Exam #2 CNSE M55 (Ch 6 to 10)

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Score: 96%

▼ **Question 1:**   ✔ Correct

What is the name of the partition management utility that will both create GUID partitions and create file systems on those partitions?

| parted | ✔ |

Explanation

The parted utility is a partition editor that allows you to create GUID partitions and then create file systems on those partitions.

You can use gdisk to create partitions, but you cannot use it to create file systems.

References

▷ **3.1.2 System Design Part 2**

▷ **8.1.1 MBR Disk Partitions**

⌨ **8.1.2 Managing MBR Partitions**

⌨ **8.1.3 Viewing MBR Partitions**

☰ **8.1.4 MBR Partition Management Facts**

☰ **8.1.5 Device Naming Facts**

▷ **8.2.1 GUID Partitions**

⌨ **8.2.2 Managing GUID Partitions**

☰ **8.2.3 GUID Partition Management Facts**

q_guidpart_lp5_04.question.fex

▼ Question 2:   ✔ Correct

Which **useradd** option displays the default values specified in the **/**etc/default/useradd file?

-d	✔

Explanation

useradd -D displays the default values specified in the /etc/default/useradd file. The /etc/default/useradd file contains default values used by the **useradd** utility when creating a user account.

useradd creates new user accounts. The following options override the settings as found in /etc/default/useradd:

- **-c** adds a description for the account in the GECOS field of /etc/passwd.
- -d assigns an absolute pathname to a custom home directory location.
- **-e** specifies the date on which the user account will be disabled.
- **-f** specifies the number of days after a password expires until the account is permanently disabled.
- **-g** defines the primary group membership.
- **-G** defines the secondary group membership.
- **-M** does not create the user's home directory.
- **-m** creates the user's home directory (if it does not exist).
- **-n, N** does not create a group with the same name as the user (Red Hat and Fedora).
- **-p** defines the encrypted password.
- **-r** specifies the user account is a system user.
- **-s** defines the default shell.
- **-u** assigns the user a custom UID. This is useful when assigning ownership of files and directories to a different user.

References

▷ **7.1.2 Linux Group Overview**

q_user_cf_lp5_02.question.fex

▼ **Question 3:**   ✔ Correct

Which of the following DNF options will display whether updates are available for RPM packages?

➡ 🔘 **list updates**

⚪ **list**

⚪ **update**

⚪ **install**

Explanation

dnf list updates displays whether updates are available for packages. Use the DNF utility to install RPM packages, including their dependencies.

dnf list displays lists of packages. **dnf install** installs a package. **dnf update** updates RPM packages.

References

🗒 **6.2.4 YUM and DNF Facts**

q_rpm_yum_f_lp5_05.question.fex

▼ **Question 4:**   ✔ Correct

You obtain your applications and updates in RPM format.

Which of the following distributions is your system based on?

○ Slackware

➡ ◉ Red Hat

○ Xandros

○ Debian

Explanation

Any system that is based on or derived from Red Hat can use RPM packages.

Slackware, Debian, and Xandros do not use RPM for package management.

It is also possible for a distribution that is not based on or derived from Red Hat use RPM. SUSE is an example of such a distribution.

References

▷ 6.1.1 Red Hat Package Manager (RPM)

▷ 6.1.2 RPM Package Management

⌨ 6.1.3 Manage RPM Packages

☰ 6.1.7 RPM Facts

▷ 6.2.1 Yellowdog Updater, Modified (YUM)

⌨ 6.2.2 Install Packages with YUM

⌨ 6.2.3 Install Packages with Dandified YUM (DNF)

☰ 6.2.4 YUM and DNF Facts

▷ 6.3.1 Debian Package Manager (dpkg)

▷ 6.3.2 Advanced Packaging Tool (apt-get)

⌨ 6.3.3 Managing Debian Packages

6.3.4 Debian Package Management Facts

q_rpm_f_lp5_01.question.fex

▼ **Question 5:**   ✔ Correct

What command will upgrade an RPM package only if an earlier version is already installed on the system?

| rpm -F |

✔

Explanation

The **rpm -F** command upgrades the package, but only if an earlier version currently exists on the system.

