in a restricted set of directories such as standard

binary file directories, library directories and man page directories.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 652.

**Incorrect Answers:** 

- A. The whereis command does not search the entire directory tree.
- B. You wouldn't use the whereis command to look for source files.
- C. There is no whereis database to update.

### **QUESTION** 197

You suspect that you have two commands with the same name as the command is not producing the expected results. What command would you use to determine the location of the command being run?

Answer: which.

Explanation: The which command is used to display the full path to the program that would be run if a

specified command was issued.

Reference: http://www.oreillynet.com/linux/cmd/w/which.html

#### **QUESTION** 198

You locate a command in the /bin directory but do not know what it does. What command can you use to determine its purpose.

Answer: whatis.

Explanation: The whatis command searches a database of short man pages to determine the purpose of

a command.

Reference: http://www.oreillynet.com/linux/cmd/w/whatis.html

#### **OUESTION** 199

What command must you run to update the database used by the whatis command?

- A. makewhatis
- B. updatedb
- C. make whatisdb
- D. The database is updated automatically.

Answer: A.

Explanation: The makewhatis command is used to update the whatis database.

Reference: http://www.tac.eu.org/cgi-bin/man-cgi?makewhatis+8

Incorrect Answers:

- B. Updatedb is the wrong command to update the whatis database.
- C. Make whatisdb is the wrong command to update the whatis database.
- D. The database is not updated automatically.

### **QUESTION** 200

What does the apropos command do?

- A. It is the same as the man -f command.
- B. It is the same as the man -K command.
- C. It searches the short descriptions from the man pages.
- D. It uses the locatedb database to answer your query.

Answer: C.

Explanation: The apropos command is similar to the whatis command in that is searches the short descriptions from the man pages for a specified string. Whatis only searches for a single word.

Reference: http://www.oreillynet.com/linux/cmd/a/apropos.html

Incorrect Answers:

- A. It is not the same as the man -f command.
- B. It is the same as the man -k command, not the man -K command (note the capital K).
- D. It uses the whatis database, not the located database.

#### **QUESTION 201**

Which of the following items would not be important for you to record in your system documentation?

- A. Any kernel patches you might apply.
- B. Applications that are installed.
- C. When did each user log on last?
- D. What problems with the system you have had.

Answer: C.

Explanation: Documentation is an important part of any system administrator's job. However, the last time each user logged on is not important and does not need to be documented.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 438.

**Incorrect Answers:** 

- A. Any kernel patches should be documented.
- B. Any installed applications should be documented.
- D. Any system problems should be documented.

#### **QUESTION** 202

Which of the following would improve your ability to provide user support?

- A. Create a directory containing instructions for using all installed applications.
- B. Email your user's your office hours.
- C. Whenever a user has a problem, fix it and leave.
- D. Use as much technical language as possible when explaining what went wrong.

Answer: A.

Explanation: A directory containing instructions for using all installed applications would make a system administrator's job much easier.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 438.

Incorrect Answers:

- B. It would be helpful for your users to know your working hours, but this is not as helpful as application documentation.
- C. You wouldn't leave after every problem you fixed.
- D. Using as much technical language as possible when explaining what went wrong would confuse the user and would gain nothing.

### **QUESTION** 203

Which of the following commands will make your home directory your working directory?

A. cd

B. cd home

C. cd..

D. cd home/username

Answer: A.

Explanation: When the cd command is used without specifying a directory, you will by default be taken to your home directory.

Reference: Michael J. Tobler. New Riders, Inside Linux: Page 55.

Incorrect Answers:

- B. Cd home would take you to a subdirectory of your current directory named home.
- C. The cd.. command would take you up one level in the directory tree.
- D. The cd home/username command would not take you to your home directory.

#### **OUESTION 204**

Which of the following commands will show a list of the files in your home directory including hidden files and the contents of all subdirectories?

A. ls -c home

B. ls -aR /home/username

C. ls -Af /home/username

D. ls -1 /home/username

Answer: B.

Explanation: The a option used with the ls command is used to display hidden files. The R option makes the search recursive meaning that any subdirectories will be searched.

Reference: http://www.oreillynet.com/linux/cmd/l/ls.html

Incorrect Answers:

- A. The -c option is used to list files by status change time.
- C. The -A option does not search the '.' directory.
- D. The -l command displays the files permissions. It does not display hidden files and it does not search subdirectories.

# **QUESTION** 205

What command should you type to see all the files with an extension of 'mem' listed in reverse alphabetical order in the /home/ben/memos directory.

Answer: ls -r /home/ben/memos/\*.mem

Explanation: The -r option displays the files in reverse order. The '\*' is a wildcard which means that any file that ends with .mem will be displayed.

Reference: http://www.oreillynet.com/linux/cmd/l/ls.html

#### **OUESTION** 206

You have three files in the /home/ben/memos directory called letters, tom, and betty. How could you determine each file's type by issuing only one command?

Answer: file letters tom betty

Explanation: The file command is used to display a files type. You can enter multiple filenames after the file command.

Reference: http://www.oreillynet.com/linux/cmd/f/file.html

#### **OUESTION** 207

Which of the following commands will combine the contents of the files tom and betty into a new file called friends?

- A. ls tom betty > friends
- B. cat tom betty > friend
- C. more tom betty > friends
- D. cat tom; cat betty > friends

Answer: B.

Explanation: You can use the redirection operator (>) with the cat command to combine multiple files into one file.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 654.

Incorrect Answers:

- A. You need the cat command, not the ls command.
- C. You need the cat command, not the more command.
- D. There is no semi-colon (;) between the filenames to be combined.

### **QUESTION** 208

Which of the following cannot be accomplished with the cat command?

- A. Create a new file.
- B. Display the contents of a file.
- C. Append information to another file.
- D. Change the contents of a file.

Answer: D.

Explanation: The cat command is typically used to display the contents of a file. It cannot be used to change the contents of a file (although it can add append data to a file).

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 654.

Incorrect Answers:

- A. You can create a new file with the cat <filename> command.
- B. The most common use of the cat command is to display the contents of a file.
- C. You can combine multiple files into one file or append information to a file with the cat command.

## **QUESTION 209**

Which of the following commands will display a file one screen at a time?

- A. less
- B. page
- C. tr
- D. cat

Answer: A.

Explanation: The less command will display the contents of a file one screen at a time.

Reference: http://www.oreillynet.com/linux/cmd/l/less.html

**Incorrect Answers:** 

- B. There is no page command.
- C. Tr is used to translate characters. It does not display the contents of a file one screen at a time.
- D. The cat command is used to display the contents of files but it will scroll down to the bottom of the file.

#### **OUESTION 210**

You are debugging a new application that is crashing. You want to watch the messages as they are being written to the log. What command should you use?

A. tail

- B. head
- C. less
- D. log

Answer: C.

Explanation: less is a program for paging through files or other output. Reference: http://www.oreillynet.com/linux/cmd/cmd.csp?path=l/less Incorrect Answers:

- A. The tail command is used to display the last ten lines of a specified file.
- B.The head command is used to print the first ten lines of a specified file.
- D. log is not a valid command.

# **QUESTION** 211

A customer needs a Linux server to act as a Microsoft Windows NT server. Which of the following must be installed for this server?

- A. Syslog daemon.
- B. Network file system daemon.
- C. Server message block daemon.
- D. File transfer protocol daemon.

Answer: C.

Explanation: Server Message Blocks (SMBs) are used by Windows clients for network communications. The Server Message Block daemon provides this service. Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 354. Incorrect Answers:

- A. The syslog daemon is used to log system messages.
- B. The Network File System daemon is used for communication between Linux computers.
- D. The File Transfer Protocol daemon is commonly used for transferring files across the internet.

## **QUESTION** 212

A user is having problems printing to the network printer. She has sent several jobs to the printer, but nothing is printing out. She wants to power cycle the printer, but does not want the extra jobs to print out when it comes back online. Which command would she use to accomplish this?

- A. lpc
- B. lpr
- C. lpd
- D. lprm

Answer: A.

Explanation: The 'lpc clean all <printername> command is used to remove files that cannot be printed from the specified printer queues. The 'lpc restart all <printername>' is used to restart the printer daemons on the specified printers.

Reference: http://www.oreillynet.com/linux/cmd/l/lpc.html

**Incorrect Answers** 

B: The lpr command is used to send print jobs to a print queue.

C: Lpd is the line printer daemon. It accepts print jobs submitted by the lpr command.

D: The lprm command is used to remove specific print jobs from print queues. The print jobs must be specified by job number which can be obtained using the lpq command.

#### **QUESTION** 213

Which command enables a user to make a newly created shell script executable?

A. /<filename>

B. chown +x < filename >

C. chmod +x <filename>

D. /configure <filename>

Answer: C.

Explanation: To make a script executable, you need to add the execute permission to the file. The chmod command is used to change the access mode (permission) of the file. The +x option keeps the existing permissions and adds the execute permission.

Reference: http://www.oreillynet.com/linux/cmd/c/chmod.html

**Incorrect Answers** 

A: /<filename> is not the correct command.

B: The chown command is used to change the owner of a file, not to make it executable.

D: /configure <filename> is not the correct command.

# **QUESTION** 214

An administrator logged in as a standard user needs to kill process 1010 that was started by the root user.

Which of the following commands will kill the process?

A. kill 1010

B. su "kill 1010"

C. killall -9 1010

D. cu -c "kill 1010"

Answer: B.

Explanation: To kill a process, you must be the root user or the user who started the process. The su (switch user) command is used to start a shell with a different username. If no username is specified with the su command, the root user account is assumed. Su "kill 1010" will run the kill command under the root account. When entering this command, you will be prompted for the password of the root account.

Reference: http://www.oreillynet.com/linux/cmd/s/su.html

**Incorrect Answers** 

A: The process was started by the root user. Therefore, only the root user can kill the process.

C: The process was started by the root user. Therefore, only the root user can kill the process

D: Cu is not the correct command.

#### **OUESTION 215**

The administrator for a Linux server needs to update the system and downloads the required patch. The filename is "update.tar.gz". Which of the following commands would be the best way to uncompress this file?

A. gzip -p update.tar.gz

B. tar -xzf update.tar.gz

C. gunzip -update.tar.gz

D. untar -xzf update.tar.gz

Answer: B.

Explanation: A file with the tar.gz extension has been processed by two programs. The tar utility is used to 'tar' multiple files into one archive and the gzip utility is used to compress the files. To uncompress the file, you should use the tar command. The x option is used to extract the files. The z option is used to invoke gzip to uncompress the files and the f <filename> option is used to specify the filename.

Reference: http://www.oreillynet.com/linux/cmd/t/tar.html

**Incorrect Answers** 

A: The file was created with the tar utility which called the gzip utility to compress the files. Therefore, you should use the tar command to uncompress the files.

C: The file was created with the tar utility which called the gzip utility to compress the files. Therefore, you should use the tar command to uncompress the files.

D: Untar is not the correct command.

#### **QUESTION** 216

How could an administrator switch to single-user mode without rebooting the system?

A. init 0

B. init 1

C. cd /single

D. su -single

Answer: B.

Explanation: Single user mode is known as runlevel 1. You can change the runlevel by issuing the 'init <runlevel> command (in this case 'init 1').

Reference: http://www.oreillynet.com/linux/cmd/i/init.html

**Incorrect Answers** 

A: Init 0 will change the system to runlevel 0. Runlevel 0 is used to halt the system.

C: Cd /single will change to a directory named /single.

D: Su -single will attempt to switch to a user named single.

### **QUESTION** 217

An administrator needs to append the list of files in the /tmp directory to the existing file "DoNotCreateBackup". What command would accomplish this goal?

A. ls /tmp || DoNotCreateBackup

B. ls /tmp && DoNotCreateBackup

C. ls /tmp >> DoNotCreateBackup

D. ls /tmp :: DoNotCreateBackup

Answer: C.

Explanation: The >> symbols represent a command redirector. ">>" will take the output of the ls /tmp command and instead of displaying it on screen, it will append it to a file (in this case, a file named DoNotCreateBackup).

Reference: http://www.netti.hu/doc/LinuxShellScript/rpf.htm

**Incorrect Answers** 

A: || is not a valid command redirector.B: && is not a valid command redirector.D: :: is not a valid command redirector.

#### **QUESTION** 218

The following is the output from a ps command:

PID TTY TIME **CMD** 1054 00:00:00 pts/1 bash 6894 pts/1 00:00:00 nmap 7123 00:00:00 pts/1 ps

The nmap process has been taking up too much processing power. What command can be used to run nmap with less resources?

A. bg nmap

B. stop | back 6894

C. CTRL-Q, bk nmap:6894

D. Kill 6894: nice -n19 nmap <arguments>

Answer: D.

Explanation: The Kill command is used to kill the process. The nice command is used to run a process with a lower priority. The default 'niceness' is 10. The -n19 option will lower the priority of the process. When using the nice command, the lowest priority is 19 and the highest is 1.

Reference: http://www.oreillynet.com/linux/cmd/n/nice.html

**Incorrect Answers** 

A: The bg command is used to run a process in the background. However, it doesn't lower the priority of the process.

B: Stop | back is not the correct command.

C: CTRL-Q, bk is not the correct command. (CTRL-Q is often used to turn all output stopped on screen back on).

#### **OUESTION** 219

The system administrator wants to connect to his servers remotely to create a new user. Which of the following commands can be used?

A. ftp

B. ping

C. telnet

D. traceroute

Answer: C.

Explanation: Telnet is used to access remote systems. Telnet is the user interface that communicates with another host using the Telnet protocol. Commands entered into a telnet console are executed on the remote system.

Reference: http://www.oreillynet.com/linux/cmd/t/telnet.html

**Incorrect Answers** 

A: FTP is used to transfer files using the FTP (File Transfer Protocol).

B: Ping is used to test IP connectivity.

D: Traceroute is another utility used to test IP connectivity by tracing the route to a remote host.

# **QUESTION** 220

The current working directory is /var/spool/Tom/ip. What does the command "cd~" do?

- A. Returns the user to the root directory.
- B. Returns the user to their home directory.
- C. Keeps the user in their current directory.
- D. Returns the user to the parent directory of "ip".

Answer: B.

Explanation: The 'cd~' command is the same as the 'cd' command in that it will return you to your home directory. Your home directory is the default directory you are taken to when you log in, which is why your home directory is sometimes known as your login directory.

Reference: http://www.redhat.com/docs/manuals/linux/RHL-7.3-Manual/getting-started-guide/s1-navigating-cd.html

**Incorrect Answers** 

A: To go to the root directory, you would have to enter the command: cd /.

C: The cd command is used to 'change directory'. It does not keep you in the current directory.

D: To go to the parent directory of the ip directory (in other words, to go up one level), you would enter the command: cd.. or cd /var/spool/Tom.

### **QUESTION 221**

Which Linux file shows which users have access to which groups?

A. /usr/group

B. /usr/users

C. /etc/group

D. /etc/users

Answer: C.

Explanation: The /etc/group file contains a list of all the groups and the members of each group.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 243.

**Incorrect Answers** 

A: The group file is in the /etc directory, not the /usr directory.

B: /usr/users does not contain group information.

D: /etc/users does not contain group information.

## **QUESTION 222**

Why would setting up separate file systems for /home and /var be appropriate?

- A. Administrators can separate user files from business files.
- B. The system is not subject to failure from log file or user quota overruns.
- C. Guests accounts included in /var are separated from user accounts kept in /home.
- D. Users can access /home for their personal applications and /var can store old applications.

Answer: A.

Explanation: The /var directory contains 'variable' system data such as log files. It is a good idea to keep this data separate from the users' personal data stored in their home directories.

Reference: http://www.mandrakeuser.org/docs/basics/bfiles2.html

**Incorrect Answers** 

- B: Quota overruns would not cause a system failure.
- C: There are no guest accounts in the /var directory.
- D: /var is not used to store old applications.

# **QUESTION** 223

A customer has installed a new IDE hard drive in a Linux system. The drive has been partitioned and formatted with the ext2 file system. She is complaining that the new drive must be mounted manually every time the computer is booted. What needs to be done?

- A. Use a utility to edit fstab.
- B. Add the proper drive module to the kernel.
- C. Add the drive information to the /dev directory.
- D. Change the runlevel to reflect the number of partitions in the system.

Answer: A.

Explanation: The fstab file contains information about the filesystems. This information includes who can mount the filesystems and whether the filesystem should be mounted automatically at system bootup.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 400/1.

**Incorrect Answers** 

B: No drive module needs to be added to the kernel as the filesystem can be mounted manually.

C: The drive information must already be in the /dev directory as the filesystem can be mounted manually.

D: It is not necessary to change the runlevel.

# **QUESTION** 224

A technician discovers that the route command is being used incorrectly. Which of the following resources is the quickest means of finding examples of correct usage?

- A. Search the distribution documentation CD.
- B. View the HOWTO pages on the Web browser.
- C. Use the built-in help pages by typing "help route".
- D. Use the built-in manual pages by typing "man route".

Answer: D.

Explanation: Every system has manual pages installed by default. The manual pages contain information about various commands including the syntax and the correct usage for each command. You can access the manual pages using the 'man' command. To display information about the route command, you would type 'man route'.

Reference: http://www.oreillynet.com/linux/cmd/m/man.html

**Incorrect Answers** 

A: Searching the distribution documentation CD (if there is one) would be a long way of doing it.

B: The HOWTO pages are very useful. However, using the man pages is quicker.

C: The 'help' pages are known as manual pages and can be accessed using the 'man' command, not the help command.

#### **OUESTION 225**

A user wants to have a custom software daemon run each time the system starts. Where could this be configured?

A. rc.local

B. ~/.bashrc

C. inetd.conf

D. /etc/profile

Answer: A.

Explanation: Rc.local is a startup script that can be configured to start processes or daemons when the system boots up. The rc.local file exists in the /etc directory or a script subdirectory such as /etc/rc.d.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 394.

Incorrect Answers

B: The bashrc file is used to set environment variables for the BASH shell. It is not used to start daemons.

C: Inetd.conf is used to configure the inet daemon. Inetd starts server processes when they are requested. Inetd could be used to start the custom daemon, but it won't start the daemon until it receives a request for it. For this reason, it is better to use the rc.local file.

D: The /etc/profile file is used to set defaults for environment variables. It is not used to start daemons.

## **QUESTION 226**

For which of the following reasons could the dd utility be used?

- A. To locate and access system log files.
- B. To create a bootable Linux system disk.
- C. To automate editing system configuration files.
- D. To automate access to system hardware information.

Answer: D.

Explanation: The 'dd' utility is used to take input from an input file (IF) and output to an output file (OF). You could use this to read information about hardware by taking input from the hardware configuration files and output this information to a single file.

Reference: http://www.oreillynet.com/linux/cmd/d/dd.html

**Incorrect Answers** 

- A: The dd utility cannot be used to locate system log files.
- B: The dd utility cannot be used to create a Linux system disk.

C: Editing system configuration files cannot be automated because the configuration information would be different each time, and therefore should be manually entered into the files.

# **QUESTION 227**

At boot time, the computer reported that there are problems with inodes and blocks. What is the problem, and how is it corrected?

- A. The boot sector is corrupt and needs to be replaced.
- B. The file system has become corrupt and needs to be repaired.
- C. The partition table has become corrupt and needs to be repaired.
- D. The drive is configured using an improper file system and needs to be reformatted.

Answer: B.

Explanation: If you get errors about inodes and blocks during system boot up, the most likely problem is that you have a corrupted file system. This can be caused by improperly shutting down the machine. You should use a disk repair utility such as fsck to attempt to recover the filesystem.

Reference: http://theory.uwinnipeg.ca/faqs/section4.html

Incorrect Answers

A: If the boot sector was corrupt, the boot loader would not be able to run. Therefore, you would not

get errors related to a corrupted filesystem because the filesystem hasn't been read yet.

C: If the partition table had become corrupt, the system would not be able to find the partitions. This would not result in inode or block error messages.

## **QUESTION 228**

A user is attempting to login to a Linux machine but her password keeps getting rejected. Which of the following actions should be done first to try to solve the problem?

- A. Reboot the machine.
- B. Replace the keyboard.
- C. Check to see if root can login.
- D. Check to see if <Caps Lock> is on.

Answer: D.

Explanation: Passwords are case sensitive. The most common cause of logon failure due to a rejected password is the keyboard Caps Lock being on.

**Incorrect Answers** 

- A: Restarting the machine won't affect someone's ability to log on if their password is wrong.
- B: It is possible that the keyboard is faulty, but it is more likely that the Caps Lock is on.
- C: You would check to see if root can log in if you were sure you're password is correct and the Caps Lock is off.

#### **QUESTION** 229

A customer wants to determine which TCP ports are in use on his Linux server. Which of the following commands should be used?

- A. tftp
- B. lsport
- C. minicom
- D. netstat

Answer: D.

Explanation: Netstat is a TCP/IP command used to show the network status. For all active sockets, it will print the protocol, the number of bytes waiting to be received, the number of bytes to be sent, the port number, the remote address and port, and the state of the socket. The -t option with Netstat is used to display just the TCP ports.

Reference: http://www.oreillynet.com/linux/cmd/n/netstat.html

Incorrect Answers

- A: TFTP (Trivial File Transfer Protocol) is used to transfer files, not to display TCP port information.
- B: Lsport is used to list printer ports, not TCP ports.
- C: Minicom is a utility used for connection modem dial up connections.

# **QUESTION 230**

An operator is concerned that errors occurred during the last tape backup. Which of the following

is the LEAST helpful in determining that a successful backup was performed?

- A. View the log file.
- B. Perform a test restore.
- C. Run a diagnostic of the tape drive.
- D. Inspect the tape media with appropriate utilities.

