



Exam: XK0-001

Title : Linux+

Ver : 01.27.04

QUESTION 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 'swap on' 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).

QUESTION 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 super user 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.

QUESTION 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 | name2 > name3
- B. name1 < name2 | name3
- C. name1 > name2 | 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 or 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 (<).

QUESTION 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>

Incorrect Answers:

- 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. mv
- 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 mv command is used to move or rename a file or directory.

QUESTION 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.

QUESTION 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.

QUESTION 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 super user.
- 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 add user 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 passwd 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 super user.
- 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.

QUESTION 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. Its output included the IP address, net mask 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. dhcpcd

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.

QUESTION 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. Ifconfig 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 30 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 31 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 of 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 partitioned and formatted during the installation and therefore will not need defragmenting.

QUESTION 32 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 33 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. Send mail

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. Send mail is a Linux email server program. It does not provide web server services.

QUESTION 34 A user wants to set up his parallel port printer on the workstation's first parallel port. What 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 35 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.

QUESTION 36 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 37 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 Win modems.
- D. Linux requires modems that use the Rockwell chipset.

Answer: C.

Explanation: When computers are supplied with internal PCI modems, the modems are usually Win modems. 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 38 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.

QUESTION 39 Which utility can remove, list, and add modules, as well as auto clean?

- 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 auto clean the modules.

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

Incorrect Answers:

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

QUESTION 40 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.

QUESTION 41 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.

Incorrect Answers:

- 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 42 In an Apache default installation, which of the following configuration files contains the Document Root?

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

QUESTION 43 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.

Incorrect Answers:

- 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 44 Review the following entry: /dev/cdrom /cd iso9660 ro, user, no auto 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. No auto 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 no auto option prevents the CD-ROM being mounted at boot time.

QUESTION 45 Configuring hosts.deny and hosts.allow will protect the server from intruders that attempt which of 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.

Incorrect Answers:

- 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 46 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 47 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 48 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 49 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.

QUESTION 50 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 51 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. imap
- 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 52 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 53 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 54 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 httpd"` 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 55 A user executed a Perl 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 56 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 57 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.

QUESTION 58 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 59 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 60 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 61 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.

Incorrect Answers:

- 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 62 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/special.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 63 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.

Incorrect Answers:

- 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. Siginitt is not used to determine if network interfaces are up and running.

QUESTION 64 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.

QUESTION 65 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 66 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.

QUESTION 67 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 fire wire 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 68 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 69 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 70 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 71 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 72 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 73 Which network interface card has BNC connector on it?

- A. IR
- B. Thin net
- C. Fiber optic
- D. Twisted pair

Answer: B.

Explanation: Thin net (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 74 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 75 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.pcmec.com/show/motherboards/80/>

Incorrect Answers:

- 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 76 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 77 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 78 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.

QUESTION 79 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 80 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 81 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 82 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 83 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 84 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.

QUESTION 85 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 can 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 'utility'.

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 86 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 87 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 88 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 89 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 Red hat 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 90 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 91 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.

QUESTION 92 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 93 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. This is an incorrect use of the `boot` command in a `lilo.conf` file.

QUESTION 94 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 95 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 96 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 97 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 super block

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 super block.

QUESTION 98 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 of insmod installed.
- D. The module would still load if it were designed for another device. The device just wouldn't work.

QUESTION 99 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 100 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.

QUESTION 101 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 102 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 103 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 multi-user mode in which any user can log in.
- D. Runlevel 2 is a multi-user mode in which any user can log in.

QUESTION 104 A new employee having a problem with account login has the following entry 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 105 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.

QUESTION 106 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 107 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 `.forward` 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. *Send mail*. 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 108 What file should be edited to add two additional gettys to runlevel 3?

A. `/etc/inittab`

B. `/etc/termcap`

C. `/etc/rc.d/init.d/inittab`

D. `/usr/local/etc/getty.conf`

Answer: A.

Explanation: The `/etc/inittab` file contains the default configuration information for the various run levels.