References

▷ 6.1.1 Red Hat Package Manager (RPM)

▷ 6.1.2 RPM Package Management

⌨ 6.1.3 Manage RPM Packages

▤ 6.1.7 RPM Facts

▷ 6.2.1 Yellowdog Updater, Modified (YUM)

⌨ 6.2.2 Install Packages with YUM

⌨ 6.2.3 Install Packages with Dandified YUM (DNF)

▤ 6.2.4 YUM and DNF Facts

▷ 6.3.1 Debian Package Manager (dpkg)

▷ 6.3.2 Advanced Packaging Tool (apt-get)

⌨ 6.3.3 Managing Debian Packages

▤ 6.3.4 Debian Package Management Facts

q_rpm_f_lp5_02.question.fex

▼ **Question 6:**   ✔ Correct

Which of the following commands will check for dependencies before loading the
gameport module in the kernel?

- ○ **insmod gameport**

- ○ **modprobe -d gameport**

- ○ **depmod gameport**

➡ ⦿ **modprobe gameport**

Explanation

The **modprobe gameport** command checks for dependencies before loading the module
into the kernel.

The **insmod** command also loads modules into the kernel, but it does not check for
dependencies.

References

🔳 **9.2.3 Kernel Module Management Facts**

q_modules_lp5_05.question.fex

▼ Question 7:   ✔ Correct

You have installed a package called *mathpac* with DNF. After a system upgrade, the package is not working correctly.

Which of the following commands should you try first to get the package to function?

    ○ **dnf upgrade mathpac**

    ○ **dnf remove mathpac** and then **dnf install mathpac**

    ○ **rpm -U mathpac**

➡ ◉ **dnf update mathpac**

Explanation

update ensures all dependencies are met. **upgrade** is for some backward compatibility functions and considers package obsoletes. It may be removed in the future. **dnf remove mathpac** and then **dnf install mathpac** will work, but this option requires unnecessary steps. The **rpm** command is inappropriate for dnf packages.

References

🗒 **6.2.4 YUM and DNF Facts**

q_rpm_yum_f_lp5_02.question.fex

▼ Question 8:   ✔ Correct

As a network administrator, you have had several users ask for a way in which they could connect their phones to their Linux computer, without the use of wires.

Which of the following device types would BEST meet these user's needs?

- ○ GPIO
- ➡ ● Bluetooth
- ○ USB
- ○ PCI
- ○ HBA

Explanation

Bluetooth allows a device such as a phone to be connected to a Linux computer, as if the device were plugged in using a wire. However, Bluetooth is only a short-range solution.

The Universal Serial Bus (USB) requires a physical connection to the computer. However, you may use a USB device to provide Bluetooth capabilities.

GPIO is a type of pin found on an integrated circuit that does not have a specific function. The function of a GPIO pin is customizable and can be controlled by software.

A PCI device is any piece of computer hardware that plugs directly into a PCI slot on a computer's motherboard.

A Host bus adapter (HBA) is a hardware device, such as a circuit board or integrated circuit adapter, that provides I/O processing and physical connectivity between a host system, such as a server, and a storage device.

References

▤ **9.1.2 Device Types Facts**

q_device_types_facts_lp5_bluetooth.question.fex

▼ Question 9:   ✔ Correct

Which of the following is the MOST common Linux file system?

     ○ JFS

     ○ XFS

➡ ◉ ext4

     ○ ReiserFS

Explanation

Ext4 is the most common Linux file system.

XFS, JFS and ReiserFS are newer and less popular Linux file systems.