Answer: C.

Explanation: If you are concerned about possible errors during a backup operation, the first thing you should do it to check the log files. You should also test the backup by performing a test restore and inspect the tape media. If the tape media proves to be faulty or the restore fails, then you would know that the backup was unsuccessful.

Running a diagnostic of the tape drive is probably the least helpful of the answers given. The tape drive may pass the diagnostics, but that wouldn't guarantee that the backup was successful. If the tape drive failed the diagnostics, it still doesn't necessarily mean that the backup was unsuccessful.

**Incorrect Answers** 

- A: Viewing the log file is the first thing you should do.
- B: Performing a test restore is a good way of testing a successful backup.
- D: Inspecting the tape media should be done as tapes do wear out after a while.

# **QUESTION 231**

A customer wants to identify all of the services that were initially loaded by his server upon boot and compare these with services that are currently running.

How should he look for this information?

- A. examine /boot and run "ps-ef".
- B. examine /var/log/dmesg and run "ps -e".
- C. examine /etc/init.d and run "whatis -x".
- D. examine /var/log/boot.log and run "ps -ax".

#### Answer:

Explanation: The /var/log/boot.log file will contain all the messages displayed at boot time (plus any other system messages). This will include the services being started at boot time. The ps -ax command will display all currently running processes.

Reference: http://www.oreillynet.com/linux/cmd/p/ps.html

**Incorrect Answers** 

A: /boot does not contain the messages displayed at boot time.

B: The dmesg utility can be used to display boot messages. However, to display the currently running processes, you need to use the ax options with the ps command.

C: Whatis is not used to display the currently running processes.

#### **QUESTION** 232

A user is trying to connect to a system via HTTP. How could an administrator verify that HTTP services are running after a default installation?

- A. Run "finger http".
- B. Run "restart httpd".
- C. Run "ps aux | grep http".
- D. View /var/messages to verify that the service started.

Answer: C.

Explanation: The ps aux command is used to list all currently running processes. The output of this command is then handed to the grep command using the pipe (|) redirector. The grep http command will take the output from the ps aux command and search it for any occurrences of 'http'. If any occurrences of http are found, then you know that http is running.

Reference: http://www.oreillynet.com/linux/cmd/p/ps.html

Incorrect Answers

A: The finger command is used to display information about users, not about processes.

B: The 'restart httpd' command incorrect. 'Httpd restart' would restart the httpd process, but it isn't used to tell you if the process is currently running.

D: /var/messages is the wrong file to verify that the service started. This information would be in /var/log/boot.log.

#### **OUESTION 233**

The administrator uses the rpm command to install a new software package but he gets the following error message:

cannot get exclusive lock on database

error:cannot open /var/lib/rpm/packages.rpm

What is the best way to solve the problem?

- A. Run "rpm -initdb".
- B. Run "rpm -rebuilddb".
- C. Copy the package to the directory /var/lib/rpm/.
- D. Check whether a second instance of rpm is already running.

Answer: D.

Explanation: The error stated in the question is usually caused by another instance of rpm already running. Killing the other rpm instance should solve the problem.

Reference: http://www.yolinux.com/TUTORIALS/LinuxTutorialSysAdmin.html#RPM Incorrect Answers

A: "rpm -initdb" is used to build a new database. This is not necessary.

B: "rpm -rebuilddb" is used to rebuild an existing database. This may solve the problem but it is not the first thing you should try.

C: The error "cannot open /var/lib/rpm/packages.rpm" suggests that the package exists in the directory. Otherwise, you would get an error saying it couldn't find the file.

# **QUESTION 234**

What is the quickest way to create a file that lists all the groups to which the user 'bob' belongs?

- A. whereis bob >> bob\_groups.txt
- B. grep bob /etc/group > bob\_groups.txt
- C. find /etc/passwd bob >> /var/tmp/bob\_groups.txt
- D. cd /etc; cat groups | grep bob | > bob\_groups.txt

Answer: B.

Explanation: The grep command is used to search files for occurrences of a string - in this case bob in the /etc/group file. The output of this command is placed into a file name bob\_groups.txt using the > command redirector. Using the > redirector, the file bob\_groups.txt will be created if it doesn't already exist.

Reference: http://www.oreillynet.com/linux/cmd/g/grep.html

http://www.netti.hu/doc/LinuxShellScript/rpf.htm

**Incorrect Answers** 

A: The whereis command is used to locate the binary file and man pages for a command.

C: The find command is used to find files, not to find occurrences of a string within a file.

D: This command would almost work but it is a long way of doing it. The only thing wrong with the command is that is has two redirectors together ( | followed by >).

#### **OUESTION 235**

A Linux system boots up with only "LI" instead of LILO.

What does this indicate?

- A. LILO is not installed.
- B. The video driver is corrupted.
- C. The hard drive is not functioning properly.
- D. The second stage bootloader was unable to start.

Answer: D.

Explanation: If LI is displayed during bootup, it indicates that the first stage boot loader was able to load the second stage boot loader, but has failed to execute it.

Reference: http://www.linuxpeople.cc/howto/liloerrorshowto.htm?link

**Incorrect Answers** 

A: LI was displayed. This indicates that LILO is installed.

B: LI being displayed has nothing to do with the video driver.

C: If the hard drive wasn't functioning properly, it is unlikely that the first stage of LILO (LI) would be able to run.

#### **QUESTION** 236

A system with an existing Linux installation has an onboard network interface already configured as 'eth0' that is functioning properly. A PCI network interface card is inserted into an empty PCI slot and configured as 'eth1'. After the network services are restarted, neither network interface device has network connectivity. Both devices have link lights, the correct drivers are installed and are supported by the kernel. There is no error message generated.

# What is the problem?

- A. A motherboard defect caused both cards to stop functioning properly.
- B. It is not possible to run an onboard and expansion NIC in the same PC.
- C. An IP conflict between the cards caused networking services to fail at boot.
- D. The kernel swapped the identification of the NICs causing neither to operate properly.

Answer: C.

Explanation: The most likely cause of the problem is that both network cards are configured with the same IP address thus causing a conflict.

**Incorrect Answers** 

- A: Both network cards have link lights. Therefore, it is unlikely to be a motherboard problem.
- B: It is possible to run an onboard and expansion NIC in the same PC.
- D: It is very unlikely that the kernel would swap the identification of the NICs.

### **QUESTION 237**

The server has been rebooted after a kernel panic. Which of the following files can be viewed to try to determine the problem?

- A. wtmp
- B. dmesg
- C. boot.log
- D. messages

Answer: D?

Explanation: The boot.log file contains system messages. Examining this file might give some indication of the problem. The /var/log/messages file will contain error messages generated by the kernel before the machine was rebooted. Therefore, /var/log/messages would be the first file to look at to determine the problem.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 609.

**Incorrect Answers** 

- A: The wtmp file contains information about logins.
- B: Dmesg displays the kernel messages displayed at bootup. We need to see the error messages generated before the reboot.
- C: The boot.log file may contain some indication of the problem; however, /var/log/messages would be the first file to look at to determine the problem.

#### **QUESTION 238**

Using which of the following commands creates a risk of destroying data on a mounted file system?

- A. fsck
- B. mkfs
- C. mount

#### D. setserial

Answer: B.

Explanation: The mkfs command is used to create a filesystem on a hardware device such as a hard disk or a mount point. Creating a new filesystem over an existing filesystem will destroy the data on the existing filesystem.

Reference: http://www.oreillynet.com/linux/cmd/m/mkfs.html

**Incorrect Answers** 

A: Fsck (file system checker) is used to check the file system for errors. Although this can cause problems if the filesystem is mounted as read only, it is not as dangerous at the mkfs command.

C: The mount command is used to mount a filesystem. Running this command on a filesystem that is already mounted would just generate an error message. It would not cause the loss of data.

D: Setserial is a program designed to set and/or report the configuration information associated with a serial port. It would not cause the loss of data on a mounted filesystem.

### **QUESTION 239**

What is the first step in troubleshooting a system problem?

- A. Collect information.
- B. Test a possible solution.
- C. Make a hypothesis about a solution.
- D. Try to modify the configuration files.

Answer: A.

Explanation: The first step in troubleshooting should always be to collect information about the problem. This information can determine whether the problem is hardware or software related, and what the possible cause of the problem could be. When you know the cause of the problem, you can try to find a solution to the problem.

**Incorrect Answers** 

- B: You need to know the cause of the problem before you can test a solution to the problem.
- C: You need to know the cause of the problem before you can try to find a solution to the problem.
- D: You need to know the cause of the problem so that you know what configuration changes to make.

#### **OUESTION** 240

Which of the following is NOT a valid SCSI connector?



Answer: C.

Explanation: This is a DB15 connector commonly used to connect to VGA monitors.

Reference: http://www.ramelectronics.net/html/scsi\_connecters.html

http://www.nullmodem.com/HD-DB-15.htm

**Incorrect Answers** 

A: This is a DB 25 connector. B: This is an HD 68 connector.

D: This is a 50 pin Centronics connector.

## **QUESTION 241**

Exhibit:



Which of the following types of memory modules is shown in the exhibit?

A. SIMM

B. DIMM

C. RIMM

D. SIPP

Answer: B.

Explanation: The exhibit shows a 168 pin DIMM.

Reference: http://www.orcalogic.co.uk/Products/Products.htm

Incorrect Answers
A: This is not a SIMM.
C: This is not a RIMM.
D: This is not a SIPP.

## **QUESTION 242**

What Linux service is responsible for exporting and importing directories with another system on a network?

A. NFS

B. tftp

C. Squid

D. Exportfs

Answer: A.

Explanation: The NFS service (Network File Service) is used to share directories on a network. The Network Filesystem (NFS) protocol provides transparent remote access to shared files across networks. The NFS protocol is designed to be portable across different machines, operating systems, network

architectures, and transport protocols.

Reference: http://www.freebsd.org/doc/en\_US.ISO8859-1/books/handbook/nfs.html Incorrect Answers

B: TFTP (trivial file transfer protocol) is used to transfer files across a network. It is not used for exporting or importing directories.

C: Squid is a web proxy program. It is not used for exporting or importing directories.

D: Exportfs is a command used to export directories. However, it is the NFS service that is responsible for the exporting and importing of directories.

#### **OUESTION** 243

A medium-sized business wants to use GNOME or KDE. Which of the following hardware components is required?

- A. SCSI Card
- B. Modem Card
- C. Video Card
- D. Network Card

Answer: C.

Explanation: Gnome and KDE provide graphical desktop environments for Linux computers. To use these graphical desktop environments, you will need a graphics card otherwise known as a video card. Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 145.

**Incorrect Answers** 

A: A SCSI card is required if you have SCSI devices. It is not needed to enable the use of Gnome or KDE.

B: A modem card is required if you want a dial up connection (to an ISP for example). It is not needed to enable the use of Gnome or KDE.

D: A network card is required if you want to connect to a LAN (local area network). It is not needed to enable the use of Gnome or KDE.

## **QUESTION** 244

A customer installed a new intranet in their company, but the new network is not working. Connection attempts from the clients to the hosts generate "unknown host" errors. Pinging the server's IP address from a client is successful. What service needs to be added to the network to fix this issue?

- A. BIND
- B. Squid
- C. xinetd
- D. portmap

Answer: A.

Explanation: BIND (Berkeley Internet Name Daemon) is a common type of DNS service. DNS is used to map hostnames to IP addresses. In this question, you can ping the server's IP address; therefore, you

have network connectivity. You are unable to ping the hostname which means you have a name resolution problem. Adding the DNS service (BIND) to the network will solve this problem.

Reference: http://www.isc.org/products/BIND/

**Incorrect Answers** 

- B: Squid is a web proxy program. It is not used for name resolution.
- C: Xinetd is the Linux 'superserver'. It is used to start services on a Linux computer.
- D: Portmap is used with NFS to mount filesystems.

# **QUESTION 245**

A client requires a system that is able to store all of his customer records and records of transactions. What type of server should the client implement?

- A. Proxy Server
- B. Database Server
- C. Messaging Server
- D. Application Server

Answer: B.

Explanation: A database is used to store information. This information could be about anything. However, a common use of a database is to store customer information. A database server is a network server hosting a database, that can be accessed by workstations on the network.

Reference: http://linas.org/linux/db.html

**Incorrect Answers** 

A: A proxy server is used to provide an internet connection and web caching functionality. It is not used to store customer information.

C: A messaging server is used to provide messaging functionality on a network. It is not used to store customer information.

D: An application server is used to provide access to applications to workstations on a network. It is not used to store customer information.

# **QUESTION** 246

Which of the following information is NOT returned by if config on a machine connected to an Ethernet network?

- A. Ip address
- B. Mac address
- C. Computer hostname
- D. Active network interface

Answer: C.

Explanation: The ifconfig command is used to configure a network interface or to obtain information about the network interface. The information includes the IP address, the hardware (MAC) address, and the active network interface. However, it does not display the hostname of the computer.

Reference: http://www.oreillynet.com/linux/cmd/i/ifconfig.html

#### **Incorrect Answers**

- A: The ifconfig command displays the IP address.
- B: The ifconfig command displays the MAC address.
- D: The ifconfig command displays information about the active interface including packets received/sent.

#### **OUESTION 247**

The system administrator notices that the system is running slow. What should be done to find the processes that are using the most resources?

- A. Use the command "renice" to show the processes with the highest priority.
- B. Use the command "ps a" to list the top five processes with the highest priority.
- C. Use the command "jobs" to give a constantly updated list of CPU-intensive processes.
- D. Use the command "top" to give a real-time updated list of processes ranked by CPU usage.

Answer: D.

Explanation: The 'top' command is used to display information (frequently refreshed) about the most CPU-intensive processes currently running. If a process is using an excessive amount of CPU time, killing or restarting the process may improve system performance.

Reference: http://www.oreillynet.com/linux/cmd/t/top.html

**Incorrect Answers** 

A: The renice command can be used to adjust the priority of a process. However, it does not display the processes with the highest priority.

B: The ps a command will list all running processes. It is easier to use the top command to display just the most CPU-intensive processes.

C: The 'jobs' command to not display a constantly updated list of CPU-intensive processes.

#### **QUESTION** 248

Which of the following commands is used to obtain the summary of hard disk partitions?

- A. fsck
- B. fdisk
- C. fsck -l
- D. fdisk -l

Answer: D.

Explanation: The fdisk command is used to create/view hard disk partitions. The -l option is used to display information about all the hard disk partitions.

Reference: http://www.rt.com/man/fdisk.8.html

**Incorrect Answers** 

A: Fsck is used to check the filesystem for errors. It is not used to display partition information.

B: The fdisk command with no options will start a menu driven program, listing various options. The fdisk command on it's own does not display partition information.

C: Fsck is used to check the filesystem for errors. It is not used to display partition information.

## **QUESTION** 249

Which of the following can be used to apply the package "package-update-3.5.i386.rpm" to the original rpm package?

A. rpm -qa package-update-3.5.i386.rpm

B. rpm-Uvh package-update-3.5i386 rpm

C. rpm -ivh package-update-3.5.i396.rpm

D. rpm --update package-update-3.5.i386.rpm

Answer: B.

Explanation: The U option used with rpm is used to install a package or upgrade an existing package. The v and h options are used to display a series of pound signs (#) to indicate the progress of the installation/upgrade.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 178/9.

**Incorrect Answers** 

A: The qa options are used to query the installed packages. This will display information such as the installed files for the package.

C: The i option is used to install a package. However, when using the i option to install a package, a package with the same name must not already exist on the system.

D: Update is not the correct option to upgrade the package.

## **QUESTION 250**

An assistant network administrator has just been assigned the task of performing a daily check of the security system. A script will be created that will be executed daily as a cron job. Which of the following commands can be included in the script which directly relates to enhancing and checking the system security?

A. find /-name \* >> /var/log/daily

B. chmod -R  $4000 / \gg /var/log/daily$ 

C. find / -perm 4000 >> /var/log/daily

D. grep -Ril root /ect/\* >> /var/log/daily

Answer: C.

Explanation: Setuid executable files can be run as the file owner rather than the user running the file. This can be a security risk as it could give an intruder root access to your system. You can use the find / -perm 4000 command to search for setuid files. The output of the search is appended to a file called /var/log/daily with the >> redirector.

Reference: http://www.intersectalliance.com/projects/LinuxConfig/LinuxConfig-4.0.html Incorrect Answers

A: This command would search / (the root directory) for any (\*) filename and list the output in the /var/log/daily file. This would result in a list of every file on the system.

B: The chmod command is used to change the permissions on files (in this case, every file on the system). It cannot be used to enhance security.

D: This command would search every file in /etc/ for an occurrence of the word root. This doesn't improve security.

#### **QUESTION** 251

An administrator needs to maintain a log of work performed on a Linux server. Which of the following written records is the most important to maintain?

- A. Updates to hardware drivers.
- B. Updates of user passwords.
- C. New users added to the system.
- D. File system check times and results.

Answer: A.

Explanation: Documenting work performed on a server is very important for troubleshooting purposes. It is often helpful to know the exact version of your hardware drivers. This will make it easier for an administrator to know if he/she has the most recent version of the drivers.

**Incorrect Answers** 

- B: Documenting updates to user passwords is not necessary. Documenting the actual passwords is definitely not recommended.
- C: Documenting new users is not necessary. A list of user accounts can be obtained at any time.
- D: Documenting file system check times could be useful as it could indicate a deteriorating hard disk. However, just noting any file system errors would suffice.

### **QUESTION 252**

The /etc/passwd file for a Linux system has an "x" in the second field. What does this indicate?

- A. The user account is disabled.
- B. The user is configured for X login.
- C. The system is using shadow passwords.
- D. The user is required to change the password at next login.

Answer: C.

Explanation: The second field is the password field. Linux distributions that use shadow password files typically place an 'x' in this field. Others place the encrypted password in this field.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 273.

**Incorrect Answers** 

- A: If the user account was disabled, the password field would contain a '\*'.
- B: The x does not mean the account is configured for an X login.
- D: The x does not mean the user is required to change the password at next login.

## **QUESTION** 253

A user creates a cron job that deletes all files in /tmp and /var/tmp on her home machine each night. However, she notices several days later that some of the files have not been deleted. What can she do so the cron job performs correctly?

- A. Write a shell script to remove the files.
- B. Make a new crontab while logged in as root.
- C. Log in as superuser and delete the files manually.
- D. Edit her user crontab while logged in as superuser.

Answer: B.

Explanation: To delete the files, she must have the necessary permissions on all the files. To ensure she has the necessary permissions, she should make a new crontab while logged in as root. This will make the cron job run with root permissions, and successfully delete all the files.

**Incorrect Answers** 

- A: If she used a shell script, she would still need the necessary permissions to delete the files.
- C: Deleting the files manually is unnecessary.
- D: Editing the crontab won't make the cron job run with root permissions.

#### **QUESTION 254**

A system administrator of a 200-server network wants to simplify routine monitoring of log files on each server. What is the industry-recommended method to do this?

- A. Create a script on the administrator's workstation to attach to each server and copy its log files to the local drive.
- B. Create a new server called 'loghost'.

Modify the syslog.conf file on each server so log files are forwarded to 'loghost'.

C. Run logcp at each server.

Specify the administrators workstation as the destination and "\*" for which log files to forward.

D. Create a script on each server to analyze each of the log files on the server and forward important information to the administrator's workstation.

Answer: B.

Explanation: To simplify the monitoring of log files, you should use a central logging server. You can modify the syslog.conf file on each server to configure the servers to save their log files on the central logging server.

**Incorrect Answers** 

- A: You shouldn't store important log files on a workstation.
- C: This would have to be done every time you wanted the logs copied to your machine.
- D: It would be difficult to define 'important information' in a script.

#### **QUESTION 255**

A user tells the administrator that he has found the entry "..." in his home directory, and he did not create this entry. Which of the following actions should the administrator take and why?

- A. Leave the directory as it is because "..." refers to the parent directory.
- B. Lock the directory and examine its contents to determine if this is a security risk.
- C. Leave the directory as it is because the "..." was created by a normal system process at login.

D. Run fsck on the /home partition because the "..." is an indication of possible file corruption.

Answer: B.

Explanation: The '...' directory is not created by default. Someone must have created it. Therefore, you should lock the directory and examine its contents to determine if this is a security risk. Incorrect Answers

A: '...' does not refer to the parent directory. '..' (2 dots) refers to the parent directory.

C: The '...' directory isn't created by a process at login.

D: A '...' directory doesn't indicate possible file system corruption.

## **QUESTION 256**

Users on a machine need to run the command run\_file that requires superuser permissions in order to write to other files. Which of the following will allow that to happen?

- A. Run " ./run\_file -su root".
- B. Use the chroot command.
- C. Edit the users ".login" files.
- D. Change run\_file to a SUID command.

Answer: D.

Explanation: The Set User ID (SUID) option is used in conjunction with executable files, and tells Linux to run the program with the permissions of whoever owns the files, rather than with the permissions of whoever runs the file. For example, if the root user owns the file, the file will run with root permissions when any user runs the file.

Reference: Roderick W. Smith. Sybex Linux + Study Guide: Page 254.

**Incorrect Answers** 

A: The su command is used to 'switch user' and open a shell with the permissions of that user.

However, the syntax in this answer is incorrect.

B: The chroot command is not used to run a command as root.

C: Editing the login files will not enable a user to run a program as root.

### **QUESTION** 257

A user has accumulated over 500 MB of programs stored in 25 directories. Now he would like to backup the programs to his home computer by creating a compressed archive and then using ftp to transfer the data to his computer at home.

Which of the following is the best way to do this?