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

Incorrect Answers:

B. `/etc/termcap` does not contain configuration information for the various run levels.

C. `/etc/rc.d/init.d/inittab` does not contain configuration information for the various run levels.

D. `/usr/local/etc/getty.conf` does not contain configuration information for the various run levels.

QUESTION 109 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.

QUESTION 110 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: 192.168.1.1/24
- D. 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 111 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 112 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 113

What command is used to remove a kernel module?

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

Answer: A.

Explanation: The 'rmmmod' (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.

QUESTION 114 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 115 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 116 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 117 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 118 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.

QUESTION 119 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 120 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 121 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 122 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 123 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 124 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 125 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 126 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 127 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 128 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 as IP addresses.
- C. The 32 bit address is the IP address, not the MAC address.

QUESTION 129 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 due to 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 130 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.

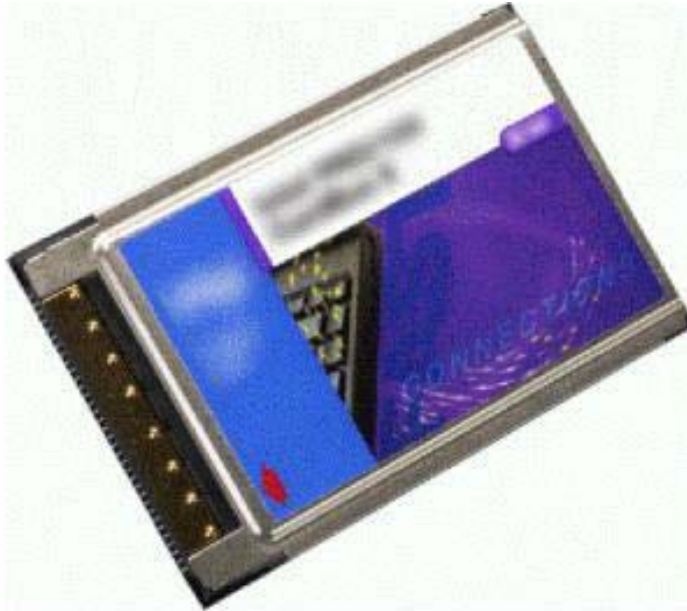
Explanation: The 100 in 100BaseTX stands for 100 Mbps. In full duplex mode, this speed is doubled.

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 131 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 132 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 133 Which type of memory not only detects, but also corrects single-bit errors?

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

Answer: B.

Explanation: ECC memory can detect errors but it cannot correct them.

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

Incorrect Answers:

- A. EDO RAM does not detect errors.
- C. Parity RAM can correct errors.
- D. RAMDAC is used with video adapters and does not perform error checking.

QUESTION 134 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 135 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 136 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:502:502:555-1234:/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 137 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 `add user` command to create the shared group, then add user to create the user accounts.
- C. As root, run the `add user` 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 `add user` 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.

QUESTION 138 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.

QUESTION 139 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 140 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 141 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 142 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 143 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 144 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 Linux hacker)
<http://www.ussg.iu.edu/hypermail/linux/kernel/0306.0/1685.html>

QUESTION 145 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 146 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.

QUESTION 147 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 m option 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.

QUESTION 148 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 149 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 file system.
- 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.

QUESTION 150 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.

QUESTION 151 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 152 In order to apply a file system to your new partitions you must format them. What command would you use to create the ext2 file system?

Answer: mkfs.

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

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

QUESTION 153 When formatting your partition with the mkfs command, you can also pass to the command the type of file system 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.

QUESTION 154 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 155 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.

QUESTION 156 When you issue the command `ls -l`, 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>

QUESTION 157 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. *Sybox Linux + Study Guide*: Page 462.

QUESTION 158 You cannot mount `/dev/hdb1` and suspect that the super block 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 super block with a copy saved to another location on your disk.
- D. Restore the super block from your tape backup.

Answer: C.

Explanation: The `e2fsck` utility can be used to replace the super block 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 super block.
- D. You cannot restore the super block from a tape backup because you cannot mount the drive.

QUESTION 159 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 file system.
- 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 than 50 percent, then your system will slow down.
- D. If the amount of free space is too low, your 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.