- A. Use gunzip to create a compressed form for each file.
- B. Use zcat to create an archive and use gzip to compress the archive.
- C. Use tar with the "z" option to create a compressed archive in one step.
- D. Use zcat to compress all of the files and then tar to create an archive.

Answer: C.

Explanation: Tar is the best utility to use to create an archive containing multiple files. The z option invokes the gzip utility to compress the files as part of the archive creation process.

Reference: http://www.oreillynet.com/linux/cmd/t/tar.html

**Incorrect Answers** 

- A: Gunzip is used to uncompress files, not to compress them.
- B: Zcat is not used to create an archive. It is used to list the contents of an archive.
- D: Zcat is not used to compressed files. It is used to list the contents of an archive.

#### **QUESTION 258**

How can an original file or kernel be preserved before being updated or patched on a Linux system?

- A. Edit the /etc/profile/changelog file and add the filename or kernel version to be backed up.
- B. Use the upu, the Update Protection Utility in X to protect the original file or kernel, which is saved in /usr/src.
- C. From the directory containing the file to be backed up, type "cp <original file or kernel name> <original file or kernel name>.bak".
- D. Files and kernels cannot be saved because the updates will permanently overwrite the originals by default to eliminate the possibility of version conflicts.

Answer: C.

Explanation: The best way to preserve the original version of a file or kernel is to make a backup of it. The easiest way to create a backup of a file is to make a copy of it. The command to copy a file is 'cp'. Reference: http://www.oreillynet.com/linux/cmd/c/cp.html

**Incorrect Answers** 

A: Editing the /etc/profile/changelog won't preserve an original copy of a file.

B: I don't know if there is an 'Update Protection Utility'. However, if the utility exists, it is still not the easiest way to preserve an original copy of a file.

D: Files and kernels can be preserved by making a backup copy of them.

## **QUESTION** 259

Which of the following commands, when issued, protects a file named classic from being deleted by root?

A. chattr +c classic

B. chattr +i classic

C. chmod 000 classic

D. chmod a-rwx classic

Answer: B.

## **QUESTION** 260

You are installing the Linux operating system on a computer. You want the Linux installation program to search for bad blocks. Which steps in the Linux installation process for most Linux distribution enables the installation program to search for bad blocks?

- A. The hard disk formatting step.
- B. The hard disk partitioning step.
- C. The installation type step.
- D. The Linux Loader (LILO) configuration step.

Answer: A.

#### **QUESTION 261**

Which of the following lines of text, when added to the /etc/crontab file, will run the cleanup script on the first day of every month at 2:05 A.M.?

A. 25 \*1\* cleanup

B. 5 2 1 1 \* cleanup

C. 5 2 1 \* \* cleanup

D. 25 \* \* 1 cleanup

Answer: C.

#### **QUESTION 262**

Which of the following best describes what will occur when the su -c 'kill 392' root command is issued and a valid password is entered?

- A. A user will kill the process named 392, which was started by root.
- B. A user is given root-level permissions, and the process with PID number 392 will be terminated.
- C. A user is given root-level permissions, and the processes started in March of 1992 will be terminated.
- D. The root user will kill all of the processes that were started by root.

Answer: B

#### **QUESTION 263**

Which of the following can you use if you want to configure a Linux computer only as a firewall?

- A. Apache
- B. BIND
- C. iptables
- D. Squid

Answer: C.

#### **OUESTION 264**

Your Linux computer has a serial mouse on COM1. You want to connect an external modem to the computer. Connecting the modem to which of the following ports can cause the modem and mouse to malfunction?

- A. COM2
- B. COM3
- C. COM4
- D. USB

Answer: B.

## **QUESTION 265**

Which of the following statements best describes what will happen when the rpm - qa command is issued?

- A. The name of each installed package will be displayed.
- B. All of the packages installed on the computer will be verified.
- C. Detailed information about an installed package will be displayed.
- D. The name of each file contained within a package will be displayed.

Answer: A.

## **QUESTION 266**

Which device normally uses a DMA channel?

- A. PCI modem
- B. Laser Printer
- C. ISA sound card
- D. Cable video tuner

Answer: C

#### **QUESTION** 267

A technician installs a SCSI card and three SCSI devices on a new system. The system does not recognize any of the SCSI devices or the controller. What is the most likely cause?

- A. There is an Int13h conflict.
- B. There is a SCSI ID conflict.
- C. There is an I/O address conflict.
- D. There are no Linux drivers installed.

Answer: C

#### **QUESTION** 268

Which of the following devices are hot-swappable?

- A. PS/2 mouse
- B. AGP video card
- C. CardBus network card
- D. Parallel port printer

Answer: C

#### **QUESTION** 269

A user adds a serial trackball to his system. Now, neither the existing mouse nor the trackball work. Which of the following will most likely correct the problem?

- A. Reboot the system.
- B. Perform a BIOS upgrade.
- C. Reconfigure the COM ports.
- D. Reinstall the modem drivers.

Answer: C

#### **QUESTION** 270

A user replaces an old 4 GB IDE drive with a new 30 GB IDE drive. During the installation process, Linux recognizes only 8 GB of the available disk space. Which of the following is most likely the problem?

- A. The BIOS does not support larger hard drives.
- B. The hard disk controller has no LBA capability.
- C. The value of the hard disk size in the CMOS is set incorrectly.
- D. The hard disk has to be low-level formatted to access the full capacity.

Answer: A

#### **QUESTION 271**

During a cold boot of a system, which test examines the CPU, memory and video?

- A. CMOS
- B. POST
- C. DIOS
- D. Bootstrap

Answer: B

#### **QUESTION 272**

ATAPI technology is a standard for which of the following items?

- A. CPUs
- B. Power supplies
- C. Mass storage devices
- D. Modulater/demodulater

Answer: C

#### **QUESTION 273**

Unshielded twisted-pair is used for which of the following networks?

A. 10Base2

B. 10Base5

C. 10BaseF

D. 10BaseT

Answer: D

#### **QUESTION** 274

Based on the exhibit, in what type of I/O bus should the card shown be used?



A. PCI

B. ISA

C. EISA

D. MicroChannel

Answer: A

#### **QUESTION** 275

Which of the following is a field replaceable unit?

A. CPU fan

B. PCI bridge

C. Lavel 1 cache

D. Onboard SCSI controller

Answer: A

#### **QUESTION** 276

The current BIOS version on two workstations does not support the processor that will be installed, but the same motherboard with new BIOS version does. Which of the following is the best way to resolve the problem?

- A. Update the CMOS using a HEX editor.
- B. Flash the BIOS with a binary or HEX file.
- C. Replace the old motherboard with a new one.
- D. Use the debug command to copy the BIOS from a new motherboard.

Answer: B

### **QUESTION 277**

A new PC is delivered to the site. Upon the initial power up, there is no video display, no beeps are heard, but the hard drive and fans power up. Which of the following has most likely caused this problem?

- A. The mouse is not connected.
- B. The diskette drive has failed.
- C. The CPU is not seated properly.
- D. The network card is not installed.

Answer: C

### **QUESTION 278**

Which of the following can a parity error indicate?

- A. A DIMM is failing
- B. The IDE hard drive is corrupt
- C. The IRQ settings are incorrect
- D. The software is not compatible with the hardware

Answer: A

## **QUESTION** 279

A user has just purchased a new external modem and wants to install it on his Linux desktop workstation. What port on the workstation would be used?

A. USB

B. PS/2

C. HD-68

D. RJ-11

Answer: A

## **QUESTION 280**

Exhibit





# Certkiller.com

D. 💿 🔛 💿

Study the exhibit. When a user installs his new Linux desktop computer, what port would he use

to connect a CAT5 cable to establish a connection on the network?
A. A. B. B C. C D. D
Answer: B
QUESTION 281 Exhibit A. ♥ ⋯⋯ ●
В. [ • • • • • • • • • • • • • • • • • •
Certkiller.com
D. Study the exhibit. A user wants to install an external CDROM drive onto a system. Which interface should be used?
A. A B. B C. C D. D
Answer: B
QUESTION 282 What should be terminated on a SCSI bus with one internal hard drive and one external CDROM?
A. The hard drive only B. The SCSI interface card only C. Both the hard drive and the CDROM drive D. The SCSI controller, hard drive, and CDROM drive
Answer: C

## **QUESTION** 283

A user installed a new hard drive into a system with an existing hard drive. He then connected a ribbon cable to the new hard disk. He powered on the computer, but the system did not boot. Which of the following most likely caused the problem?

A. The hard disk needs a new MBR.

- B. The hard disk drive was not low-level formatted first.
- C. The controller was damaged by an electrical discharge.
- D. The ribbon cable was inserted backward on the hard disk.

Answer: D

#### **QUESTION 284**

What is the difference between "shutdown -h now" and "init 0"?

- A. "init 0" does not power down the Linux system
- B. "init 0" does not halt the system during power down
- C. "init 0" does not send a broadcast message to logged-in users
- D. "init 0" does not stop services before powering down the system.

Answer: C

#### **QUESTION 285**

An administrator recursively copies the /home directory to a new hard drive using the command cp -R /home /usr/home

What further actions are required, if any, to make the files accessible to the users?

- A. Give executable permission to the users on the new home directory.
- B. Change ownership of the files, and assign directory permissions to users.
- C. Change ownership of the files; directory permissions are automatically assigned.
- D. No further action is required. All permissions are replicates using the cp command

Answer: B

#### **QUESTION** 286

Which of the following commands is issued to create the group 'sqleditors' on a system?

- A. group +sqleditors
- B. addgroup sqleditors
- C. groupadd sqleditors
- D. echo sqleditors:x:601: > /ets/groups

Answer: C

#### **QUESTION** 287

A software developer completed his annual report yesterday. He is now trying to print the report and submit it to his supervisor; however, he has forgotten the name and path of the report file. Which of the following commands can be used to obtain a listing of recently modified files?

- A. locate -t2
- B. find / -mtime 2
- C. whereis -time 2

D. grep / -ctime 2

Answer: B

#### **QUESTION 288**

A user logs onto the system as root. He attempts to execute the script file a,sh. He is getting the message "Execute permission denied". What command must be used before the file can be executed?

- A. chgrp
- B. chown
- C. chmod
- D. execute

Answer: C

#### **QUESTION** 289

Which of the following commands creates a tar file called back.tar that contains all files ending with extension ".c" in the current directory?

A. tar back.tar \*.c

B. tar xvf | \*.tar \*.c

C. tar cvf back.tar \*.c

D. tar cvzf | \*.tar \*.c

Answer: C

## **QUESTION** 290

Where are log files normally found?

- A. /bin
- B. /etc
- C. /tmp
- D. /var

Answer: D

#### **QUESTION** 291

A user wants to load a PDF file from the CDROM. What command would allow the user to access this file?

- A. mount -dos /dev/cdrom
- B. mnt /dev/cd0 /mount/cdrom
- C. mount -t vfat /mnt/cdrom /dev/cdrom
- D. mount -t iso9660 /dev/cdrom /mnt/cdrom

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## **QUESTION 292**

Which of the following commands can be used to place print jobs in the print queue?

A. pr

B. lpq

C. lpr

D. lprm

Answer: C

## **QUESTION 293**

Which of the following strings indicate that the input of the program called printData should be redirected from the file calles "myData"?

A. printData . myData

B. printData > myData

C. printData < myData

D. printData | myData

Answer: C

### **QUESTION** 294

What is the most secure way to connect to a remote machine?

A. ssh

B. ftp

C. http

D. telnet

Answer: A

#### **QUESTION** 295

Which of the following commands will create 'bsmith' as a user in the group 'web\_users'?

A. useradd bsmith web\_users

B. useradd -g web\_users bsmith

C. useradd web\_users bsmith

D. groupadd -group web\_users bsmith

Answer: B

#### **QUESTION** 296

A Linux system administrator has forgotten the root password. Which of the following would be

the best way for the system administrator to gain access to the machine?

- A. Reinstall Linux.
- B. Enter runlevel 0 and run passwd.
- C. Reboot and use the mdrecovery utility.
- D. Reboot, enter Linux single-user mode and run passwd.

Answer: D

#### **QUESTION** 297

Which of the following commands kan be used to save and resume editing the file in the vi editor?

A.:w

B. :x

C.:v

D. :s!

Answer: A

#### **QUESTION 298**

How can the X Window manager be restarted?

- A. Press <Ctrl><Alt><Delete>
- B. Press <Ctrl><Alt><Backspace>
- C. Press <Ctrl><Alt><F5>, login, and type "startx"
- D. Change consoles and type the command "kill -9 X"

Answer: B

#### **QUESTION** 299

What information about the user does the "x" provide in the following line in the /etc/passwd file? chris:x:501:501:chris smith:/home/chris:/bin/bash

- A. The user is disabled.
- B. The user has no password.
- C. The user has a blank password.
- D. The user has a shadow password.

Answer: D

#### **QUESTION** 300

Which of the following commands should be used to move the file named John1 from the directory /home/j/john/temp to /home/j/john/save?

- A. mv /home/j/john/temp/john1 /home/j/john/save
- B. mv/home/j/john/save/home/j/john/temp/John1

C. mv/home/j/john/temp/John1/home/j/john/save

D. mv /home/j/john/save/john1 /home/j/john/temp

Answer: C

## **QUESTION** 301

After completing an installation of Linux, the technician is asked to document the current configuration and place this in a public location. The technician documented the following items:

- Administrator contact information
- System network settings
- Application configuration
- Installed components

Which of the following did the technician fail to include?

- A. The root password
- B. Disk partitioning scheme
- C. Location of common system files
- D. Cost of replacement system components

Answer: B

## **QUESTION** 302

A system technician needs to determine with hardware modules are loaded on a particular Linux server. Which of the following commands will perform this task?

- A. lsmod
- B. modules
- C. insmod -list
- D. modprobe -list

Answer: A

#### **OUESTION** 303

Which of the following is the best way to change video resolution from 800x600 to 1024x768?

- A. Run xf86config to change the resolution.
- B. Reinstall Linux with more options for X Server.
- C. Reinstall X Server with support for the 1024x768 resolution.
- D. Restart X Server after typing "resolution=1024x768" as root.

Answer: A

#### **OUESTION** 304

A user tries to dial into his ISP. The modem dials and connects, but loses the connection after a few seconds. The log files indicate tat an "Authentication failed" error occurred, but the password in the configuration file on the client system is correct. Which of the following is most likely to be

## the problem?

- A. The phone line is bad.
- B. The user dialed the wrong phone number.
- C. The ppp\_auth kernel module is not loaded.
- D. The wrong authentication protocol was used by PPP.

Answer: D

#### **QUESTION** 305

What port is commonly used by the POP3 protocol?

A. 25

B. 53

C. 69

D. 110

Answer: D

#### **QUESTION** 306

Below is a list of possible steps to take in order to change manually from the old IP address to new IP address of a computer.

- I. Use if config to disable the network interface
- II. Use if config to enable the network interface using the new IP address
- III. Update the arp table with the new address
- IV. Update the routing table with the new paths
- V. Use insmod to insert a new driver

Which of the steps are required?

- A. I, II, and IV only
- B. I, II and V only
- C. I, III, and IV only
- D. I, II, IV and V only

Answer: A

#### **QUESTION** 307

A user typed the following command on a machine:

ifconfig eth0:1 192.168.155.5 up

What would be the effect of typing this on a machine that already has an address of 192.168.155.1 assigned to eth0?

- A. It will replace the current IP address with 192.168.155.5.
- B. It will assign 192.168.155.5 to eth0 as a second IP address
- C. It will replace the old broadcast address with 192.168.155.5.
- D. It will assign the address of 192.168.155.5 to the second physical Ethernet card.

Answer: B

#### **QUESTION** 308

Which of the following files includes device names, mount points, filesystem types, permissions and information about whether to mount the device at boot time?

- A. /dev/info
- B. /etc/fstab
- C. /boot/info
- D. /etc/inittab

Answer: B

#### **QUESTION** 309

Which of the following commands will set the current system time to 3:00 PM, February 3, 2002?

- A. date 020315002002
- B. dateset 020320021500
- C. time 0300:02:03:2002
- D. timeset 1500.02.03.2002

Answer: A

### **QUESTION** 310

Which of the following is a configuration file that contains the system virtual console specifications?

- A. XF86Config
- B. /etc/profile
- C. /etc/inittab
- D. /etc/vconsole

Answer: C

#### **OUESTION 311**

Which file can be edited to disable FTP, POP, and RSH services?

- A. /etc/ports
- B. /ets/inittab
- C. /etc/inetd.conf
- D. /etc/remote.conf

Answer: C

#### **QUESTION** 312

If a video card is not recognized by the X configuration utility during the installation process, which of the following actions should be taken to enable X to display after installation is complete?

- A. Edit the /etc/inittab to boot the X Window System
- B. Identify the chipset on the video card and obtain the driver from the manufacturer.
- C. Inspect the CMOS for information on the video card and install the drivers that came with the video card.
- D. Edit /etc/lilo.conf to include a boot message to the kernel pointing to the location of the video drivers.

Answer: B

#### **QUESTION** 313

What is the main difference, if any, between GRUB and LILO?

- A. LILO does not support hard drives larger than 30 GB.
- B. GRUB does not support passing of kernel boot options.
- C. GRUB does not have to be rewritten to the hard drive after changing the configuration file.
- D. There is none.

Answer: C

#### **QUESTION** 314

Which of the following commands is used to cancel print jobs?

- A. lpq
- B. lpc
- C. lpr
- D. lprm

Answer: D

#### **OUESTION** 315

Users contact the administrator and complains that they are unable to browse the Web. nslookup on a popular known site produces the following error: "Host/domain not found", while a ping to a known WAN IP address is successful. Which service needs to be restarted and why?

- A. Samba. The file server is not responding.
- B. BIND. Name resolution is not taking place.
- C. Squid. The proxy server is not responding.
- D. HTTPD. The WAN Web Servers are not responding

Answer: B

#### **QUESTION** 316

Which of the following commands can be run to gather specific information regarding the hardware in the system?

- A. dmesg
- B. tail sysinfo
- C. cat /var/log/spool
- D. cat /var/log/syslog

Answer: A

## **QUESTION** 317

A Linux system is used for various Internet services and remote user access. When a problem arises with one of the machine's services, which of the following actions is the LEAST likely to disrupt other services on that machine?

- A. Kill a daemon
- B. Reboot the machine
- C. Change to runlevel 1
- D. Disable a network device

Answer: A

#### **QUESTION** 318

A user calls into the support line and reports that he is unable to unlock his desktop. After several attempts, he is sure that he has entered his password correctly. What is the first thing to do to troubleshoot this situation?

- A. Change his password.
- B. Check to see if <Caps Lock> is on.
- C. Check if he has a valid password.
- D. Check to see if his account is active.

Answer: B

## **QUESTION** 319

A system will not allow root to ssh into the system. All others can connect via ssh. Which of the following configuration files should be edited to permit connection as the root user?

- A. ssh\_config
- B. pam\_deny.so
- C. sshd config
- D. /root/.ssh/allowed\_connections

Answer: C

### **OUESTION** 320

tar automatically compresses and decompresses using which of the following options?

A. c

B. z

C./z

D. -c

Answer: B

#### **OUESTION** 321

The Linux system is not assigning IP addresses to client systems. After a reboot and executing the command "dhcpd start", the problem is not corrected. After changing to the correct directory, which of the following commands should be used to permit IP addresses to be assigned?

A. ./dhspd start

B. ./dhcpd restart

C. touch dhcpd.leases

D. chkconfig --level 3 dhcpd on

Answer: C

#### **QUESTION** 322

The Linux system has experienced a power failure. After the system is booted up, it hangs with file system corruption messages. What is the best way to resolve this?

A. Boot into single-user mode and run fsck.

B. Boot into multi-user mode and run chkdsk.

C. Boot into single-user mode and run mdrecoveryd.

D. Boot into multi-user mode and run "/sbin/shutdown -t3 -r now".

Answer: A

#### **OUESTION 323**

Which of the following is a common switch used to display command syntax for most programs?

A. /?

B.-h

C. --man

D. -help

Answer: B

#### **QUESTION** 324

While attempting to start an application in an X Window System environment, the following error occurs:

Error: Can't open display

What most likely led to this error?

- A. The application is not an X application.
- B. It is the wrong version of the application.
- C. The application was compiled with the wrong graphics library.
- D. The administrator has used "su -" to log into the current account.

Answer: D

## **QUESTION** 325

Which of the following would correct a corrupt master boot record and allow a clean boot into Linux?

- A. Boot Linux and type "fdisk /MBR"
- B. Boot any OS and type "fdisk /MBR"
- C. Boot DOS with a boot diskette and type "lilo"
- D. Boot Linux with a boot diskette and type "lilo"

Answer: D

## **QUESTION** 326

Which of the following commands is most useful to determine whether an Ethernet card problem is caused by hardware or the Linux kernel?

- A. init and ps
- B. route and ping
- C. dmesg and ifconfig
- D. kupdate and mprobe

Answer: C

#### **OUESTION** 327

A system is configured to dual-boot Linux with another operating system that is located on /dev/hda1. LILO is the choosen boot manager. The system reboots without access to the other operating system. What lines should be added to lilo.conf to allow access to the other operating system?

A. table = LILO

label = <shortened name of operating system>

other = /dev/hda

B.  $O/S = \langle shortened name of operating system \rangle$ 

location = /dev/hda1

bootmgr = LILO

C. label = /dev/hda1

table = /dev/had

other = <shortened name of operating system>

D. other =  $\frac{dev}{da1}$ 

label = <shortened name of operating system>

table = /dev/hda

Answer: D

#### **QUESTION** 328

"netstat -i" is typed at the command line. All of the following information will be displayed EXCEPT

- A. Transmission errors for each network interface
- B. The number of packets dropped for each network interface
- C. The number of packets received for each network interface
- D. A list of masqueraded connections for each network interface

Answer: D

#### **QUESTION** 329

Which of the following commands would be used to watch the mail log for errors?

- A. locate
- B. tail -f
- C. monitor -f
- D. cat mail.log

Answer: B

#### **QUESTION** 330

Linux is being installed on a system that uses SCSI hardware. During partitioning, an error is produced that says there are no valid devices found on which to install partitions. The hard drive spins up. The SCSI controller is functioning properly and supported by Linux. The cable is a known good cable and there is proper termination. What is the problem?

- A. The SCSI hard drive is not jumpered to the proper SCSI ID.
- B. The SCSI controller needs to be reset to factory defaults.
- C. The SCSI controller on the hard drive needs a firmware update.
- D. The SCSI controller on the hard drive has an intermittent problem.

Answer: A

#### **QUESTION** 331

What command is used to access the information about memory availability and usage in Linux?

- A. cat /dev/meminfo
- B. cat /var/log/mem

- C. cat /proc/meminfo
- D. cat /etc/memory/usage

Answer: C

## **QUESTION** 332

A customer has installed a new hard drive on a Linux system. What would be the order of tasks to allow her to put her MP3 collection on the new drive?

- A. fsck, mount, mkfs
- B. mount, mkfs, chkfs
- C. cfdir,mkfs,mount
- D. mkfs,mount,fschk,cp

Answer: C

#### **QUESTION** 333

A system administrator complains that a user's system has been forwarding unsolicited email (spam) to mass email lists. Which of the following actions needs to be done to sendmail to stop the spam?

- A. Change the firewall rules.
- B. Restart the sendmail daemon.
- C. Restrict relay domains in the sendmail configuration.
- D. Change the SMTP mail server in the sendmail configuration.

Answer: C

## **QUESTION** 334

What is the purpose of cron?

- A. Manage incoming and outgoing mail
- B. Runs specified commands at defined times
- C. Sets the system clock to a specified time
- D. Changes the permission settings on a file or directory

Answer: B

#### **QUESTION** 335

Which command will extract the file "backup-4-19-2001.tgz"?

- A. unzip backup-4-19-2001.tgz
- B. tar xf backup-4-19-2001.tgz
- C. tar xzf backup-4-19-2001.tgz
- D. uncompress backup-4-19-2001.tgz

Answer: C

#### **QUESTION** 336

A user calls the help desk, complaining that upon issuing a command to list files in her home directory, a "permission denied" error is received. Which of the following actions should be taken to resolv the problem?

- A. Delete the user's home directory and re-create it.
- B. Ask the user for some patience while the server is rebooted.
- C. Run "chmod 007" on the user's home directory and have the user try again.
- D. Check the UID:GID of the user's home directory and change it if necessary.

Answer: D

### **QUESTION** 337

Which of the following types of backup minimizes system downtime during restore?

- A. FDD backup
- B. Full backup
- C. Incremental backup
- D. Differential Backup

Answer: B

#### **QUESTION** 338

A system administrator routinely needs to see the list of who has logged in and out on a machine, as well as their login times. Which of the following commands searches the "/var/log/wtmp" file and displays who has logged onto the machine and when they logged on?

- A. who
- B. last
- C. log -l
- D. wtmplst

Answer: B

## **QUESTION** 339

A user who wants the status listing of all network interfaces will use which of the following commands to obtain this information?

- A. if config -a
- B. if config up
- C. if config eth\*
- D. ifconfig --all

Answer: A

#### **QUESTION** 340

A Linux superuser is unable to delete a file. The user is also unable to change permission for the file. What is the problem?

- A. The file is actually a hard link.
- B. The file has the immutable flag set.
- C. The file has been fragmented across directories.
- D. The superuser does not have permission to access the file.

Answer: B

## **QUESTION** 341

Which of the following packages helps to identify a bad password?

- A. CERT
- B. Hack
- C. Crack
- D. Tiger

Answer: C

### **QUESTION** 342

Which of the following commands will list all rpm packages installed on the system?

- A. rpm -d
- B. rpm -i
- C. rpm -qa
- D. rpm -Uvh

Answer: C

#### **QUESTION** 343

The system technicians and administrators at a facility are poor at keeping maintenance records up-to-date. The administrator decides to keep only the minimum information in the records and require that it be updated. Which of the following information is the most important to maintain?

- A. Dates and times that the server was rebooted
- B. Version numbers of patches applied to services
- C. Information about new users added to the system
- D. Records of which administrators have logged in to the system

Answer: B

#### **QUESTION 344**

The system administrator needs to examine the processes that the user with the login of 'john' currently owns. Which of the following commands would best do this?

A. ps john

B. ps -r john

C. ps -U john

D. ps -all | grep john

Answer: C

#### **QUESTION** 345

What Linux service is responsible for successfully sharing files over a NetBios network?

A. NFS

B. Samba

C. XFree86

D. Xwindows

Answer: B

#### **QUESTION** 346

Why would Kernel 2.3.19-2 be an INAPPROPRIATE kernel for a production web server?

- A. It is a test version of the kernel.
- B. It is not the most recent kernel available.
- C. It needs to be upgraded to Kernetl 2.3.20 for network support.
- D. This version of the Linux kernel has a known problem with Apache.

Answer: A

#### **QUESTION** 347

A customer wants to upgrade an old UNIX server to a current version of a Linux OS. The SCSI controller manufacturer is out of business. What should be done to verify that the SCSI controller will work with Linux?

- A. Verify that SCSI emulation is activated in the kernel.
- B. Use the man pages to verify there is a SCSI module available for the controller.
- C. Use the kernel editor to vierify there is a SCSI module installed for the controller.
- D. Use the Linux distribution Hardware Compability List to verify that the controller is supported.

Answer: B

#### **OUESTION** 348

A customer is concerned about attacks to his network from the Internet. The customer wants a system that will prevent unauthorized intrusion from outside his network. What type of server

does the customer require?

- A. Firewall
- B. Web Server
- C. Database Server
- D. System Management Server

Answer: A

#### **QUESTION** 349

During installation of a Linux system, the customer decided to use the ReiserFS file system rather than ext2. What is the most likely reason for this choice?

- A. ext2 allows only 8 character file names.
- B. ReiserFS allows partitions to be journaled.
- C. ReiserFS has built-in USB file system support.
- D. There are no differences between ext2 and ReiserFS.

Answer: B

#### **OUESTION** 350

A Linux workstation is being integrated into a network that uses older Novell Netware servers (version 2.2 and 3.12). The workstations use only the Netware client software to communicate with the server and to share data. Which of the following protocols should be installed on the Linux workstation?

- A. TCP/IP
- B. NetBIOS
- C. IPX/SPX
- D. Apple Talk

Answer: C

### **QUESTION** 351

A customer has recompiled his kernel to a new image including new modules. GRUB is not being used as the boot loader. After editing the necessary configuration files, what command should be issued?

- A. /etc/lilo
- B. /sbin/lilo
- C. /sbin/loadlin
- D. ./start kernel

Answer: B

#### **QUESTION** 352

What command is commonly issued to compile and install an application from its source code?

A. run

B. rpm

C. make

D. install

Answer: C

#### **OUESTION** 353

The system administrator has just completed the installation and configuration of a DNS server to be used for external name resolution. The DNS service need to be validated before bringing the server into production.

What would be the best method to validate the proper operation of the service?

- A. Ping an external IP address.
- B. Get a Web page from within the local area network.
- C. Run the dig command for an external domain name.
- D. Run traceroute to the DNS server and analyze the hops.

Answer: C

#### **QUESTION** 354

A package that a user installed has never run successfully and returns a large number of errors. What is the first action that should be taken?

- A. Run "verify <package\_name>"
- B. Run "rpm --verify <package\_name>"
- C. Validate that the /boot directory exists
- D. Validate that kernel.lib is the correct version

Answer: C

#### **QUESTION** 355

An error message appears that states that no modular support is available. What caused this error message?

- A. A module is corrupted and must e reinstalled
- B. The installation is corrupt and must be reinstalled
- C. A device being installed is not functioning and must be replaced.
- D. The kernel does not support loadable modules and must be recompiled.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **QUESTION** 356

The user installs the second SCSI hard drive into the computer and needs to partition it. Which of the following commands must be run to partition the disk?

A. fdisk /dev/hdb

B. fdisk /dev/hd2

C. fdisk /dev/sdb

D. fdisk /dev/sd2

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

## **QUESTION** 357

During installation of a new server, the technician enabled Shadow Passwords and MD5 Passwords. What changes have been made on the server?

- A. NFS has now been disabled.
- B. Access to /etc/passwd is now limited to root.
- C. The maximum password length is now 64 characters.
- D. User passwords are now kept in the /etc/shadow file.

Answer: D

#### **QUESTION** 358

Which of the following passwords would be the most secure?

A. xpF57se

B. range76

C. 76range

D. LasVegas

Answer: A

#### **QUESTION** 359

Which of the following packages is usually more important for a "workstation" installation than a "server" installation?

- A. DNS Server
- B. DHCP Server
- C. Proxy Server
- D. XFree86 Server

Answer: D

#### **OUESTION** 360

You are a junior Linux system engineer. You are working on a Linux based PC.

ATAPI is used in which of the following hardware devices?

- A. ISA Sound card
- B. Software modem
- C. Mouse
- D. None of the choices.
- E. RAM
- F. Mass storage device

Answer: F

#### **QUESTION** 361

You are a junior Linux system engineer. You are working on a Linux based PC. You are designing multimedia presentation material to be presented on various Linux systems. Which of the following medias should you consider?

- A. GZIP device
- B. None of the choices.
- C. Tar device
- D. CD Disc
- E. Backup tape
- F. Floppy

Answer: D.

### **QUESTION** 362

You are a junior Linux system engineer. You are working on a Linux based PC. For use in your Linux computer is a 16 bit SCSI implementation capable of transferring 40MB per second. What type of cable should be used?

- A. 68 pin
- B. None of the choices.
- C. 40pin
- D. 82pin
- E. 50pin

Answer: A.

## **QUESTION** 363

You are a junior Linux system engineer. You are working on a Linux based PC. The PC you ordered just arrives. You turn it on. The power supply is running. However, there is NO display and NO beep.

What is the likely cause?

- A. The chassis is damaged.
- B. The CPU does not seat properly.
- C. The power cord is off.

- D. The hard drive is damaged.
- E. None of the choices.

Answer: B.

## **QUESTION** 364

You are a junior Linux system engineer. You are working on a Linux based PC. Somehow the Linux server does not assign the IP addresses to the clients. Even the command "dhcp start" is useless.

What should you do?

- A. None of the choices.
- B. level 4
- C. ./dhcp restart
- D. ./dhcp reset
- E. ./dhcp stop start

Answer: C.

## **QUESTION 365**

You are a junior Linux system engineer. You are working on a Linux based PC. There is a network outage between Linux and the remote web site.

How do you locate the point of failure?

- A. traceroute
- B. hardware
- C. cat
- D. dmesg
- E. show
- F. hw
- G. display

Answer: A.

#### **QUESTION** 366

You are a junior Linux system engineer. You are working on a Linux based PC. How do you change your finger information?

A. Run chkconfig

- B. None of the choices.
- C. Run chmod
- D. Run chgrp
- E. Run chfn

Answer: E.

#### **QUESTION** 367

You are the Linux technician responsible for maintaining the Linux computers on your network.

Peter from a virtual terminal runs a program that locks the terminal.

How do you close the locked terminal?

- A. Switch to run level 1 and kill the locked virtual terminal.
- B. Switch to a different virtual terminal and kill the locked virtual terminal.
- C. Switch to a different virtual terminal and run a cron job.
- D. Switch to run level 5 and kill the locked virtual terminal.

Answer: B.

#### **OUESTION** 368

You are the Linux server administrator of Certkiller . You found a potential bug when using XFree86 on your computer, making it impossible to run X.

What should you do?

- A. Report to the XFree86 project team.
- B. None of the choices.
- C. Reinstall XFree86 with the -a parameter.
- D. Press Ctrl+C to bypass XFree86.
- E. Reinitialize X with the s- option.

Answer: A.

#### **QUESTION** 369

You are the Linux server administrator of Certkiller . You just recompiled your kernel to include new modules. GRUB is not used as the boot loader.

After editing the appropriate configuration file, what command should you issue?

- A. /usr/lilo
- B. /bin/lilo
- C. /sbin/lilo
- D. /opt/lilo

Answer: C.

## **QUESTION** 370

You are the Linux technician responsible for maintaining the Linux computers on your network. How do you show who is currently logged in?

- A. None of the choices.
- B. whoaml
- C. who
- D. finger
- E. whois

Answer: C.

#### **QUESTION** 371

You are the Linux server administrator of Certkiller.

What command do you use to watch the mail log for error?

- A. sendmail -l
- B. None of the choices.
- C. cat mail.log
- D. mail.log < in
- E. showmail

Answer: C.

### **QUESTION** 372

You are the Linux technician responsible for maintaining the Linux computers on your network.

What command will print your own effective userid?

- A. who
- B. whoami
- C. None of the choices.
- D. whois
- E. finger

Answer: B.

#### **QUESTION** 373

You are the Linux server administrator of Certkiller . When you boot Linux, only the "Li" of LILO appears.

What is the likely cause?

- A. Partition was extended to pass the 1024 cylinders.
- B. LILO.com missing.
- C. LILO is on the firs hard drive while Linux is on the second.
- D. LILO uninstalled.

Answer: A.

#### **QUESTION** 374

You are the Linux server administrator of Certkiller.

What is the command ps for?

- A. Allocate memory for process.
- B. View the current processes statuses.
- C. View the past processes statuses history.

- D. Enforce a process.
- E. None of the choices.

Answer: B.

#### **QUESTION** 375

You are the Linux technician responsible for maintaining the Linux computers on your network. How do you view PDF files on Linux?

- A. XPDF
- B. None of the choices.
- C. Xacrobat
- D. Xviewer
- E. Xview

Answer: A.

#### **QUESTION** 376

You are the Linux server administrator of Certkiller . You need to examine the running processes owned by John.

What command should you use?

- A. None of the choices.
- B. ps only
- C. grep only
- D. cat and ps
- E. cat only
- F. ps and grep

Answer: F.

### **QUESTION** 377

You are the Linux server administrator of Certkiller . Your Linux has multiple OS. Lilo is the boot manager. Somehow the system reboots without access to the other OSs.

Which file requires editing so that you can access the other OSs through LILO?

- A. None of the choices.
- B. lilo.conf
- C. conf.lilo
- D. lilo.so
- E. lilo.config

Answer: B.

## **QUESTION** 378

You are the Linux server administrator of Certkiller . You want to be updated with the latest

process status info automatically in a repetitive manner. What command should you use?

A. top

B. None of the choices

C. listpro

D. wall

E. ps

Answer: A.

#### **QUESTION** 379

You are the Linux technician responsible for maintaining the Linux computers on your network.

You are configuring saver functions. The Xscreensaver program itself is a daemon?

A. False

B. True

Answer: B.

#### **OUESTION** 380

You are the Linux server administrator of Certkiller.

What do you use to decompress a RPM package with a .gz extension?

A. rpm

B. tar

C. unzip

D. gunzip

E. uncompress

Answer: D.

#### **QUESTION** 381

You are the Linux server administrator of Certkiller . You want to track software installed on clients' computers.

How do you find out what RPM packages are installed?

A. rpm -qa || grep

B. rpm -vr | grep

C. rpm qa | grep

D. rpm -verify < grep

E. None of the choices.

Answer: C.

#### **OUESTION** 382

You are a junior Linux system engineer. You are working on a Linux based PC. What command can be used to gather hardware information on your Linux system?

- A. hw
- B. show
- C. hardware
- D. dmesg
- E. traceroute
- F. cat
- G. display

Answer: D.

### **QUESTION** 383

You are a junior Linux system engineer. You are working on a Linux based PC. Which of the following devices will directly use DMA channel on your system?

- A. Mouse
- B. External modem
- C. ISA Sound card
- D. None of the choices.
- E. RAM

Answer: C.

#### **QUESTION** 384

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following correctly describe ATAPI?

- A. Extending DMA
- B. None of the choices.
- C. Extending SCSI
- D. Extending IRQ
- E. Extending EIDE

Answer: E.

#### **QUESTION** 385

You are a junior Linux system engineer. You are working on a Linux based PC.

You are using the chat program.

Which of the following Linux daemons is likely to run together with this program?

- A. pppd
- B. httpd
- C. nisd

- D. None of the choices.
- E. nfsd

Answer: A.

# **QUESTION** 386

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following is the printer description file?

- A. None of the choices.
- B. /etc/printcap

C. rc 9

D. rc 8

E. lpd.so

Answer: B.

### **QUESTION** 387

You are a junior Linux system engineer. You are working on a Linux based PC. Your Linux client cannot browse the web by names. However, ping works.

What is the problem?

- A. BIND
- B. Hardware configuration
- C. DHCP
- D. Network congestion
- E. None of the choices.

Answer: A.

### **QUESTION** 388

You are a junior Linux engineer. You are working on a Linux based PC.

What command can you use to compress and expand data?

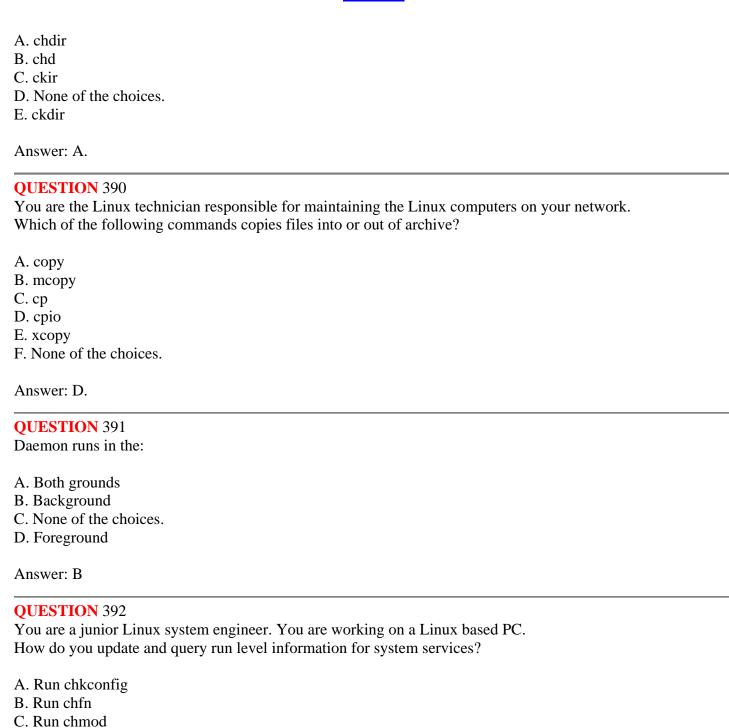
- A. decomp
- B. concentrate
- C. None of the choices.
- D. compress
- E. comp

Answer: D.

# **QUESTION** 389

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following commands allow you to change your working directory?



# **QUESTION** 393

E. Run chgrp

Answer: A.

D. None of the choices.

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following command can be used to change the file attributes on your Linux system?

A. chat B. chattr C. attribute D. None of the choices. E. attest Answer: B.
QUESTION 394 You are a junior Linux system engineer. You are working on a Linux based PC. How do you obtain and manipulate time?
A. set B. clock C. sh time D. time E. None of the choices.
Answer: B.
QUESTION 395 You are a junior Linux system engineer. You are working on a Linux based PC. How do you update password file in batch?
A. chpd B. set pass C. chpasswd D. ch pw E. chpw F. None of the choices.
Answer: C.
QUESTION 396 You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following can be used to print a file?
A. lip B. print C. None of the choices. D. lpr E. prt

Answer: D.

### **QUESTION** 397

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following can handle dependency descriptions for loadable kernel modules?

- A. loaddep
- B. depmode
- C. lsdep
- D. None of the choices.
- E. depload

Answer: B

# **QUESTION** 398

You are the Linux technician responsible for maintaining the Linux computers on your network.

What command allows you to copy MSDOS files to and from UNIX?

- A. cp
- B. None of the choices.
- C. xcopy
- D. mcopy
- E. copy

Answer: D.

### **QUESTION** 399

You are the Linux technician responsible for maintaining the Linux computers on your network.

The netstat command does not display which of the following?

- A. routing tables
- B. interface statistics
- C. network connections
- D. masquerade connections
- E. None of the above.

Answer: E.

#### **QUESTION** 400

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following is known as the print spool directory?

- A. /usr/print/
- B. /usr/printsp/
- C. None of the choices.
- D. /var/spool/
- E. /opt/spool/

Answer: D.

#### **QUESTION** 401

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following are the valid parameters of the netstat command?

- A. -a
- В. -р
- C. -v
- D. -1
- Е. -е
- F. All of the choices.

Answer: F.

#### **QUESTION** 402

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following will remove a job from the print queue?

- A. lpr
- B. lpq
- C. lprm
- D. lpre
- E. None of the choices.

Answer: C.

#### **QUESTION** 403

You are a junior Linux system engineer. You are working on a Linux based PC. You need to define automated conversational scrip with a modem.

What command should you consider?

- A. chat
- B. modem
- C. ppp
- D. None of the choices.
- E. script

Answer: A.

### **QUESTION** 404

You are the Linux technician responsible for maintaining the Linux computers on your network. Print request to LPD must come from computers that are listed in:

A. rc 9

- B. rc 8
- C. lpd.so
- D. /etc/hosts.equiv
- E. /etc/printcap
- F. None of the choices.