QUESTION 160 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 161 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 162 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 file system 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. Fsk is time consuming and hence unnecessary.

QUESTION 163 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 164 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.

QUESTION 165 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.

QUESTION 166 What command can you use to see the boot messages?

A. dmesg

B. cat kernel.messages

C. log view

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. Log view is the incorrect command to view the boot messages.

D. Man logs would display the man files for a program named logs.

QUESTION 167 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 168 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 run levels 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 run levels this line applies to

QUESTION 169 Which file should you examine to determine the defined run levels for your system?

Answer: /etc/inittab

Explanation: The inittab file is the configuration file for the init daemon. This file contains the defined run levels on a Linux system.

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

QUESTION 170 How does single user mode differ from other run levels?

- 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 file system 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 171 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 172 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 173 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 system.
- 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 174 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 175 You have installed a new UPS (Uninterruptible Power Supply) and the powered 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 powered 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 powered daemon.
- C. The /etc/inittab file, not the /etc/power.conf file, is used to configure the init daemon which is used start the powered daemon.
- D. The /etc/inittab file, not the /etc/conf.ups file, is used to configure the init daemon which is used start the powered daemon.

QUESTION 176 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.

QUESTION 177 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 178 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 179 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 180 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 181 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/dh1
```

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 182 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.

QUESTION 183 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.

QUESTION 184 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.

QUESTION 185 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 186 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.

QUESTION 187 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 188 You want to find how to set the `manpath` variable so you type `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 189 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 190 You have installed an additional set of man pages but in Spanish. You have one user who wishes to use the Spanish pages rather than 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 191 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` command is used to access a tutorial on the `info` program.

Reference: Roderick W. Smith. *Sybox Linux + Study Guide*: Page 657.

Incorrect Answers:

- A. `Man info` would display the man pages for the `info` program. `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 192 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.

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 193 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 194 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 195 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 196 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 Goggle 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.

QUESTION 197 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 198 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 199 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>

QUESTION 200 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 201 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 it 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 locatedb database.
-

QUESTION 202 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 203 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 204 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.

QUESTION 205 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 -l /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 206 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>

QUESTION 207 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>

QUESTION 208 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 209 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 210 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.

QUESTION 211 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: A.

Explanation: The tail command is used to display the last ten lines of a specified file.

Reference: <http://www.oreillynet.com/linux/cmd/t/tail.html>

Incorrect Answers:

- B. The tail command is used to display the few lines of a specified file.
- C. The head command is used to print the first ten lines of a specified file.
- D. Log is not a valid command.

QUESTION 212 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 213 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 214 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 215 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.

QUESTION 216 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 217 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 218 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 219

The following is the output from a ps command:

PID	TTY	TIME	CMD
1054	pts/1	00:00:00	bash
6894	pts/1	00:00:00	nmap
7123	pts/1	00:00:00	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).

QUESTION 220 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. trace route

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: Trace route is another utility used to test IP connectivity by tracing the route to a remote host.

QUESTION 221 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 222 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 223 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 224 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 file systems. This information includes who can mount the file systems and whether the file system should be mounted automatically at system boot up.

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 file system can be mounted manually.