Answer: D.

### **QUESTION** 405

You are the Linux technician responsible for maintaining the Linux computers on your network. During system boot up, you receive an "exiting error", and the system never reaches the console login prompt.

Which of the following is the likely cause?

- A. CRC error
- B. MBR failure
- C. None of the choices.
- D. Disk fragmentation
- E. Kernel corruption

Answer: E.

#### **QUESTION** 406

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following represents the dynamic linker?

- A. dyn.so
- B. None of the choices.
- C. dyn.lnk
- D. ld.so
- E. link.dy

Answer: D.

### **QUESTION** 407

You are a junior Linux system engineer. You are working on a Linux based PC.

When you start an X Window application, you receive the error "cant' open display".

What is the cause?

- A. Registry corruption.
- B. None of the choices.
- C. The application is using the wrong graphic library.
- D. Resolution is too high.
- E. Resolution is too low.

Answer: C.

# **QUESTION** 408

You are a junior Linux system engineer. You are working on a Linux based PC.

How do you clear the terminal screen?

- A. cls
- B. clean
- C. clear
- D. erase
- E. None of the choices.

Answer: C.

# **QUESTION** 409

You are a junior Linux system engineer. You are working on a Linux based PC.

Modprobe will automatically load all base modules needed in a module stack, as described by:

- A. The metabase.
- B. The ini file.
- C. None of the choices.
- D. The registry file.
- E. The dependency file.

Answer: E.

# **QUESTION** 410

You are a junior Linux system engineer. You are working on a Linux based PC. In Linux you can update the password in batch only of the password is in unencrypted state.

- A. True.
- B. Falsee.

Answer: B.

#### **QUESTION** 411

You are the Linux technician responsible for maintaining the Linux computers on your network. The behavior of depmod can be adjusted by the configuration file named:

- A. /etc/conf.modules
- B. /etc/confmodules
- C. None of the choices.
- D. /etc/conf modules
- E. conf.module

Answer: A.

### **QUESTION** 412

You are the Linux technician responsible for maintaining the Linux computers on your network. How do you avoid the print queue to be filled up?

- A. queue off
- B. set queue
- C. None of the choices.
- D. minfree
- E. limitsize

Answer: D.

#### **QUESTION** 413

You are the Linux technician responsible for maintaining the Linux computers on your network.

One of your users cannot log in although his password if fine.

What is the cause?

- A. None of the choices.
- B. May be the keyboard "caps lock" is on.
- C. CPU failure
- D. Poor system stability
- E. Kernel corruption

Answer: B.

### **QUESTION** 414

You are the Linux technician responsible for maintaining the Linux computers on your network.

You have just installed some new DLLs.

When you reboot Linux, what will be run at boot up?

- A. ldconfig
- B. ldd
- C. ldexp
- D. ldbridge
- E. None of the choices.

Answer: A.

#### **QUESTION** 415

You are the Linux technician responsible for maintaining the Linux computers on your network.

To use the kill command, you need to specify the pid as well.

Which of the following correctly describe the PID?

- A. It is not needed in the kill command.
- B. It specifies the default kill list for use with cron.
- C. It specifies the list of processes that kill should signal.

D. It specifies the list of programs that should be aborted with prompt.

Answer: C.

### **QUESTION** 416

You are the Linux technician responsible for maintaining the Linux computers on your network. What determines run-time bindings?

A. ldd

B. None of the choices.

C. ldexp

D. ldconfig

E. ldbridge

Answer: D.

#### **QUESTION** 417

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following actions is least likely to affect the other services on the same Linux PC?

- A. Kill a daemon.
- B. Remove the NIC.
- C. Reboot the system.
- D. Shut down the system.
- E. None of the choices.

Answer: A

#### **QUESTION** 418

You are the Linux technician responsible for maintaining the Linux computers on your network. Ideonfig should normally be run by which of the following accounts?

- A. Normal application
- B. System utility
- C. Normal user
- D. None of the choices.
- E. Super user

Answer: E.

#### **QUESTION** 419

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following commands can list the loaded modules?

A. msmod

B. depmode

- C. Ismode
- D. listmode
- E. lsmod
- F. None of the choices.

Answer: E.

### **QUESTION** 420

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following will print shared library dependencies?

- A. ldd
- B. ldbridge
- C. None of the choices.
- D. ldexp
- E. ldconfig

Answer: A.

### **QUESTION** 421

You are the Linux technician responsible for maintaining the Linux computers on your network. How do you print the version number of ldd?

- A. Run ldd
- B. Run ldd with -v
- C. Run ldd with -V
- D. Run lddver
- E. None of the choices.

Answer: B.

# **QUESTION** 422

You are the Linux technician responsible for maintaining the Linux computers on your network. At boot time, the line printer daemon is invoked from which file?

- A. None of the choices.
- B. ldconfig.so
- C. rc 8
- D. rc 9
- E. lpd.so

Answer: C.

#### **OUESTION 423**

You are the Linux technician responsible for maintaining the Linux computers on your network. Lpc can be used to:

- A. Enable printer spool queue
- B. Disable printer spool queue
- C. Enable printer
- D. All of the choices.
- E. Disable printer

Answer: D.

### **QUESTION** 424

You are the Linux technician responsible for maintaining the Linux computers on your network. The lpc command can control the printers listed in which of the following files?

- A. /opt/printcap
- B. /usr/printcap
- C. /etc/printcaps
- D. /etc/printcap
- E. /ect/print\_cap

Answer: D.

# **QUESTION** 425

You are the Linux technician responsible for maintaining the Linux computers on your network. Information obtained from Ismod can also be found from:

- A. /proc/ram
- B. /proc/modes
- C. None of the choices.
- D. /proc/module\_stat
- E. /proc/modules

Answer: E.

## **QUESTION** 426

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following is the line printer daemon?

- A. ldexp
- B. ldbridge
- C. None of the choices.
- D. lpd
- E. lpconfig

Answer: D.

### **QUESTION** 427

You are the Linux technician responsible for maintaining the Linux computers on your network.

Somehow your NIC ceases functioning.

What is your first thing to do?

- A. Change the NIC.
- B. Reboot the server.
- C. Check the link light for connectivity.
- D. Reset the BIOS.

Answer: C.

### **OUESTION** 428

You are a junior Linux system engineer. You are working on a Linux based PC.

Your compresses files can be restored to their original form using which of the following commands?

- A. decomp
- B. decompress
- C. None of the choices.
- D. uncom
- E. uncompress

Answer: E.

# **QUESTION** 429

You are the Linux technician responsible for maintaining the Linux computers on your network.

What command formats and displays the on-line manual pages?

- A. man
- B. help
- C. prthelp
- D. manuals
- E. None of the above.

Answer: A.

# **QUESTION** 430

You are the Linux technician responsible for maintaining the Linux computers on your network. In Linux, files can be copied around by using:

- A. None of the choices
- B. copy
- C. mcopy
- D. cpio
- E. cp

F. xcopy

Answer: E.

### **QUESTION** 431

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following can handle loadable modules automatically?

- A. depmode
- B. depload
- C. loaddep
- D. lsdep
- E. None of the choices.

Answer: A.

#### **QUESTION** 432

You are the Linux technician responsible for maintaining the Linux computers on your network.

Why would you use the df command?

- A. report filesystem disk space usage
- B. report filesystem disk fragmentation
- C. report filesystem disk error
- D. report filesystem disk time

Answer: A.

#### **OUESTION** 433

You are the Linux technician responsible for maintaining the Linux computers on your network, When you use the df command, how do you list inode information instead of block usage?

- A. Use -p
- B. Use -n
- C. Use -i
- D. Use -a
- E. None of the choices.

Answer: C.

### **QUESTION** 434

You are the Linux technician responsible for maintaining the Linux computers on your network. How do you list directory contents? (Select all that apply.)

- A. dirfiles
- B. lsmod
- C. dir

- D. ls
- E. None of the choices.

Answer: C, D.

# **QUESTION** 435

You are the Linux server administrator of Certkiller.

To allow chown to operate on files and directories recursively, what parameter should you use?

- A. -r
- B. -R
- C. -recur
- D. None of the chocies.
- E. -v
- F.-h

Answer: B.

#### **QUESTION** 436

You are the Linux server administrator of Certkiller.

When using the unmount command, what is "-a" for?

- A. None of the choices.
- B. Mount all of the file system described in /etc/mtab.
- C. Unmount all of the file systems described in /etc/mtab.
- D. Unmount all of the file systems described in /opt/mtab.
- E. Unmount all of the file systems described in /usr/mtab.

Answer: C.

#### **OUESTION** 437

You are the Linux server administrator of Certkiller.

What is the purpose of cron?

- A. Change permissions.
- B. None of the choices.
- C. Run specified commands in defined times.
- D. Manage incoming and outgoing requests.
- E. Set system clock.

Answer: C.

#### **QUESTION** 438

You are the Linux technician responsible for maintaining the Linux computers on your network.

Which of the following is a valid text editor?

- A. picasus
- B. None of the choices.
- C. Notepad
- D. vi
- E. Wordpad

Answer: D.

# **QUESTION** 439

You are the Linux server administrator of Certkiller.

When pwconv is run, what will happen if /etc/shadow does not exist?

- A. System restarts
- B. User fails to logon
- C. None of the choices.
- D. Password attributes in /etc/passwd will be moved to the corresponding location in /etc/shadow
- E. System error

Answer: D.

#### **OUESTION** 440

You are the Linux server administrator of Certkiller . You want chown to output a diagnostic for every file processed.

What parameter should you specify?

- A. -recur
- B. None of the choices.
- C. -r
- D. -R
- E. -h
- F. -v

Answer: F.

### **QUESTION** 441

You are the Linux server administrator of Certkiller . You are using cron for job scheduling. You just modified the crontab file.

What should you do to make the new changes affective?

- A. None of the choices.
- B. Do nothing.
- C. Change the run level.
- D. Reboot the server.
- E. Reset the cron parameters.

Answer: B.

# **QUESTION** 442

You are the Linux server administrator of Certkiller.

Which of the following server activities is least important to be noted in the server documentation?

- A. None of the choices.
- B. Kernel upgrade.
- C. RAM upgrade.
- D. NIC replacement.
- E. Video card replacement.

Answer: E.

#### **OUESTION** 443

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following is the NIS build and install program?

- A. ypset
- B. ypinstall
- C. ypbuild
- D. None of the choices.
- E. ypinit
- F. ypbind

Answer: E.

### **QUESTION** 444

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following will find the server for a NIS domain and store the information in a binding file?

- A. None of choices.
- B. ypset
- C. ypinit
- D. ypbind
- E. ypbuild
- F. ypinstall

Answer: D

#### **OUESTION** 445

You are the Linux server administrator of Certkiller.

What do you use to schedule a job for execution only once?

A. at

- B. crontab
- C. None of the choices.
- D. attab
- E. cron

Answer: A.

# **QUESTION** 446

You are the Linux technician responsible for maintaining the Linux computer on your network.

How do you send a message to everybody's terminal?

- A. wall
- B. dmesg
- C. sysmesg
- D. None of the choices
- E. send

Answer: A.

### **QUESTION** 447

You are the Linux server administrator of Certkiller.

Which of the following commands can be used to change user AND group ownership?

- A. chgrp
- B. choowngrp
- C. chown
- D. groupchange
- E. None of the choices.

Answer: C.

### **QUESTION** 448

You are the Linux server administrator of Certkiller . Somehow you failed to use the crontab command.

What should you do?

- A. Make sure you are listed in the allow file and not listed in the deny file.
- B. None of the choices.
- C. Make sure you the deny file is deleted.
- D. Make sure you are not listed in the allow file and not listed in the deny file.
- E. Make sure you are listed in the allow file and the deny file.

Answer: A.

# **QUESTION** 449

You are the Linux server administrator of Certkiller . In the /etc/shadow file, what indocates that

an user account is disabled	?
A. !	
B. &&	
C. None of the choices.	
D. *	
E. //	

Answer: D.

### **QUESTION** 450

You are the Linux server administrator of Certkiller . Which of the following commands is most useful for determining if an Ethernet card problem is caused by the kernel or the hardware?

A. print

B. route

C. None of the choices.

D. dmesg

E. ifconfig

F. both dmesg and ifconfig.

Answer: F

### **QUESTION** 451

You are the Linux server administrator of Certkiller . Which of the following files contains descriptive information about the various file systems in Linux?

A. mstab

B. mnttab

C. None of the choices.

D. fstab

E. filetab

Answer: D.

# **QUESTION** 452

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following is an improved version of vi?

A. vim

B. None of the choices.

C. emacs

D. vie

E. picos

Answer: A.

# **QUESTION** 453

You are the Linux server administrator of Certkiller . You want to set up a cron job to monitor printing. However, it seems like it doesn't run at all.

What should you do?

- A. Check the process list to locate an instance of the cron job and inspect the system run level.
- B. Check the process list to locate an instance of the cron job and inspect the processor utilization.
- C. None of the choices.
- D. Check the process list to locate an instance of the cron job and inspect the cron log file.

Answer: D.

# **QUESTION** 454

You are the Linux server administrator of Certkiller . In Sendmail, how do you prevent Aliasing?

- A. Precede the address with simi colon.
- B. Precede the address with colon.
- C. Precede the address with double backslashes.
- D. None of the choices.
- E. Precede the address with backslash.

Answer: E.

#### **OUESTION** 455

You are the Linux server administrator of Certkiller.

What command do you use to set disk usage quota for users?

- A. quotaon
- B. quota
- C. None of the choices.
- D. setquota
- E. diskquote
- F. diskquota

Answer: D.

# **QUESTION** 456

You are the Linux server administrator of Certkiller.

To extract file with the tgz extension, you should use:

- A. cpio
- B. None of the choices.
- C. cpm
- D. compress
- E. Xtool

F. tar

Answer: F.

# **QUESTION** 457

You are the Linux server administrator of Certkiller.

What command do you use to announce to the system that disk quotas should be enabled on the file system?

- A. quotaon
- B. diskquote
- C. None of the choices.
- D. setquota
- E. diskquota
- F. quota

Answer: A.

#### **QUESTION** 458

You are the Linux server administrator of Certkiller.

What command do you use to list the tables used by cron?

- A. None of the choices.
- B. attab
- C. at
- D. cron
- E. crontab

Answer: E.

### **QUESTION** 459

You are the Linux server administrator of Certkiller.

Which of the following commands can you use to create passwd from passwd and shadow, and then removes the shadow for you?

- A. pwconv
- B. grpunconv
- C. None of the choices.
- D. pwunconv
- E. grpconv

Answer: D.

#### **OUESTION** 460

You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following provides screen saver function in Linux?

- A. xscreenSaver
- B. xsave
- C. None of the choices.
- D. xscreen
- E. XSS

Answer: A.

### **QUESTION** 461

You are the Linux technician responsible for maintaining the Linux computer on your network.

You are setting up NIS.

Which of the following is the path of the binding file?

- A. /opt//yp/binding
- B. /var/binding
- C. /var/binding/yp
- D. None of the choices.
- E. /var/yp/binding

Answer: E.

# **QUESTION** 462

You are the Linux server administrator of Certkiller . You failed to perform a graphical login to X.

X did not start properly.

What is the ultimate solution?

- A. Change the run level.
- B. Reset the password.
- C. Login as sys and reinstall X.
- D. Login as root and reconfigure X.

Answer: D.

### **QUESTION** 463

You are the Linux server administrator of Certkiller.

Which of the following Linux programs provide mail routing capabilities?

- A. Mailsend
- B. Exchange
- C. Sendmail
- D. MailExchange
- E. None of the choices.

Answer: C.

### **QUESTION** 464

You are the Linux server administrator of Certkiller.

Which of the following files store information of the mounted file system?

- A. /usr/mount.so
- B. /etc/mtab
- C. None of the choices.
- D. /etc/mount.tab
- E. /mount

Answer: B.

### **OUESTION** 465

You are the Linux server administrator of Certkiller.

Which of the following is a common switch to show command syntax for Linux programs?

- A. None of the choices.
- B. -man
- C.-HELP
- D.-h
- E. -n

Answer: D.

### **QUESTION** 466

You are the Linux server administrator of Certkiller . Your Linux has multiple OS. Lilo is the boot manager.

Which of the following lines should be edited in the LILO configuration file so that you can access the other OSs through LILO?

- A. A line of "Other" ="
- B. A line of "Label ="
- C. A line of "Table ="
- D. All of the choices.

Answer: D.

# **QUESTION** 467

You are the Linux server administrator of Certkiller.

From where can you configure options of xscreensaver?

- A. None of the choices.
- B. .xscreensaver
- C. .xscr
- D. .xresources
- E. .xinit

Answer: B

#### **QUESTION** 468

You are the Linux server administrator of Certkiller . In which of the following directories can system generated messages be checked?

- A. /boot
- B. /msg/log
- C. /var/log
- D. /tmp
- E. None of the choices.

Answer: C.

# **QUESTION** 469

You are the Linux server administrator of Certkiller . You are using TAR. TAR can be instructed to automatically compress and decompress during backup using what option?

- A. None of the choices.
- B. -dc
- C. -z
- D. -a
- E. -c

Answer: C.

### **QUESTION** 470

You are the Linux server administrator of Certkiller . You insert a CD and try to transfer a file to your own account. The "ls /mnt/cdrom" command shows you the wrong directory tree. What is the likely cause?

- A. None of the choices.
- B. MBR corruption
- C. Improper mounting
- D. System unstable
- E. Disk fragmentation

Answer: C.

### **QUESTION** 471

You are the Linux server administrator of Certkiller.

Where are crontab files located?

- A. /var/spool/crontab
- B. Memory

- C. /var/spool/cron
- D. /var/cron
- E. None of the choices.
- F. Cache

Answer: C.

# **QUESTION** 472

You are the Linux server administrator of Certkiller . You insert a CD and try to transfer a file to your own account. The "ls /mnt/cdrom" command shows you the wrong directory tree. What should you do first?

- A. unmount /mnt/cdrom
- B. unmount cdrom
- C. mount /mnt/cdrom
- D. None of the choices.

Answer: A.

# **QUESTION** 473

You are the Linux server administrator of Certkiller.

To show all the status of all the network interfaces, the command to use is?

- A. if config everything
- B. ifconfig -stat
- C. None of the choices.
- D. ifconfig -allstat
- E. if config -a

Answer: E.

### **QUESTION** 474

You are the Linux server administrator of Certkiller.

What file is used by the Sendmail program for name aliasing?

- A. None of the choices.
- B. mailali
- C. mail\_aliases
- D. aliases
- E. mailal

Answer: D.

#### **OUESTION** 475

You are the Linux server technician for Certkiller . Regarding Linux server maintenance, which of the following record must you keep?

- A. None of the choices.
- B. Version numbers of the patches applied.
- C. Server reboots time.
- D. New users added to the systems.
- E. Administrator logon time.

Answer: B.

### **QUESTION** 476

You are the Linux server administrator of Certkiller.

Which of the following programs can write information to fstab?

- A. crontab
- B. None of the choices.
- C. passwwd
- D. sendmail
- E. shadow

Answer: B.

# **QUESTION** 477

You are the Linux server administrator of Certkiller . What do you use to identify bad passwords?

- A. CERT
- B. None of the choices.
- C. Crack
- D. Tigering
- E. Hack

Answer: C.

### **QUESTION** 478

You are the Linux server administrator for Certkiller.

Which of the following is the major config file used by XFree86?

- A. initx
- B. xinit
- C. startx
- D. xf86config
- E. xstart

Answer: D.

# **QUESTION** 479

You are the Linux server administrator for Certkiller . You experienced a power failure, and now

the system suffers from system corruption.

What should you do?

- A. Log into single user mode and run LILO.
- B. Log into single user mode and run fsck.
- C. Log into multi user mode and run fsck.
- D. Log into single user mode and run chkdsk.

Answer: B.

### **QUESTION** 480

You are the Linux server administrator of Certkiller.

How do you specify the effective group identification of the process currently running?

- A. addgroup
- B. setgid
- C. setid
- D. groupadd
- E. None of the choices.
- F. setuid

Answer: B.

### **QUESTION** 481

You are the Linux server administrator of Certkiller.

What command do you use to compile and install an application form its source code?

- A. compile
- B. install
- C. depmode
- D. make
- E. None of the choices.
- F. rpm

Answer: D.

#### **QUESTION** 482

You are the Linux server administrator of Certkiller . You want to use the cat command to find out the current swap memory usage information.

Which of the following should be inspected by cat?

- A. /proc/meminfo
- B. /proc/ram
- C. None of the choices.
- D. /proc/temram
- E. /proc/swapinfo

Answer: A.

#### **QUESTION** 483

You are the Linux server administrator of Certkiller . On a dual CPU system, what command will you use to verify that both CPU's are recognized?

- A. grep
- B. chkw
- C. dmesg
- D. cat
- E. None of the choices.
- F. find

Answer: D.

# **QUESTION** 484

You are the Linux server administrator of Certkiller.

Which of the following is responsible for locating server in a NIS domain and saving corresponding information in a binding file?

- A. ypconfig
- B. ypload
- C. None of the choices.
- D. ypbind
- E. ypset

Answer: D.

### **QUESTION** 485

You are the Linux server administrator for Certkiller.

Why is there a bin directory in the anonymous FTP user's home directory?

- A. It is REQUIRED by the server for security purpose.
- B. It is necessary to provide copies of common binaries.
- C. None of the choices.
- D. It is necessary to provide copies of images.
- E. The user creates it.

Answer: B.

#### **QUESTION** 486

You are the Linux server administrator of Certkiller . Files created by which of the following compression utilities can be extracted by gunzip?

A. gzip

- B. compress
- C. All of the choices.
- D. pack
- E. zip

Answer: C.

### **QUESTION** 487

You are the Linux server administrator of Certkiller . You just executed the uptime command.

What output do you expect?

- A. How long the system has been running.
- B. How many users are currently logged on.
- C. System load averages.
- D. All of the choices.
- E. Current time.

Answer: D.

### **QUESTION** 488

You are the Linux server administrator of Certkiller . How do you ensure that XFree86 can be run on your PC's display card?

- A. Run xf86config.
- B. Run xfconf.
- C. None of the choices.
- D. Check the compatibility list.
- E. Run XF86Setup.

Answer: D.

### **QUESTION** 489

You are the Linux server administrator of Certkiller . You just installed a second IDE disk into your system.

As a device, this disk should be referred to as?

- A. /dev/sdc
- B. /dev/sdv
- C. /dev/sda
- D. /dev/had
- E. /dev/hdb

Answer: E.

# **QUESTION** 490

You are the Linux server administrator of Certkiller.

How do you enable support for two VGA adaptors with Xfree86?

- A. Recompile the kernel.
- B. Run Xconfig.
- C. It is not supported.
- D. None of the choices.
- E. Change the rc.1 script.
- F. Edit the startx file

Answer: C.

# **QUESTION** 491

You are the Linux server administrator of Certkiller.

Which of the following is a local filesystem used for CD-ROM drives?

- A. ext
- B. minix
- C. xiafs
- D. hpfs
- E. iso9660
- F. ext2
- G. msdos

Answer: E.

# **QUESTION** 492

You are the Linux server administrator of Certkiller . Which of the following is a local filesystem that supports filenames of 14 or 30 characters only?

- A. ext
- B. xiafs
- C. msdos
- D. ext2
- E. hpfs
- F. iso9660
- G. minix

Answer: G.

### **QUESTION** 493

You are the Linux server administrator of Certkiller.

Where will the system check places file fragments when your system is rebooted after a power failure?

- A. None of the choices.
- B. /lost

- C. /tmp/lost
- D. /lost+found
- E. /lostandfound
- F. /tmp

Answer: D.

### **QUESTION** 494

You are the Linux server administrator of Certkiller.

Which of the following commands allow you to specify user identity?

- A. setid
- B. addgroup
- C. None of the choices.
- D. setuid
- E. setgid
- F. groupadd

Answer: D.

#### **OUESTION** 495

You are the Linux server administrator of Certkiller.

Why should you set up separate partition for /home and /var?

- A. Both of the choices.
- B. System will not subject to failure from log file overrun.
- C. System will not subject to failure from user quota overrun.

Answer: A.

#### **OUESTION** 496

You are the Linux server administrator of Certkiller.

How do you verify the proper operation of your Linux DNS service?

- A. traceroute
- B. ping
- C. None of the choices
- D. testdns
- E. dig

Answer: E.

# **QUESTION** 497

You are the Linux server administrator of Certkiller .

How do you list all installed RPM packages?

- A. rmp -d
- B. None of the choices.
- C. rmp -all
- D. rpm -qa
- E. rpm -s

Answer: D.

# **QUESTION** 498

You are the Linux server administrator of Certkiller.

Which of the following backup methods minimize the time consumed during a backup?

- A. Daily
- B. Incremental
- C. None of the choices.
- D. Full
- E. Differential

Answer: B.

# **OUESTION** 499

You are the Linux server administrator of Certkiller.

What is a regular expression for?

- A. Describes real numbers.
- B. None of the choices.
- C. Describes integers.
- D. Describes symbols.
- E. Describes strings.

Answer: E.

# **QUESTION** 500

You are the Linux server administrator of Certkiller . You receive an error saying no modular support is available.

What is the cause?

- A. The kernel does not support loadable module.
- B. The kernel does not support memory segmentation.
- C. The kernel is corrupted.
- D. None of the choices.
- E. The kernel does not support built in processes.

Answer: A.

### **QUESTION** 501

You are the Linux server administrator of Certkiller . You just installed a new drive into your Linux computer.

In order to place your MP3 collection into the drive, what should you do?

- A. mount
- B. cfdisk
- C. All of the choices.
- D. mkfs

Answer: C.

#### **QUESTION** 502

You are the Linux server administrator for Certkiller . You added some RAM to the server, and the new memory is not seen during boot time.

What should you do?

- A. Edit the lilo configuration file and run GRUB.
- B. None of the choices.
- C. Reboot for the second time.
- D. Power cycle the computer.
- E. Edit the lilo configuration file and rerun LILO.
- F. Run dmesg -conf.

Answer: E.

#### **QUESTION** 503

You are the Linux server administrator of Certkiller.

How do you verify the proper operation of your Linux router?

- A. ping
- B. traceroute
- C. testdns
- D. dig
- E. None of the choices.

Answer: B.

#### **QUESTION** 504

You are the Linux server administrator of Certkiller.

What do you use to install a decompressed RPM package originally with a .gz extension?

- A. rpm
- B. uncompress
- C. None of the choices.
- D. unzip

E. gunzip

F. tar

Answer: A.

### **QUESTION** 505

You are the Linux server administrator of Certkiller . You want to show the amount of free RAM in your system.

Which of the following commands should you use?

- A. who
- B. whoaml
- C. free
- D. whowas
- E. None of the choices.

F. w

Answer: C.

# **QUESTION** 506

You are the Linux server administrator of Certkiller.

What is the best way for you to configure your Xfree86 server?

- A. xfset
- B. Both XF86Setup and xf86config
- C. None of the choices.
- D. XF86Setup
- E. xf86config
- F. xfconf

Answer: B.

#### **OUESTION** 507

You are the Linux server administrator of Certkiller . You found that a user's system has been forwarding junk emails.

How do you stop him?

- A. Restrict the relay domains in the sendmail configuration.
- B. Deploy internal packet filters.
- C. Deploy internal firewalls.
- D. None of the choices.
- E. Block SMTP and POP.

Answer: A.

### **QUESTION** 508

You are the Linux server administrator of Certkiller . You are installing Linux into a new computer.

Where will LILO be installed?

- A. /boot
- B. /home
- C. /master
- D. MBR
- E. /root

Answer: D.

# **QUESTION** 509

You are the Linux server administrator for Certkiller . You asked your peer to document the current server configuration information and place it in a public location.

Which of the following should be excluded from the documentation?

- A. Network settings
- B. Installed components
- C. Disk partitioning scheme
- D. Application config
- E. Root password
- F. None of the choices.

Answer: E.

#### **OUESTION** 510

You are the Linux server administrator of Certkiller . A hacker broke into your network.

Which of the following measures should be taken?

- A. Run FSCK.
- B. Stop the server services and reboot.
- C. Change the root password and lock the account intruded.
- D. Set up a cron job to change passwords for all the accounts regularly.
- E. None of the choices.

Answer: C.

#### **QUESTION** 511

You are the Linux server administrator of Certkiller.

Which of the following backup methods minimize system downtime during a restore?

- A. None of the choices.
- B. Full
- C. Daily

- D. Incremental
- E. Differential

Answer: B.

# **QUESTION** 512

You are the Linux server administrator of Certkiller.

Which of the following passwords should be most secure?

- A. Xpf45sk
- B. San Jose
- C. Rank56
- D. 56ranking

Answer: A.

### **QUESTION** 513

You are the Linux server administrator for Certkiller . You asked peer to document the current server configuration information and place it in a public location.

In addition to:

Disk partitioning scheme

Network settings

Application config

**Installed components** 

Which of the following should be included in the documentation?

- A. List of all user accounts.
- B. Root password.
- C. None of the choices.
- D. Administrator contact info.
- E. System file locations.

Answer: D.

#### **QUESTION** 514

You are the Linux server administrator of Certkiller.

Which of the following encryption methods can be used for the shadow password file?

- A. MD5
- B. RC1
- C. CHA
- D. None of the choices.
- E. X509

Answer: A.

### **QUESTION** 515

You are the Linux server administrator of Certkiller . Your system is running slowly.

You want to find out which application uses most of the resources.

How should you do this?

A. grep

B. top

C. cat /proc

D. None of the choices

E. ps

Answer: B.

# **QUESTION** 516

You are the Linux server administrator of Certkiller.

Which of the following is more important for a workstation installation than a server installation?

A. None of the choices.

B. Proxy

C. XFree86

D. DNS

E. DHCP

Answer: C.

# **QUESTION** 517

You are the Linux server administrator for Certkiller .

Which of the following are the files that provide default templates for new user account?

A. /etc/.bashrc and /etc/skel/bash profile

B. /etc/skel/bash\_rc and /etc/skel/bash\_profile

C. /etc/skel/.bashrc and /etc/bashprofile

D. None of the choices.

E. /etc/skel/.bashrc and /etc/skel/bash profile

Answer: E.

# **QUESTION** 518

You are the Linux sever administrator of Certkiller.

Which of the following commands change file timestamps?

A. finger

B. whowas

C. top

D. who

E. touch

Answer: E.

### **QUESTION** 519

You are the Linux server administrator for Certkiller.

What command do you use to cancel print jobs in print queues?

- A. lprm
- B. lpr
- C. lpq
- D. lpc
- E. None of the choices.

Answer: A.

# **QUESTION** 520

You are the Linux server administrator of Certkiller.

What is the appropriate shell to set for a user account being disabled?

- A. /bin/deny
- B. /bin/false
- C. /bin/disable
- D. None of the choices.
- E. /bin/sh

Answer: B.

#### **OUESTION** 521

You are the Linux server administrator of Certkiller . Your users received permission denied errors when accessing their own home directories.

Which of the following should you do?

- A. Run chmod 088 on all the home directories.
- B. Check the UID:GID of the users' home directories and make changes if needed.
- C. Ask them to restart the client services and retry again.
- D. Delete and recreate those home directories.
- E. None of the choices.

Answer: B.

#### **OUESTION** 522

You are the Linux server administrator of Certkiller . You want to find out who is currently logged on as well as what they are doing.

Which of the following commands should you use?

A. whowas

- B. None of the choices.
- C. who
- D. w
- E. free
- F. whoaml

Answer: D.

# **QUESTION** 523

You are the Linux server administrator for Certkiller.

What file must you create to work with the make utility?

- A. lilo.conf
- B. None of the choices.
- C. ldd.so
- D. ld.config
- E. makefile

Answer: E.

#### **OUESTION** 524

You are the Linux server administrator of Certkiller.

Which of the following is a valid guideline for a good password?

- A. None of the choices.
- B. Sequence of character, numbers and symbols.
- C. Dictionary words.
- D. User's data of birth.
- E. Users name.

Answer: B.

# **QUESTION** 525

\$ nslookup

- > set q=mx
- > server.domain.com

What are you trying to do if you use the above

sample code?

- A) Find out which IP corresponds with mx.server.domain.com.
- B) Get a list of name servers serving domain.com.
- C) Find out which server handles the mail of server.domain.com.
- D) Get updated cache data for a caching proxy server.
- E) Find out the list of hosts in server.domain.com.

Answer: C

### **QUESTION** 526

\$ traceroute 1.2.3.4

traceroute: icmp socket: Operation not permitted In the above session, why did the traceroute fail?

- A) ICMP packets have been blocked at that host.
- B) The traceroute binary is not set uid root.
- C) The host 1.2.3.4 does not exist.
- D) Programs using the ICMP protocol can only be run by root.
- E) The remote host does not accept ICMP packets.

Answer: B

### **QUESTION** 527

md driver 0.90.0 MAX\_MD\_DEVS=256, MAX\_REAL=12

The above message may appear when you boot your system. What is the purpose of the md driver?

- A) Detecting and managing Mitsumi CD-ROM drives
- B) Detecting and managing MD chipsets
- C) Detecting known bugs in the MD sound cards
- D) Detecting and managing software RAID arrays
- E) Detecting known bugs in the CPU

Answer: D

# **QUESTION** 528

After compiling a new kernel, your system runs very slowly. Which one of the following do you do in order to improve the situation?

- A) Compile the kernel with only current devices enabled.
- B) Add more memory.
- C) Re-compile the kernel with shared memory support.
- D) Upgrade your processor.
- D) Compile the kernel with EGCS optimization.

Answer: A

#### **OUESTION** 529

What is the difference between a pipe and a redirection?

- A) A pipe sends to a TCP port; a redirection sends to a UDP port.
- B) A redirection sends output to a program; a pipe sends to a file.
- C) A pipe sends output to a program; a redirection sends to a file.
- D) A redirection is used with filesystems; a pipe is used with networking.

E) They are two words that mean the same thing and are used interchangeably.

Answer: C

# **QUESTION** 530

You have a 486 system with 8 MB of memory, and you want to set up Linux on it for use as a network router. When you start the install, the setup disk begins to boot, but you soon get a message that there is insufficient memory.

Based on the above, which one of the following can you do?

- A) Compile a more basic kernel on another machine for use on this one.
- B) Buy more memory; Linux requires at least 32 MB of memory.
- C) Run a memory diagnostic program to check for bad memory.
- D) Forget the whole idea; Linux requires at least a Pentium class system.
- E) Linux cannot be used as a network router.

Answer: A

#### **QUESTION** 531

Which one of the following is NOT a means of attacking a network?

- A) SYN attack
- B) identd refusal
- C) password sniffing
- D) DOS ("denial of service")
- E) IP spoofing

Answer: B

#### **OUESTION** 532

To redirect standard error output to a file, which one of the following commands is appropriate in BASH?

- A) \$ ./program 0> file
- B) \$ ./program &2 file
- C) \$ ./program > file
- D) \$ ./program | file
- E) \$ ./program 2> file

Answer: E

#### **OUESTION 533**

You have a firewalled Linux server running the Apache Web server. You decide to install the SSL extensions to your

Apache server to do secure e-commerce. You installed everything, but you CANNOT connect to the secure server.

What could be the cause of the problem described above?

- A) The SSL server needs a range of ports to operate, and the firewall cannot support that.
- B) The secure server uses a different port, which might be caught in the firewall.
- C) The Apache server does not fully support the SSL extensions.
- D) The SSL extensions must run as root.
- E) The firewall only allows the main httpd process to run.

Answer: B

# **QUESTION** 534

What is the default log file for syslog?

- A) /var/adm/message
- B) /var/log
- C) /var/log/messages
- D) /usr/tmp/syslog
- E) /var/log/syslog

Answer: C

#### **QUESTION** 535

When X attempts to start, the monitor flashes briefly and then goes back to a text console.

Based on the above, which one of the following is WRONG?

- A) The video card is not properly set up.
- B) The kernel is not compiled with the proper hardware support.
- C) The X config file is missing or corrupt.
- D) The mouse is not connected.
- E) The system does not have enough memory.

Answer: D

# **QUESTION** 536

When buying a hardware SCSI RAID controller, which one of the following helps you find one that is supported in Linux?

- A) There are no hardware RAID systems that are supported in Linux. There are options to use software emulation to create Pseudo-RAIDs.
- B) Look for a controller that is supported in Netware. Linux currently supports all Netware-compatible boot devices.
- C) Look for a controller that is plug and play. Plug and play devices are sure to work in Linux.
- D) Download the latest stable kernel and check the config

options. Most that are supported have a configuration selection.

E) Look for one that supports ASPI. ASPI is an industry-wide standard for SCSI RAID and is well-supported in Linux.

Answer: D

# **QUESTION** 537

You have several hundred dial-up users and a class C network address pool. Which one of the following services lets you provide Internet connectivity to these users WITHOUT getting additional IP addresses?

- A) IP firewalling
- B) dhcpd
- C) netbios service
- D) if config
- E) route

Answer: B

#### **OUESTION** 538

Which one of the following programs is often used in the elimination of spam?

- A) procmail
- B) mailx
- C) mutt
- D) Netscape Messenger
- E) fetchmail

Answer: A

## **QUESTION** 539

Which one of the following allows you to find the time, date, and duration of a recent user's logins?

- A) cd /home; finger \*
- B) cat /var/log/wtmp
- C) last
- D) cat /etc/passwd
- E) finger \*@localhost

Answer: C

### **QUESTION** 540

Which one of the following commands can be useful to find software that is installed insecurely?

A) fsck

- B) find / -perm 4000
- C) locate insecure
- D) find / -insecure
- E) init 0

Answer: A

### **QUESTION** 541

Why do many Linux distributions come with the "shadow password suite" installed by default?

- A) To allow users to change their passwords themselves
- B) To allow the usage of longer passwords
- C) To prevent users from cracking other users' passwords
- D) To prevent cracking using a hacked /bin/login binary
- E) To speed up the login process

Answer: D

# **QUESTION** 542

finger stream tcp nowait root /usr/sbin/tcpd in.fingerd #cfinger stream tcp nowait root /usr/sbin/tcpd in.cfingerd #systat stream tcp nowait guest /usr/sbin/tcpd /bin/ps -auwwx

What is WRONG with the part of inetd.conf presented above?

- A) The path to tcpd is incorrect.
- B) finger is insecure and should be disabled.
- C) systat is required by syslogd.
- D) ";" should used for comments in inetd.conf.
- E) There is nothing wrong; this is the optimal configuration.

Answer: E

#### **QUESTION** 543

You are configuring a network to use DHCP rather than static IP assignment. You want to assign a static IP to your system via the DHCP server.

Referring to the above scenario, which command allows you to find out your Ethernet address?

- A) setserial
- B) route
- C) getmac
- D) if config
- E) hdparm

Answer: D

### **QUESTION 544**

Which one of the following is a file system that you CANNOT mount?

A) swap

B) FAT

C) root

D) VFAT

E) iso9660

Answer: A

#### **QUESTION** 545

With which one of the following does the kernel need to be compiled in order to use multiple processors in Linux?

A) CONFIG\_APM\_IGNORE\_MULTIPLE\_SUSPEND=y

B) CONFIG\_SHAPER=y

C) CONFIG\_SMP=y

D) CONFIG\_DUAL=y

E) CONFIG\_MTRR=y

Answer: C

#### **QUESTION** 546

You have been hired as a new administrator of an existing Linux network. The previous administrator left without telling anyone the root password to the server, and she cannot be reached.

Based on the above, which one of the following allows you to get root access from the console and to change the unknown password to a new one?

- A) Reboot the server. When the system is starting, press the left shift key to get to LILO. When you get the LILO prompt, type "linux rootpass=newpasswd"; newpasswd will become root's new password.
- B) Reboot the server. When the system is starting, press the left shift key to get to LILO. When you get the LILO prompt, type "linux root=/dev/hda1 rw init=/bin/sh". When you get the # prompt, type "passwd" to change the password. Type "sync" and "reboot".
- C) Reboot using a boot disk. When you get the # prompt, type "set newroot passwd" and you will be prompted for a new root password. Reboot again and use the new root password you just set to log in. Type "reboot".
- D) Without the root password, it is virtually impossible to get into Linux to do administrative tasks. The only way to fix the problem is to reinstall Linux completely. Once you have

reinstalled, you should load the old data from tape backup. E) You have to run John the Ripper password cracker on the /etc/passwd file. This will crack all passwords in this file. If shadow passwords are used, you will not be able to crack the passwords, and you must reinstall Linux.

Answer: B

#### **QUESTION** 547

When configuring a new kernel, which one of the following commands displays a text-based color menu interface for selecting kernel options?

- A) make menuconfig
- B) make xconfig
- C) kernelsetup
- D) mkernelconf --ncurses
- E) mkernelconf --color

Answer: A

#### **OUESTION** 548

Which one of the following programs is NOT open-source?

- A) MC 4.5
- B) KDE 1.1
- C) Bash 2.03
- D) EGCS 1.0
- E) Netscape Communicator 4

Answer: D

#### **OUESTION** 549

A typical daemon process will perform the following steps when starting:

fork() and exit

setsid()

fork() and exit again

chdir("/")

close() file descriptors 0, 1, and 2

Establish new open descriptors for stdin, stdout and stderr.

Which one of the following explains the strange startup behavior pictured above?

- A) It allows the process to print error messages to a log file.
- B) It allows the process to answer queries from a TCP port.
- C) It allows the process to have full control of the kernel.
- D) It allows the process to detach from the parent session.
- E) It allows the process to hide from ps and top so the system

administrator will not see them.

Answer: D

### **QUESTION** 550

A user installs Linux for the first time and then figures out he should have created a swap partition. His hard disk is now full with a single Linux partition.

Referring to the scenario above, can the user create a swap space without destroying his data?

- A) Yes, by using a swap file with the swap utilities
- B) Only if he has software to resize his ext2 partition
- C) Yes, by allocating part of the Linux partition to swap with the ext2 utilities
- D) No, he needs to destroy the Linux partition first.
- E) No, he cannot create a swap partition once the installation is over.

Answer: B

### **QUESTION** 551

You download a program provided under the GPL license, and you want to modify it. Which one of the following things can you NOT do?

- A) Add your name to all of the copyright notices.
- B) Change the license of the code.
- C) Resell the modified source.
- D) Redistribute the modified source.
- E) Redistribute modified binaries.

Answer: B

#### **QUESTION** 552

Connected to localhost.

220 host.domain.com FTP server (Version wu-2.5.0(1)) ready.

Name: root

331 Password required for root.

Password:

530 Login incorrect.

Login failed.

ftp>

The above code is the transcript from a failed FTP session.

What do you need to do in order to allow root to connect in this case?

- A) Add the ftp terminal to the file /etc/security.
- B) Remove user root from the /etc/ftpusers file.
- C) Root cannot connect to an FTP server.