- C: The drive information must already be in the /dev directory as the file system can be mounted manually.
- D: It is not necessary to change the runlevel.

QUESTION 225 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.

QUESTION 226 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 227 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 228 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 file system.

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 file system because the file system 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 229 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 230 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. lspport

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: Lspport is used to list printer ports, not TCP ports.

C: Minicom is a utility used for connection modem dial up connections.

QUESTION 231 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 is 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 232 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 "whatism -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: Whatism is not used to display the currently running processes.

QUESTION 233 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.

QUESTION 234 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 235 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 it has two redirectors together (`|` followed by `>`).

QUESTION 236 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 boot loader was unable to start.

Answer: D.

Explanation: If LI is displayed during boot up, 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 237 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 238 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 boot up. 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 239 Using which of the following commands creates a risk of destroying data on a mounted file system?

- A. fsck
- B. mkfs

- C. mount
- D. set serial

Answer: B.

Explanation: The mkfs command is used to create a file system on a hardware device such as a hard disk or a mount point. Creating a new file system over an existing file system will destroy the data on the existing file system.

Reference: <http://www.oreillynet.com/linux/cmd/m/mkfs.html>

Incorrect Answers

A: Fck (file system checker) is used to check the file system for errors. Although this can cause problems if the file system is mounted as read only, it is not as dangerous as the mkfs command.

C: The mount command is used to mount a file system. Running this command on a file system that is already mounted would just generate an error message. It would not cause the loss of data.

D: Set serial 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 file system.

QUESTION 240 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.

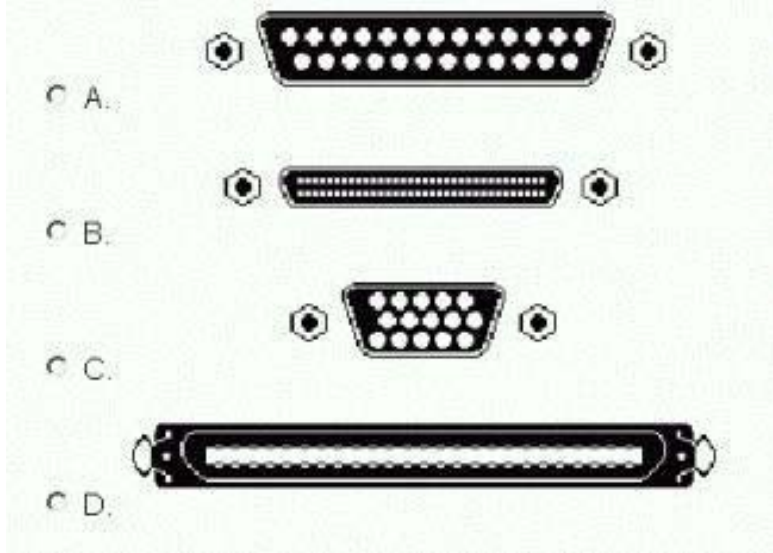
Incorrect Answers

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.

QUESTION 241 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_connectors.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 242 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 243 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 File system (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.

QUESTION 244 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 245 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 'super server'. It is used to start services on a Linux computer.

D: Portmap is used with NFS to mount file systems.

QUESTION 246 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 247 Which of the following information is NOT returned by ifconfig 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.

QUESTION 248 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 249 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 file system 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 file system for errors. It is not used to display partition information.

QUESTION 250 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-3.5.i386 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 251 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 / >> /var/log/daily
- C. find / -perm 4000 >> /var/log/daily
- D. grep -Ril root /etc/* >> /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 252 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 253 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 254 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 super user and delete the files manually.
- D. Edit her user crontab while logged in as super user.

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 255 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 256 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 257 Users on a machine need to run the command run_file that requires super user 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 258 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 259 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 260 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 261 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 262 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. `2 5 *1* cleanup`
- B. `5 2 1 1 * cleanup`
- C. `5 2 1 * * cleanup`
- D. `2 5 * * 1 cleanup`

Answer: C.

QUESTION 263 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 264 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.

QUESTION 265 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 266 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 267 You are the Linux server administration of your company. 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 268 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. Micro channel

Answer: E

QUESTION 269 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 270 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 271 You are the Linux server administrator of your company. 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 272 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 273 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 274 You are the Linux server administrator of your company. 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 275 You are the Linux administrator of your company. 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.

QUESTION 276 You are the Linux server administrator of your company. 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 277 You are the Linux server administrator of your company. 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 278 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 279 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 280 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 281 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.

QUESTION 282 You are the Linux server administrator of your company. Which of the following are valid repetition operators for regular expressions?

- A. +
 - B. { n }
 - C. All of the choices.
 - D. ?
 - E. *
- Answer: C.