- D) Remove root from the hosts.deny file.
- E) There is no super user on this machine.

Answer: D

# **QUESTION** 553

command -U username -P password

Based on the above, which one of the following explains why you should NOT enter a password on the command line for certain programs?

- A) Export regulations on encryption do not allow strong encryption to secure the passwords passed through the shell.
- B) Many programs do not clear their command line copy buffer between invocations, and the next person to run the program will default to the previous password.
- C) There is no problem with using command line passwords.
- D) Other users on the system can see the command line arguments.
- E) Many programs are subject to buffer overflow errors if passwords are entered on a command line.

Answer: B

#### **QUESTION** 554

Which one of the following does NOT allow you to configure Samba shares?

- A) vi smb.conf
- B) LinuxConf
- C) Setup
- D) SWAT
- E) WebMin

Answer: C

## **QUESTION** 555

NIS was installed on your network, but your Linux system still tries to authenticate users locally. What must you do to change that?

- A) Modify /etc/nsswitch.conf.
- B) Modify the /etc/passwd file.
- C) Erase the /etc/passwd file.
- D) Make sure the NIS server resolves.
- E) Modify /etc/hosts.

Answer: D

### **QUESTION** 556

What can open-source licenses provide that other closed-source licenses CANNOT?

- A) Freedom to do anything you want with the source code
- B) Freedom to get programs for free
- C) Freedom to modify source code for personal use
- D) Freedom to redistribute modified source code
- E) Freedom to download and run programs

Answer: C

#### **QUESTION** 557

Joel wants to redirect all console messages to a 9.6 Kbps serial connection on a Linux server running Kernel 2.2 without a monitor.

Based on the above, which one of the following needs to be set up?

- A) The file /boot/serialconsole must exist. The file is a named pipe that redirects console output to the serial port.
- B) The daemon seriald must be running and /etc/serial.conf needs the following: /dev/ttyS0 uart 16550A port 0x03f8 irq 4 spd\_normal skip\_test console=/dev/ttyS0
- C) The kernel needs to have support compiled in and the /etc/lilo.conf should contain: serial=0,9600n8 append="console=tty0 console=tty50,9600"
- D) You need to run devdump console /dev/ttyS0 to dump the console device output to the serial port ttyS0. This will stay in effect until you type "devdump console console" to direct output back to the console.
- E) The kernel needs to have support and /etc/bootparams should contain: boot=serial,ttyS0,9600n8

Answer: B

#### **QUESTION** 558

You need to print four copies of a file with the lpr command.

Which command line argument do you use?

- A) lpr -#4
- B) lpr -w 4
- C) lpr -4
- D) There is no such argument. You need to use a shell script.
- E) lpr -n4

Answer: A

### **QUESTION** 559

For which one of the following reasons is the sticky bit used?

- A) It ensures that programs are not swapped to virtual memory.
- B) It defines small sticky note-type files that are used for storing transient data.
- C) It marks non-removable files.
- D) It differentiates device files from normal files.
- E) It ensures that only a file's owner can remove files in a directory.

Answer: D

### **QUESTION** 560

A user's non-time-critical processes are taking up 98 percent of your system's processor and is making it difficult to use. Based on the above, which one of the following makes the system more usable?

- A) killall -9 `ps -ef | awk '{print \$8}"
- B) batch user
- C) slowuser user
- D) renice +10 -u user
- E) init 0 user

Answer: D

# **QUESTION** 561

You are looking for a high speed SQL database backend for a

Web site, and you do not need transaction support.

Based on the above, which one of the following is a good option?

- A) DBM
- B) PostgreSQL
- C) mSQL
- D) MySQL
- E) Sybase

Answer: C

#### **QUESTION** 562

Which one of the following is a commercial X server?

- A) Accelerated X
- B) XFree86
- C) Xinit
- D) Open Look
- E) Window Maker

Answer: A

#### **QUESTION** 563

"Secure connection to server refused; reverting to insecure method. Using rsh. WARNING: Connection will not be encrypted."

A user reports the above error message he gets from trying to connect to his account. Why did he get that error?

- A) He tried to connect using rsh with a password, but the rsh configuration denied him.
- B) He does not have an account on the server.
- C) He tried to connect using ssh and the ssh server was not running.
- D) He tried to use a secure version of rsh, but the rsh binary on the server does not support encryption.
- E) He tried to telnet to the server, but he should have used rsh.

Answer: C

### **QUESTION** 564

You want to send a bunch of files to another user running a Slackware system. What is the preferred format for the package?

A) RPM

B) TAR

C) JAR

D) DEB

E) RAR

Answer: B

#### **OUESTION 565**

What is a "partition boot record"?

- A. The first sector of a hard disk partition
- B. The first partition of a hard disk
- C. A hard disk's partition table
- D. A set of tables (in binary form) describing a disk, its geometry, and so forth
- E. A bootstrap loader routine

Answer: A

#### **QUESTION** 566

A user wants to open an xterm with 70 characters by 15 lines. Which one of the following commands accomplishes that?

A. xterm -size 15x70

- B. xterm -geometry 70x15+10+10
- C. xterm -c 70 -l 15
- D. xterm -size 70x15
- E. xterm -geometry 0x0+70+15

Answer: A

## **QUESTION** 567

Which one of the following is NOT a standard runlevel?

- A. Administrator mode
- B. X11 mode
- C. Shutdown mode
- D. Single-user mode
- E. Multi-users mode

Answer: A

### **QUESTION 568**

When typing "ifconfig ppp0", the reported IP is 0.0.0.0. Which one of the following might be the problem?

- A. You forgot to specify your IP address in /etc/hosts.
- B. The remote server did not assign an IP address.
- C. The modem was not detected.
- D. Your current IP address is 0.0.0.0.
- E. The dialout process has not occurred yet.

Answer: E

### **QUESTION** 569

Sample Code:

ls | grep -v stop >> /tmp/file

Which one of the following explains the function of the above command string?

- A. It lists the current directory files, greps for files containing the word stop within the file, and gives a verbose listing, which is written to /tmp/file.
- B. It gets a list of the current directory, pipes to grep, grep outputs all files containing stop in the filename, and those filenames are written to the file /tmp/file.
- C. It gets a list of the current directory, moves those files to a directory called stop, and keeps a record of these actions in /tmp/file.
- D. listing, redirected to /tmp/file. Since grep has the -v, it just outputs its version information to STDERR.
- E. It gets a list of the current directory, pipes to grep, grep outputs all except filenames containing stop, and those filenames are appended to the file /tmp/file.

Answer: E

### **QUESTION** 570

Tess King wants to get a new printer for her Linux system. She does NOT want to mess with filters, and she does NOT need color. Which one of the following meets her needs?

- A. Lexmark 2657
- B. Canon BJC-4000
- C. Epson EX710
- D. HP PS printer
- E. Canon BJ-200

Answer:

### **QUESTION** 571

When configuring a new kernel, which one of the following commands displays a text-based color menu interface for selecting kernel options?

- A. mkernelconf --ncurses
- B. make menuconfig
- C. mkernelconf --color
- D. kernelsetup
- E. make xconfig

Answer: B

#### **QUESTION** 572

XF86Setup, the XFree86 setup program, uses a default X server to display configuration options. Which one is it?

- A. XF86\_TGA
- B. XF86 SVGA
- C. XF86 VGA16
- D. XF86\_S3V
- E. XF86\_CONFIG

Answer: C

# **QUESTION** 573

Sample Code:

brw-rw-r-- 1 root root 2, 0 May 5 1998 /dev/fd0

Above is the floppy device. You want to allow selected users to have full access to the floppy drive. What is the best solution?

- A. Change the group to floppy and add those users to group floppy.
- B. Make a symlink to the /dev/users virtual device.
- C. Use chmod 666 /dev/fd0 so everyone can read the floppy drive.
- D. Change the type of the device to character mode (=c) because block devices cannot be shared.
- E. Use chown root.users /dev/fd0 and give the users partial root access with the su command.

Answer: A

### **OUESTION** 574

Which one of the following is WRONG with using xhost + to enable X applications?

- A. It can be used in nearly any environment, except those in which tftp has been enabled. Tftp along with xhost + is a security risk.
- B. It allows any remote users to access your X server's functions, and it is a security risk.
- C. It uses cookies to authenticate. Cookies are insecure by nature and should not be used.
- D. It grants SUID access to all files in your directory.
- E. There is nothing wrong with using xhost + because your terminal will still grant access only to a system to which you are connected.

Answer: B

# **QUESTION** 575

Scenario:

A user complains about not being able to retrieve e-mail from your server.

Based on the above, which one of the following can you do to test this problem from the server?

- A. Telnet localhost 21, type user USERNAME, and type pass PASSWORD. If this works, there is a problem with the client's software.
- B. Telnet localhost 110, type user USERNAME, type pass PASSWORD, and type quit if a message count is displayed. If this works, the problem is likely to be the user's client.
- C. Telnet localhost 13. If you get a response back, the problem is the client software.
- D. Telnet localhost 80 and type 'get /'. If you get a result back, the problem is the client software.
- E. Telnet localhost 25, type hello, type mail from: user@localhost, type rcpt to: user@remotehost, type data, and press enter twice. If this works, then the problem is the user's client e-mail settings.

Answer: E

### **QUESTION 576**

To redirect standard error output to a file, which one of the following commands is appropriate in BASH?

- A. \$ ./program &2 file
- B. \$ ./program > file
- C. \$ ./program | file
- D. \$ ./program 0> file
- E. \$ ./program 2> file

Answer: E

### **OUESTION** 577

Your system has an ISA, PnP internal modem, but Linux CANNOT detect it. The box states "This modem was tested on Windows 95/98/NT but may work on OS/2 and older systems". What is the most likely problem?

- A. You need to use ISA PnP tools to detect it.
- B. Linux does not support ISA PnP modems.
- C. The IRQ configuration is wrong.
- D. You need to update your BIOS to support ISA PnP devices.
- E. The modem is a winmodem and will not work on Linux.

Answer: E

### **QUESTION** 578

Which one of the following allows you to paste in X?

- A. Press Ctrl+S twice.
- B. The left mouse button.
- C. Press Alt+P.
- D. The middle mouse button.
- E. Ctrl+P

Answer: D

#### **QUESTION** 579

Why do many system administrators prefer to use SSH rather than normal telnet?

- A. It provides better logs.
- B. It encrypts the password.
- C. It encrypts the whole connection.
- D. It disables packet sniffers.
- E. It allows for better communication.

Answer: C

# **QUESTION** 580

To setup quotas in Linux so that users only get to use a certain amount of space, which one of the following needs to be done?

- A. Download the user space quota utilities. Setup /etc/quota.conf with the username, maxspace, and maxfiles values. Insert the statement quotastart in your startup scripts.
- B. Add an entry to the GCOS field in /etc/password for the users you want to have quotas. After the shell, type a comma and the quota parameters. An example is: nobody:x:65534:65534:nobody:/home:/bin/sh,quota=32M to add a 32MB quota for user nobody.
- C. Type "export quota=user, size".
- D. When setting up a new filesystem, use the --with-quotas option of mkfs to add the accounting tables needed to use quotas. Once this is done, set up a quotas.def file in each filesystem to define the quota limits.
- E. Compile a kernel with the CONFIG\_QUOTA option and edit your startup scripts to run quotacheck and quotaon. Type "edquota -u user" to add a quota for a user.

Answer: E

### **QUESTION** 581

Scenario:

You need to copy some information from a Windows95 system to Linux. You set up the hard drive from the Windows system as a second drive. After mounting the drive using mount /dev/hdb1 /win95, you type ls -l /win95 and see the files, but some are listed with 8.3 filenames like PROGRA~1. Copying the files does not help; you get the same filenames in the ext2 filesystem to which you have set up to copy.

Based on the above, which one of the following allows you to see the long filenames?

- A. Use mount with the -conv=auto option to automatically read the long filename translation map from Windows and convert the filenames.
- B. Linux is currently unable to use long filenames from a Windows 95 machine. This feature is to be included in the upcoming 2.4 kernel.
- C. vfat support needs to be compiled into the kernel or loaded as a module. Mount the filesystem using vfat as a mount option.
- D. Kernel 2.2.10 or newer needs to be used. Long filename support was added to that version. Mount with ufs as the fstype.
- E. use the -rock option of mount to mount the drive with Rock Ridge extensions that will show long filenames.

Answer: C

### **OUESTION** 582

Which one of the following allows you to tell what runlevel your system uses by default?

- A. Check /etc/inittab and look for the id statement.
- B. Check /etc/mtab and look at the last number for /dev/hda1.
- C. Check /etc/init.d/inetd and look for the runlevel statement.
- D. Check /etc/default and look for DefaultRunLevel.
- E. Type the command drunlevel to find the default.

Answer: A

# **QUESTION** 583

What was the main problem the QT library had when the KDE team began using it?

- A. It was being developed in a foreign country.
- B. It was still in alpha stage.
- C. The author asked for a large amount of money from the developers.
- D. It had license restrictions.
- E. Everyone was using the GTK library.

Answer: D

#### **QUESTION** 584

You download a program provided under the GPL license, and you want to modify

it. Which one of the following things can you NOT do?

- A. Add your name to all of the copyright notices.
- B. Resell the modified source.
- C. Redistribute modified binaries.
- E. Redistribute the modified source.
- F. Change the license of the code.

Answer: F

### **QUESTION 585**

```
Sample Code:

#!/bin/bash

ct=$1

re=$2

rp=$3

for i in $( ls *$ct* );

do

src=$i

tgt=$(echo $i | sed -e "s/$re/$rp/")

mv $src $tgt
```

done

Which one of the following explains the function of the above script?

- A. It renames files with the first argument as a substring.
- B. It moves all files in a directory.
- C. It renames all files in a directory.
- D. It replaces all files with the first argument as a substring with the text of the third argument.
- E. It removes all files in a directory while skipping directories.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **OUESTION** 586

Which one of the following can the "route" program NOT do?

- A. Set up dynamic routes.
- B. Configure multiple routes on a proxy server.
- C. View current routing information.
- D. Set up static routes.
- E. Change the default gateway.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **QUESTION** 587

Sample Code:

\$ ping your.provider.com

ping: unknown host your.provider.com

\$ ping 192.168.1.1

PING 192.168.1.1 (192.168.1.1): 56 data bytes

64 bytes from 192.168.1.1: icmp\_seq=0 ttl=255 time=68.6 ms

• • •

You know the host your.provider.com exists and its IP address is 192.168.1.1.

What may be the problem in the above sample code?

- A. Faulty network wiring
- B. Faulty network device
- C. Problem with hub
- D. Name resolution
- E. The other system's configuration

Answer: C

# **QUESTION** 588

Sample Code:

\$ <TAB>

There are 1948 possibilities. Do you really

want to see them all? (y or n)

A user reports that the above message appeared on his screen. What does the 1948 number refer to?

- A. The commands the user pressed since the account was opened.
- B. The commands the user pressed since he logged in.
- C. The number of binaries on the system.
- D. The number of executable files located in his path.
- E. The number of files in the current directory.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **OUESTION** 589

Which one of the following commands does NOT cause a reboot or shutdown of the system?

- A. shutdown
- B. init 0
- C. halt
- D. init q
- E. reboot

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

# **QUESTION** 590

You are used to configuring Linux 2.2.x firewalls with the "ipchains" command; however, you are now faced with a system running kernel 2.0.x. What command do you use to accomplish the same tasks?

- A. ipautofw
- B. ipfirewall
- C. ipfwadm
- D. ipchains
- E. ipchain

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

# **QUESTION** 591

Scenario:

When X attempts to start, the monitor flashes briefly and then goes back to a text console.

Based on the above, which one of the following is WRONG?

- A. The video card is not properly set up.
- B. The X config file is missing or corrupt.
- C. The system does not have enough memory.

- D. The kernel is not compiled with the proper hardware support.
- E. The mouse is not connected.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 592

Scenario:

A user complains that he cannot print a large file to a lpd printer.

Based on the above, which one of the following do you check or change?

- A. Upgrade the memory on your printer.
- B. fc in /etc/printcap--which tells the spooler to use file compression
- C. rf in /etc/printcap--which restricts certain file types from being printed
- D. af in /etc/printcap--which sets up accounting information
- E. mx in /etc/printcap--which defines the maximum size

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 593

What is the right command line option to start Samba as a stand-alone daemon?

- A. This is impossible; smbd must be run from inetd.conf.
- B. smbd --daemon
- C. smbd
- D. smbd --no-ident
- E. smbd -D

Answer: E

If you're in a hurry, you can start the Samba daemons by hand. As root, simply enter the following commands:

#|

\*

/usr/local/samba/bin/smbd -D\*|

#

\*

/usr/local/samba/bin/nmbd -D\*|

At this point, Samba will be running on your system and will be ready to accept connections.

### **QUESTION** 594

Which one of the following is partition type 82?

- A. Linux
- B. Linux Swap
- C. Linux raid auto
- D. Minix/Old Linux

#### E. CP/M

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **QUESTION** 595

Sample Code:

# telinit s

# telinit 3

What is the purpose of the above code?

- A. To restart all of the services without rebooting the system
- B. To prepare the system for a reboot
- C. To clear the system init queue
- D. To disable the currently running services
- E. To go into administration mode to configure services

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 596

Sample Code:

/dev/hda1 \* 1 128 1028128+ 83 Linux native

The above line is from the fdisk command. What does the \* mean in that line?

- A. An invalid partition
- B. The first partition on the disk
- C. A partition marked as bootable
- D. A limitation in the partition table
- E. Nothing

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

# **QUESTION** 597

Why is it easier for criminals to get information you send from your system to the Internet on a shared network (such as a cable modem) than on a dedicated network (such as an ADSL or T1 line)?

- A. A shared Ethernet network relays packets to all of the hosts because of collisions.
- B. Ethernet frames get bounced to every other adapter when a collision occurs.
- C. A shared network implies that everyone can connect to everyone else's system, regardless of the configuration.
- D. On a shared Ethernet network, all frames are sent to all adapters, regardless of the destination address.
- E. Programs exist to ride the network and fetch frames owned by other systems.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

# **QUESTION** 598

Sample Code:

\$ ping 192.168.100.1

PING 192.168.100.1 (192.168.100.1): 56 data bytes

ping: sendto: Network is unreachable ping: wrote 192.168.100.1 64 chars, ret=-1 ping: sendto: Network is unreachable ping: wrote 192.168.100.1 64 chars, ret=-1

--- 192.168.100.1 ping statistics ---

Which one of the following is a good place to begin diagnosing the above networking problem?

- A. The error is because 192.168.100.1 is a non-routed IP address and cannot be used. Try a different IP address to fix the problem.
- B. The outgoing TCP buffer is full; use the tcpdchk program to check the buffer and clear any stale entries.
- C. Run the netstat program to discover the status of the network. Netstat will tell you if the network status is down.
- D. Run if config and route or netstat to check for the proper settings.
- E. Run the inetd daemon. The network will not work properly unless it is started.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **QUESTION** 599

You have several hundred dial-up users and a class C network address pool. Which one of the following services lets you provide Internet connectivity to these users WITHOUT getting additional IP addresses?

- A. netbios service
- B. route
- C. ifconfig
- D. dhcpd
- E. IP firewalling

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **QUESTION** 600

Which one of the following programs is available for setting up a Samba configuration file?

- A. smbtorture
- B. smbconfig
- C. sambasetup
- D. sambaconfig
- E. swat

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 601

Which operating systems' out of the box configurations require Samba in order to accept encrypted passwords?

- A. Windows 98 and NT
- B. DOS and Windows 3.x
- C. Windows 95 and 98
- D. Unix and Windows NT
- E. Windows 95, 98, and NT

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

## **QUESTION** 602

Which one of the following lines do you put in /etc/syslog.conf to log all critical messages from the kernel to your console?

- A. crit.kernel /dev/console
- B. kernel.critical > /dev/tty
- C. kernel critical /dev/console
- D. kernel:critical /dev/tty
- E. kern.crit /dev/console

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 603

In version 2.2.x kernels, IPChains are used for which one of the following purposes?

- A. To define the IP address, subnet, and gateway
- B. To define IPC permissions
- C. To define users who are allowed to use ftp
- D. To define threaded process chains of authority
- E. To define firewalling settings

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 604

Sample Code:

Desktop 1: 10.0.0.1 Desktop 2: 10.0.0.2 Desktop 3: 10.0.0.3 Proxy: 10.0.0.254

Your office has the above IP setup. Which commands do you use to masquerade their

#### connections?

A. ipchains -P forward MASQ

ipchains -A forward -S 10/24 -d 0/32 -p all

B. ipchains -P forward MASQ

ipchains -A forward -s 10.0.0.0/0 -p all

C. ipchains -P forward MASQ

ipchains -A forward -S 10.0.0.0/32 -d 0.0.0.0/0 -p all

D. ipchains -P forward MASQ

ipchains -A forward -s 10.0.0.0/24 -d 0.0.0.0/0 -p all

E. ipchains -P forward MASQ

ipchains -forward -s 10/10 -d 0/0 -p all

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

## **QUESTION** 605

A user complains that he CANNOT run his IRC server on his account at port 1000.

What is the cause of this problem?

- A. The port is firewalled.
- B. The port is already in use by the mail service.
- C. That port cannot be used by a non-root user.
- D. IRC servers must be run by root.
- E. His account is set to disallow IRC servers.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 606

Sample Code:

Warning: Remote host denied X11 forwarding, perhaps xauth program

could not be

run on the server side.

Janie reports the above error message when she tries to connect to her account.

What might be the problem?