QUESTION 283 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 284 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 285 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 286 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 287 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 288 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 289 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 290 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 291 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.

QUESTION 292 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 293 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 294 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 295 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 296 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. IRQ
- E. Socket7

Answer: A.

QUESTION 297 You are the Linux technician responsible for maintaining the Linux computers on your network. Why would you use the df -h command?

- A. Report file system disk space usage in human readable format.
- B. Report file system disk speed in human readable format.
- C. Report file system disk fragmentation in %.
- D. Report file system disk time in seconds.

Answer: A.

QUESTION 298 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 299 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.

F:

QUESTION 300 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 301 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 302 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 303 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 304 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 305 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 306 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. trace route
- B. hardware
- C. cat
- D. dmesg
- E. show
- F. hw
- G. display

Answer: A.

QUESTION 307 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 308 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.

QUESTION 309 You are the Linux server administrator of your company. 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 310 You are the Linux server administrator of your company. 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 311 You are the Linux server administrator of your company. 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 312 You are the Linux server administrator of your company. 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.

QUESTION 313 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. trace route
- F. cat
- G. display

Answer: D.

QUESTION 314 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 315 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 316

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 317 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 318 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 319 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 320 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?

- A. chdir
- B. chd
- C. ckir
- D. None of the choices.
- E. ckdir

Answer: A.

QUESTION 321 You are the Linux technician responsible for maintaining the Linux computers on your network. Which of the following commands copies files into or out of

archive?

- A. copy
- B. mcopy
- C. cp
- D. cpio
- E. xcopy
- F. None of the choices.

Answer: D.

QUESTION 322 Daemon runs in the:

- A. Both grounds
- B. Background
- C. None of the choices.
- D. Foreground

Answer: B

QUESTION 323 You are a junior Linux system engineer. You are working on a Linux based PC. How do you update and query run level information for system services?

- A. Run chkconfig
- B. Run chfn
- C. Run chmod
- D. None of the choices.
- E. Run chgrp

Answer: A.

QUESTION 324 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. chatr
- C. attribute
- D. None of the choices.
- E. attest

Answer: B.

QUESTION 325 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 326 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 327 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 328 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 329 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 330 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 331 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 332 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
- B. -p
- C. -v
- D. -l
- E. -e
- F. All of the choices.

Answer: F.

QUESTION 333 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 334 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 335 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 336 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 337 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 338 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 339 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 340 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 341 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 if the password is in unencrypted state.

- A. True.
- B. False.

Answer: B.

QUESTION 342 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 343 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 344 You are the Linux technician responsible for maintaining the Linux computers on your network. One of your users cannot log in although his password is 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 345 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 346 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 347 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 348 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 349 You are the Linux technician responsible for maintaining the Linux computers on your network. ldconfig 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 350 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. lsmod
- D. listmode
- E. lsmod
- F. None of the choices.

Answer: E.

QUESTION 351 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 352 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 353 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.

QUESTION 354 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 355 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 356 You are the Linux technician responsible for maintaining the Linux computers on your network. Information obtained from lsmod 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 357 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 358 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.

QUESTION 359 You are a junior Linux system engineer. You are working on a Linux based PC. Your compressed 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 360 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 361 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 362 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 363 You are the Linux technician responsible for maintaining the Linux computers on your network. Why would you use the df command?

- A. report file system disk space usage
 - B. report file system disk fragmentation
 - C. report file system disk error
 - D. report file system disk time
- Answer: A.
-

QUESTION 364 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 365 You are the Linux technician responsible for maintaining the Linux computers on your network. How do you list directory contents?

- A. dirfiles
- B. lsmod
- C. dir
- D. ls
- E. None of the choices.

Answer: C.

QUESTION 366 You are the Linux server administrator of your company. 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 choices.
- E. -v
- F. -h

Answer: B.

QUESTION 367 You are the Linux server administrator of your company. When using the unmount command, what is "-a" for?

- A. None of the choices.
- B. Mount all of the file system described in /etc/mstab.
- C. Unmount all of the file systems described in /etc/mstab.
- D. Unmount all of the file systems described in /opt/mstab.
- E. Unmount all of the file systems described in /usr/mstab.

Answer: C.

QUESTION 368 You are the Linux server administrator of your company. 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 369 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 370 You are the Linux server administrator of your company. 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.

QUESTION 371 You are the Linux server administrator of your company. 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 372 You are the Linux server administrator of your company. 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 373 You are the Linux server administrator of your company. 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.

QUESTION 374 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 375 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

QUESTION 376 You are the Linux server administrator of your company. 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 377 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 378 You are the Linux server administrator of your company. 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 379 You are the Linux server administrator of your company. 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 380 You are the Linux server administrator of your company. In the /etc/shadow file, what indicates that an user account is disabled?

- A. !
- B. &&
- C. None of the choices.
- D. *
- E. //

Answer: D.

QUESTION 381 You are the Linux server administrator of your company. 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:

QUESTION 382 You are the Linux server administrator of your company. 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 383 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 384 You are the Linux server administrator of your company. 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 385 You are the Linux server administrator of your company. In Send mail, how do you prevent Aliasing?

- A. Precede the address with semi 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.

QUESTION 386 You are the Linux server administrator of your company. What command do you use to set disk usage quota for users?

- A. quota on
- B. quota
- C. None of the choices.
- D. set quota
- E. disk quote
- F. disk quota

Answer: D.

QUESTION 387 You are the Linux server administrator of your company. 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 388 You are the Linux server administrator of your company. What command do you use to announce to the system that disk quotas should be enabled on the file system?

- A. quota on
- B. disk quote
- C. None of the choices.
- D. set quota
- E. disk quota
- F. quota

Answer: A.

QUESTION 389 You are the Linux server administrator of your company. 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 390 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.

QUESTION 391 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 392 You are the Linux server administrator of your company. What command do you use to watch the mail log for error?

- A. send mail -l
- B. None of the choices.
- C. cat mail.log
- D. mail.log < in

E. show mail

Answer: C.

QUESTION 393 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 394 You are the Linux server administrator of your company. 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 first hard drive while Linux is on the second.

D. LILO uninstalled.

Answer: A.

QUESTION 395 You are the Linux server administrator of your company. 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 396 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 397 You are the Linux server administrator of your company. 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 398 You are the Linux server administrator of your company. 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 399 You are the Linux server administrator of your company. 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 400 You are the Linux server administrator of your company. 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.

QUESTION 401 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 402 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 403 You are the Linux server administrator of your company. 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 404 You are the Linux server administrator of your company. Which of the following Linux programs provide mail routing capabilities?

- A. Mail send
- B. Exchange
- C. Send mail
- D. Mail Exchange
- E. None of the choices.

Answer: C.

QUESTION 405 You are the Linux server administrator of your company. 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.

QUESTION 406 You are the Linux server administrator of your company. 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 407 You are the Linux server administrator of your company. 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 408 You are the Linux server administrator of your company. From where can you configure options of xscreensaver?

- A. None of the choices.
- B. .xscreensaver
- C. .xscr
- D. .xresources
- E. .xinit

Answer: B

QUESTION 409 You are the Linux server administrator of your company. 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 410 You are the Linux server administrator of your company. 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 411 You are the Linux server administrator of your company. 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 412 You are the Linux server administrator of your company. 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 413 You are the Linux server administrator of your company. 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. unmount /mnt/cdrom
- E. None of the choices.

Answer: D.

QUESTION 414 You are the Linux server administrator of your company. To show all the status of all the network interfaces, the command to use is?

- A. ifconfig -everything
- B. ifconfig -stat
- C. None of the choices.
- D. ifconfig -allstat
- E. ifconfig -a

Answer: E.

QUESTION 415 You are the Linux server administrator of your company. What file is used by the Send mail program for name aliasing?

- A. None of the choices.
- B. mailali
- C. mail_aliases
- D. aliases
- E. mailal

Answer: D.