- A. The sshd configuration file does not allow X11 forwarding.
- B. She did not enter the proper DISPLAY environment variable.
- C. She does not run X11 currently.
- D. The telnet server installed does not support X11 forwarding.
- D. The xset program could not be run.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **OUESTION** 607

Which of the following do ipchains configure?

- A. IP masking, firewalling, and masquerading
- B. IP forwarding, chaining, and masquerading
- C. IP routing, chaining, and masquerading
- D. IP chaining, forwarding, and firewalling
- E. IP masquerading, forwarding, and firewalling

Answer: E

#### **QUESTION** 608

If you have a program with missing libraries, in which one of the following ways can you determine which libraries are required for it to run?

- A. Use "strace < ProgramName>" (where < ProgramName> is the name of the misbehaving program).
- B. Use "ldd <ProgramName>" (where <ProgramName> is the name of the misbehaving program).
- C. Use modprobe to probe for the required library modules.
- D. You cannot be sure unless you compile from source.
- E. Use "gdb <ProgramName>" (where <ProgramName> is the name of the misbehaving program).

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **OUESTION** 609

Scenario:

You have a "WinPrinter" laser printer that will print from Windows and a Windows command prompt using HP LaserJet III emulation, but it will not print in DOS alone.

Which one of the following allows you to use the above printer with a Linux system?

- A. The printer can be used by connecting it to lp0 and setting up drivers to use it as a HP LaserJet III printer.
- B. The printer could be attached to a Windows workstation with the proper drivers and shared to the Linux system as a LJ III.
- C. The printer can be used with the Linux LinPrinter drivers. These drivers are commercially licensed and created under an NDA.
- D. The printer can be used as a generic postscript printer attached to the lp1 port.
- E. This printer cannot be used with Linux in any way. It is a Winprinter and is totally incompatible.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **OUESTION** 610

A Beowulf may be described as which one of the following types of system?

- A. SIMD, shared memory, loosely parallel
- B. Multiple CPU, shared memory
- C. Massively parallel architecture, shared memory messaging
- D. Multiple CPU, local memory, message passing
- E. Multiple CPU, threaded memory, MPI

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 611

Scenario:

A new Linux user would like to have a user interface similar to Windows 95. Based on the above, which one of the following window managers looks most similar to Windows 95?

- A. icewm
- B. WindowMaker
- C. Enlightenment
- D. gnome
- E. fvwm95

Answer: E

### **QUESTION** 612

Scenario:

You have a proxy server connected to a local network with addresses 192.168.1.x and to the Internet. You want localhost and the local network to have access to FTP. Referring to the above, what line should you put in hosts.deny?

A. in.ftpd: ALL BUT 127.0.0.1, 192.168.1

B. in.ftpd: ALL EXCEPT 127.0.0.1, 192.168.1.

C. in.ftpd: \* - 127.0.0.1, 192.168.1.0

D. in.ftpd: ALL BUT 127.0.0.1 AND 192.168.1.0 E. in.ftpd: ALL EXCEPT 127.0.0.1; 192.168.1.0/24

Answer: B

### **QUESTION** 613

What is the name of the incompatible bus that IBM introduced several years ago that caused many problems to operating systems such as Linux?

A. PnP

B. EISA

C. PCI

D. VESA

E. MCA

Answer: E

# **QUESTION** 614

Sample Code:

Connected to localhost.

220 host.domain.com FTP server (Version wu-2.5.0(1)) ready.

Name: root

331 Password required for root.

Password:

530 Login incorrect.

Login failed.

ftp>

The above code is the transcript from a failed FTP session. What do you need to do in order to allow root to connect in this case?

- A. Root cannot connect to an FTP server.
- B. Remove user root from the /etc/ftpusers file.
- C. Remove root from the hosts.deny file.
- D. There is no super user on this machine.
- E. Add the ftp terminal to the file /etc/security.

Answer: B

### **QUESTION** 615

To setup quotas in Linux so that users only get to use a certain amount of space, which one of the following needs to be done?

- A. When setting up a new filesystem, use the --with-quotas option of mkfs to add the accounting tables needed to use quotas. Once this is done, set up a quotas.def file in each filesystem to define the quota limits.
- B. Type "export quota=user, size".
- C. Compile a kernel with the CONFIG\_QUOTA option and edit your startup scripts to run quotacheck and quotaon. Type "edquota -u user" to add a quota for a user.
- D. Download the user space quota utilities. Setup /etc/quota.conf with the username, maxspace, and maxfiles values. Insert the statement quotastart in your startup scripts.
- E. Add an entry to the GCOS field in /etc/password for the users you want to have quotas. After the shell, type a comma and the quota parameters. An example is:

nobody:x:65534:65534:nobody:/home:/bin/sh,quota=32M to add a 32MB quota for user nobody.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

#### **QUESTION** 616

Which one of the following protocols can be used by Linux to communicate with other Unix hosts?

A. NetBEUI

B. TCP

C. ICB

D. NTP

E. Domain sockets

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 617

When buying a hardware SCSI RAID controller, which one of the following helps you find one that is supported in Linux?

- A. Look for one that supports ASPI. ASPI is an industry-wide standard for SCSI RAID and is wellsupported in Linux.
- B. There are no hardware RAID systems that are supported in Linux. There are options to use software emulation to create Pseudo-RAIDs.
- C. Download the latest stable kernel and check the config options. Most that are supported have a configuration selection.
- D. Look for a controller that is supported in Netware. Linux currently supports all Netware-compatible boot devices.
- E. Look for a controller that is plug and play. Plug and play devices are sure to work in Linux.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 618

Which one of the following explains why it is sometimes a good idea to use multiple partitions when installing Linux?

- A. To allow multiple hard drives to be used in the future
- B. To ensure that quotas can be enforced
- C. LILO is unable to work with large single partitions. The maximum partition size should be 1GB.
- D. To ensure that the boot information is located in the first 1024 cylinders of the hard drive
- E. To allow more mount points on the filesystem

Answer: E

### **QUESTION** 619

Which one of the following commands do you use to listen to all traffic on an Ethernet wire?

- A. ping
- B. strace
- C. ltrace
- D. slattach
- E. tcpdump

Answer: E

# **QUESTION** 620

Which one of the following does an X server do?

- A. It provides display services for X clients.
- B. It runs a window manager such as WindowMaker or Enlightenment.
- C. It provides a secure connection to the X client.
- D. It runs programs for X clients.
- E. It provides a transaction-based display map.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

# **QUESTION** 621

In which one of the following formats are NIS files generally stored?

- A. SQL database
- B. RPM
- C. gzip
- D. DBM
- E. ASCII

Answer: D

### **QUESTION** 622

NIS was installed on your network, but your Linux system still tries to authenticate users locally. What must you do to change that?

- A. Make sure the NIS server resolves.
- B. Modify the /etc/passwd file.
- C. Modify /etc/nsswitch.conf.
- D. Modify /etc/hosts.
- E. Erase the /etc/passwd file.

Answer: C

### **QUESTION** 623

Which one of the following programs is NOT used with the X server?

- A. xinit
- B. XF86Setup
- C. xauth
- D. startx
- E. xargs

Answer: E

# **QUESTION** 624

Which one of the following commands helps you find out who is ping flooding your system?

- A. ipchains
- B. netstat
- C. tcpdump
- D. ipfwadm
- E. nsof

Answer: C

# **QUESTION** 625

Sample Code:

# telinit s

# telinit 3

With which one of the following could you replace the "s" in the above code?

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

Answer: A

#### **QUESTION** 626

What is the right command line option to start Samba as a stand-alone daemon?

- A. smbd -D
- B. This is impossible; smbd must be run from inetd.conf.
- C. smbd
- D. smbd --daemon
- E. smbd --no-ident

Answer: A

# **QUESTION** 627

Which one of the following is the program you will most likely use in order to replace a Windows NT file server with Linux?

- A. Wine
- B. NFS
- C. Samba
- D. printtab
- E. NIS

Answer: C

### **QUESTION** 628

For which one of the following reasons is the sticky bit used?

- A. It differentiates device files from normal files.
- B. It marks non-removable files.
- C. It ensures that only a file's owner can remove files in a directory.
- D. It ensures that programs are not swapped to virtual memory.
- E. It defines small sticky note-type files that are used for storing transient data.

Answer: C

# **QUESTION** 629

Scenario:

After compiling and installing a new kernel, you edit /etc/lilo.conf to include the new kernel. After you reboot, the old kernel still loads up.

Based on the above, which one of the following explains what went WRONG?

- A. You forgot to run "make clean" to clean up the old kernel. Since the old kernel was not cleaned, the system still boots to it.
- B. You forgot to run "make mrproper" when creating the kernel. Mrproper makes sure the proper kernel is installed.
- C. You forgot to include kernel=ask in the /etc/lilo.conf file, so it did not ask which kernel to use by default.
- D. You forgot to run lilo before rebooting. Lilo did not update the MBR with the new boot information.
- E. When building the kernel, you used "make oldconfig", which rebuilt and installed the old kernel.

Answer: C

#### **QUESTION** 630

Scenario:

While running make install on a kernel upgrade, you get a message stating "as86:

Command not found" and the install stops.

Based on the above, which one of the following is causing this message?

- A. The bash shell is not set up to use the -as86 option to run as an 80x86.
- B. The association table for 80x86 is missing and a system.map file cannot be created.
- C. The assembler that is used to write a boot sector is missing.
- D. It cannot use aspell to do lexical analysis of the configuration files prior to install.
- E. Linux is no longer supported on your machine.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

# **QUESTION** 631

Scenario:

You have a 486 system with 8 MB of memory, and you want to set up Linux on it for use as a network router. When you start the install, the setup disk begins to boot, but you soon get a message that there is insufficient memory. Based on the above, which one of the following can you do?

- A. Linux cannot be used as a network router.
- B. Buy more memory; Linux requires at least 32 MB of memory.
- C. Run a memory diagnostic program to check for bad memory.
- D. Compile a more basic kernel on another machine for use on this one.
- E. Forget the whole idea; Linux requires at least a Pentium class system.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 632

Which one of the following arguments do you add to Apache's configuration files in order to allow .htm files to be detected as HTML?

- A. AddType text/html .htm
- B. AddType html/text .htm
- C. AddType .htm html/text
- D. AddType HTML HTM
- E. AddType .htm html

Answer: A

#### **QUESTION** 633

Sample Code:

\$ <TAB>

There are 1948 possibilities. Do you really

want to see them all? (y or n)

A user reports that the above message appeared on his screen. What does the 1948 number refer to?

- A. The number of binaries on the system.
- B. The number of files in the current directory.
- C. The number of executable files located in his path.
- D. The commands the user pressed since he logged in.
- E. The commands the user pressed since the account was opened.

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 634

Lucy wants to get a new printer for her Linux system. She does NOT want to mess

with filters, and she does NOT need color. Which one of the following meets her needs?

- A. Lexmark 2657
- B. HP PS printer
- C. Canon BJ-200
- D. Epson EX710
- E. Canon BJC-4000

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

# **QUESTION** 635

You are the Linux server administrator of Certkiller . What do you use for executing jobs repeatedly based on pre-defined schedule?

- A. attab
- B. crontab
- C. at
- D. None of the choices.
- E. cron

Answer: E.

#### **QUESTION** 636

You are the Linux server administrator of Certkiller . You install a second SCSI drive and now you need to partition it.

What command should you use?

- A. format
- B. diskf
- C. fsck
- D. fdisk

Answer: D.

# **QUESTION** 637

You are a junior Linux system engineer. You are working on a Linux based PC. You want to give some files to only the SALES group with full access rights. No one else can access the file. How do you do this?

- A. Run chmod and chown.
- B. Run chmod and chgrp.
- C. Run chown and chgrp.
- D. Run chgrp.
- E. Run chmod.
- F. Run chfn.

Answer: B.

#### **QUESTION** 638

You are a junior Linux system engineer. You are working on a Linux based PC. Which of the following will you consider as a FRU in your Linux computer?

- A. CPU Fan.
- B. Linux software patch.
- C. None of the choices.
- D. Motherboard
- E. Chassis

Answer: A.

## **QUESTION** 639

You are a junior Linux system engineer. You are working on a Linux based PC. For some reasons the Linux system cannot recognize any of the SCSI devices.

Which of the following is a likely cause?

- A. None of the choices.
- B. ID conflict.
- C. Hardware damaged.
- D. Module corruption.
- E. Cable break.

Answer: B.

# **QUESTION** 640

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following is a cold boot process?

- A. Count
- B. None of the choices.
- C. Flash
- D. POST
- E. BIOS

Answer: D.

#### **OUESTION** 641

You are the Linux server administrator of Certkiller.

Which of the following are valid repetition operators for regular expressions?

A. +

B. { n }

- C. All of the choices.
- D. ?
- E. \*

Answer: C.

#### **QUESTION** 642

You are the Linux technician responsible for maintaining the Linux computers on your network. The behavior of modprobe can be adjusted by the configuration file named:

- A. /opt/conf\_modules
- B. None of the choices.
- C. /proc/conf.module
- D. /usr/confmodules
- E. /etc/conf.modules

Answer: E.

# **QUESTION** 643

You are a junior Linux system engineer. You are working on a Linux based PC. Your Linux PC has a 10baseT network card in half duplex mode. In theory, the effective max bandwidth is:

- A. 30MB/S
- B. 10MB/S
- C. 40MB/S
- D. 20MB/S
- E. 200MB/S
- F. 100MB/S

Answer: B.

#### **QUESTION** 644

You are a junior Linux system engineer. You are working on a Linux based PC. Your Ultra-Wide SCSI device requires cable with:

- A. 80pin
- B. None of the choices.
- C. 68pin
- D. 50pin
- E. 66pin

Answer: C.

### **QUESTION** 645

You are a junior Linux system engineer. You are working on a Linux based PC. Your Linux system can only recognize 8GB out of your 30GB drive.

What is the likely cause?

- A. The system is not stable.
- B. The motherboard is malfunctioning.
- C. Large drive module is missing.
- D. None of the choices.
- E. The BIOS does not support large drive size.
- F. The power supply is too weak.

Answer: E.

# **QUESTION** 646

You are a junior Linux system engineer. You are working on a Linux based PC. Your Linux laptop is connected to an overhead projector. Somehow part of the displayed image is missing. What is the likely cause?

- A. None of the choices.
- B. Display resolution was set too high.
- C. Damaged screen.
- D. Damaged display adaptor.
- E. Incorrect driver.

Answer: B.

## **QUESTION** 647

You are a junior Linux system engineer. You are working on a Linux based PC. Your Linux PC has a 100baseT network card in full duplex mode. In theory, the effective max bandwidth is:

- A. 40MB/S
- B. 10MB/S
- C. 100MB/S
- D. 30MB/S
- E. 200MB/S
- F. None of the choices.
- G. 20MB/S

Answer: E.

#### **QUESTION** 648

You are a junior Linux system engineer. You are working on a Linux based PC. You need a storage device that is not costly and can be used to read the latest Linux distribution media. Which of the following devices can you use?

- A. Flash ROM
- B. TAR device
- C. None of the choices.

- D. Backup tape
- E. GZIP device
- F. CDROM

Answer: F.

#### **QUESTION** 649

You are a junior Linux system engineer. You are working on a Linux based PC. You are connecting two external SCSI drives to a single SCSI channel. The second drive should be connected to:

- A. SCSI port on the power supply.
- B. SCSI port on the controller.
- C. SCSI port on the first drive.
- D. SCSI port on the chassis.

Answer: C.

### **QUESTION** 650

You are a junior Linux system engineer. You are working on a Linux based PC. Which of the following correctly describe ATA?

A. None of the choices.

- B. Integrates the controller on the disk drive.
- C. Integrates the controller on the motherboard.
- D. Integrates the controller on the IRQ.
- E. Integrates the controller on the cache.

Answer: B.

#### **OUESTION** 651

You are the Linux technician responsible for maintaining the Linux computers on your network.

Why would you use the du command?

- A. To summarize disk usage of each disk slice.
- B. To defragment the drives.
- C. To summarize disk usage of each file.
- D. To undo file change.
- E. None of the choices.

Answer: C.

#### **QUESTION** 652

You are a junior Linux system engineer. You are working on a Linux based PC. Which of the following devices will involve configuration work in the system BIOS?

- A. Software modem
- B. None of the choices.
- C. External modem
- D. ISA Sound card
- E. RAM

Answer: A.

#### **QUESTION** 653

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following file systems is supported by the chattr command?

- A. Linux second primary file system.
- B. Linux first extended file system.
- C. Linux first primary file system.
- D. Linux second extended file system.

Answer: D.

### **QUESTION** 654

You are a junior Linux system engineer. You are working on a Linux based PC. You are setting up and ultra wide SCSI controller and drive. The drive goes offline constantly.

What is the likely cause?

- A. Initialization file was not configured properly.
- B. System file was not configured properly.
- C. Drive power was not provided properly.
- D. None of the choices.
- E. Termination was not done properly.

Answer: E.

#### **QUESTION** 655

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following is the choice of port for connecting external modem on Linux?

- A. USB
- B. Slot1
- C. PS/2
- D. IRO
- E. Socket7

Answer: A.

# **QUESTION** 656

You are the Linux technician responsible for maintaining the Linux computers on your network.

Why would you use the df -h command?

- A. Report filesystem disk space usage in human readable format.
- B. Report filesystem disk speed in human readable format.
- C. Report filesystem disk fragmentation in %.
- D. Report filesystem disk time in seconds.

Answer: A.

### **QUESTION** 657

You are a junior Linux system engineer. You are working on a Linux based PC. For use in your Linux computer is a 8 bit SCSI implementation capable of transferring 20MB per second. What type of cable should be used?

- A. 68pin
- B. 82pin
- C. 40pin
- D. 50pin

Answer: D.

# **QUESTION** 658

You are a junior Linux system engineer. You are working on a Linux based PC. In Linux, how do you find out about memory availability?

- A. view mem
- B. mem
- C. cat
- D. Is
- E. view
- F. None of the choices.

Answer: C.

### **QUESTION** 659

You are junior Linux system engineer. You are working on a Linux based PC.

Your Ultra-Wide SCSI device has a speed of:

- A. 10MB/sec
- B. 20MB/sec
- C. None of the choices.
- D. 40MB/sec
- E. 80MB/sec

Answer: D.

### **QUESTION** 660

You have several hundred dial-up users and a class C network address pool. Which one of the following services lets you provide Internet connectivity to these users WITHOUT getting additional IP addresses?

- A. IP firewalling
- B. netbios service
- C. route
- D. ifconfig
- E. dhcpd

Answer: Pending. Send your suggestion to feedback@ Certkiller .com

### **QUESTION** 661

You are the Linux server administration of Certkiller . The package you installed never run successfully and returns lots of errors.

What should be your first action?

- A. Run rpmcheck
- B. Re-run RPM
- C. Verify the integrity of the MBR.
- D. Verify that libc is the correct version.
- E. Verify the integrity of the file system.

Answer: D

#### **QUESTION** 662

You are a junior Linux system engineer. You are working on a Linux based PC.

Which of the following I/O bus is not likely to be used with Linux in your non-branded computer system?

- A. None of the choices.
- B. PCI
- C. ISA
- D. EISA
- E. Microchannel

Answer: E

#### **QUESTION** 663

You are a junior Linux system engineer. You are working on a Linux based PC. You have a wall connector connected to a 4-port hub. The link LED is off, and all the Linux computers cannot access the Internet.

Which of the following is the likely cause?

A. The LED is mis-configured.

- B. The LED is damaged.
- C. The cable between the wall connector and the hub is NOT for uplinking.
- D. The cable between the wall connector and the hub is for uplinking.

Answer: C

#### **QUESTION** 664

You are a junior Linux system engineer. You are working on a Linux based PC. When you powered on the computer, you found that the PS2 keyboard was not plugged in. Which of the following is a recommended way of handling this situation?

- A. Shut down, power off, plug in, power off.
- B. Shut down, power on, plug in, power on.
- C. Shut down, power off, plug in, power on.
- D. None of the choices.
- E. Shut down, power on, plug in, power off.

Answer: C.

### **QUESTION** 665

You are the Linux server administrator of Certkiller . You just installed a third SCSI disk into your system. As a device, this disk should be referred to as:

- A. /dev/sdb
- B. /dev/had
- C. /dev/hdb
- D. /dev/sdc
- E. /dev/sda

Answer: D

#### **QUESTION** 666

You are a junior Linux system engineer. You are working on a Linux based PC. Which of the following indicates parity error on your Linux system?

- A. CPU failure.
- B. DIMM failing.
- C. Cooling fan failure.
- D. Hard drive failure.

Answer: B.

#### **QUESTION** 667

You are a junior Linux system engineer. You are working on a Linux based PC. You plan to upgrade to a CPU not recognized by the current BIOS.

Which of the following is the most cost effective way to fix the problem?

- A. Reset the drive.
- B. None of the choices.
- C. Change the motherboard.
- D. Flash the BIOS.
- E. Change the whole computer.

Answer: D.

### **QUESTION** 668

You are the Linux server administrator of Certkiller . When you install Linux, you enable shadowed password.

What changes have been made to the server?

- A. User profiles are now kept in /etc/shadow
- B. User passwords are now kept in /etc/passwd
- C. User passwords are now kept in /etc/shadow
- D. Group profiles are not kept in /etc/shadow

Answer: C

# **QUESTION** 669

You are the Linux administrator of Certkiller . You decided to use the ReiserFS file system rather than ext2.

What is likely the reason?

- A. ReiserFS allows partitions to be mirrored dynamically.
- B. ReiserFS allows partitions to be journalized.
- C. ReiserFS allows partitions to be compressed.
- D. ReiserFS allows built in anti virus protection.

Answer: B.