QUESTION 416 You are the Linux server technician for your company. 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 417 You are the Linux server administrator of your company. Which of the following programs can write information to fstab?

A. crontab

B. None of the choices.

C. passwd

D. send mail

E. shadow

Answer: B.

QUESTION 418 You are the Linux server administrator of your company. What do you use to identify bad passwords?

A. CERT

B. None of the choices.

C. Crack

D. Tigerling

E. Hack

Answer: C.

QUESTION 419 You are the Linux server administrator for your company. 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 420 You are the Linux server administrator for your company. 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 421 You are the Linux server administrator of your company. 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 422 You are the Linux server administrator of your company. What command do you use to compile and install an application from its source code?

A. compile

B. install

C. depmode

D. make

E. None of the choices.

F. rpm

Answer: D.

QUESTION 423 You are the Linux server administrator of your company. 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 424 You are the Linux server administrator of your company. 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 425 You are the Linux server administrator of your company. 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 426 You are the Linux server administrator for your company. 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 427 You are the Linux server administrator of your company. 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 428 You are the Linux server administrator of your company. 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 429 You are the Linux server administrator of your company. 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 430 You are the Linux server administrator of your company. 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 431 You are the Linux server administrator of your company. 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 432 You are the Linux server administrator of your company. Which of the following is a local file system used for CD-ROM drives?

- A. ext
- B. minix
- C. xiafs
- D. hpfs
- E. iso9660
- F. ext2
- G. msdos

Answer: E.

QUESTION 433 You are the Linux server administrator of your company. Which of the following is a local file system 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 434 You are the Linux server administrator of your company. 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 435 You are the Linux server administrator of your company. 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.
-

QUESTION 436 You are the Linux server administrator of your company. 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.

QUESTION 437 You are the Linux server administrator of your company. How do you verify the proper operation of your Linux DNS service?

- A. trace route
- B. ping
- C. None of the choices
- D. testdns
- E. dig

Answer: E.

QUESTION 438 You are the Linux server administrator of your company. How do you list all installed RPM packages?

- A. rpm -d
- B. None of the choices.
- C. rpm -all
- D. rpm -qa
- E. rpm -s

Answer: D.

QUESTION 439 You are the Linux server administrator of your company. 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.

QUESTION 440 You are the Linux server administrator of your company. 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 441 You are the Linux server administrator of your company. 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 442 You are the Linux server administrator of your company. 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 443 You are the Linux server administrator for your company. 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 444 You are the Linux server administrator of your company. How do you verify the proper operation of your Linux router?

- A. ping
- B. trace route
- C. testdns
- D. dig
- E. None of the choices.

Answer: B.

QUESTION 445 You are the Linux server administrator of your company. 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 446 You are the Linux server administrator of your company. 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 447 You are the Linux server administrator of your company. What is the best way for you to configure your Xfree86 server?

- A. fest
- B. Both XF86Setup and xf86config
- C. None of the choices.
- D. XF86Setup
- E. xf86config
- F. xfconf

Answer: B.

QUESTION 448 You are the Linux server administrator of your company. You found that a user's system has been forwarding junk emails. How do you stop him?

- A. Restrict the relay domains in the send mail configuration.
- B. Deploy internal packet filters.
- C. Deploy internal firewalls.
- D. None of the choices.
- E. Block SMTP and POP.

Answer: A.

QUESTION 449 You are the Linux server administrator of your company. 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 450 You are the Linux server administrator for your company. 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.

QUESTION 451 You are the Linux server administrator of your company. 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 452 You are the Linux server administrator of your company. 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 453 You are the Linux server administrator of your company. Which of the following passwords should be most secure?

- A. Xpf45sk
- B. San Jose
- C. Rank56
- D. 56ranking

Answer: A.

QUESTION 454 You are the Linux server administrator for your company. 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 455

You are the Linux server administrator of your company.

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 456 You are the Linux server administrator of your company. 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 457 You are the Linux server administrator of your company. 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 458 You are the Linux server administrator for your company. 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 459 You are the Linux sever administrator of your company. Which of the following commands change file timestamps?

A. finger

B. whowas

C. top

- D. who
- E. touch

Answer: E.

QUESTION 460 You are the Linux server administrator for your company. 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 461 You are the Linux server administrator of your company. 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.

QUESTION 462 You are the Linux server administrator of your company. 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.

QUESTION 463 You are the Linux server administrator of your company. 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 464 You are the Linux server administrator for your company. 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.

QUESTION 465 You are the Linux server administrator of your company. 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.