References

:≡ **8.4.5 File System Management Facts**

q_fsys_lp5_01.question.fex

▼ Question 10:   ✔ Correct

Which command could you use to verify whether a crontab file exists for the *thobbs* user?

○ **crontab -e -u thobbs**

○ **crontab -r -u thobbs**

○ **crontab -a -u thobbs**

➡ ◉ **crontab -l -u thobbs**

Explanation

Use the **crontab -l -u** *user* option to see whether this file exists.

Use the **-e** option to edit the crontab, use **-r** to remove it, and use **-a** to append to the existing file.

References

▷ **10.3.4 cron Task Scheduling**

🖳 **10.3.5 Scheduling Tasks with cron**

▤ **10.3.6 cron Facts**

▤ **15.2.7 File Auditing Facts**

q_schedule_lp5_01.question.fex

▼ **Question 11:**   ✔ Correct

Which of the following commands partitions the second hard disk on a Linux system?

➡ ⦿ **fdisk /dev/sdb**

⦾ **fdisk /dev/sdc**

⦾ **fdisk /sd0-1**

⦾ **format /dev/sdb1**

Explanation

The **fdisk /dev/sdb** command can be used to open the fdisk utility to partition the second hard disk.

The **fdisk /sd0-1** command will return "No such file or directory" since the /sd0-1 device file does not exist.

The **format /dev/sdb1** command will format the first partition on the second disk. It will not partition the second hard disk.

The **fdisk /dev/sdc** command can be used to open the fdisk utility to partition the third hard disk, but not the second hard disk.

References

▷ 3.1.2 System Design Part 2

▷ 8.1.1 MBR Disk Partitions

🖥 8.1.2 Managing MBR Partitions

🖥 8.1.3 Viewing MBR Partitions

☷ 8.1.4 MBR Partition Management Facts

☷ 8.1.5 Device Naming Facts

▷ 8.2.1 GUID Partitions

🖥 8.2.2 Managing GUID Partitions

☷ 8.2.3 GUID Partition Management Facts

q_fdisk_lp5_04.question.fex

Question 12:   ✔ Correct

Which of the following commands removes print job 11 from the hp7 printer?

- ○ **lprm 11**
- ➡ ◉ **cancel -P hp7 11**
- ○ **cancel -U hp7 11**
- ○ **cancel 11**

Explanation

cancel -P hp7 11 cancels print job 11 on hp7. Use **cancel** to cancel print jobs. Options include **-P**, which specifies a printer, and **-U**, which specifies a user name. **lprm 11** removes the job from the default print queue, not hp7.

References

▤ **10.4.4 CUPS Facts**

q_cups_lp5_02.question.fex

▼ **Question 13:**   ✔ Correct

You have recently answered calls from a number of users who cannot access the mail server. Which utility would you use to quickly see if the sendmail service is running?

➡ ◉ **ps**

   ○ **uptime**

   ○ **netstat**

   ○ **ifconfig**

Explanation

Use the **ps** utility to show the running processes and see if the sendmail service is running.

netstat will check to see if the sendmail service is *listening* for traffic. **uptime** displays how long the system has been running. **ifconfig** creates and views IP configuration for network interfaces.

References

🗒 **10.1.9 Process Display Facts**

q_processes_cf_lp5_05.question.fex

▼ Question 14:   ✔ Correct

Which of the following commands would be used to make **nstevens** the owner of all of the files and directories in the **/docs** directory?

➡ ⦿ chown -R nstevens /docs

○ chown -f nstevens /docs

○ chown nstevens /docs

○ chown -v nstevens /docs

Explanation

The correct answer is **chown -R nstevens /docs**. This tells chown to act *recursively* on all files and directories in the specified location.

The **-v** option is for verbose, meaning output will be generated for every file processed.

The **-f** option is for suppressing most error messages.

With no options, chown only acts upon the given file or directory.

References

🗒 **8.8.3 File Ownership Facts**

q_own_cf_lp5_05.question.fex

▼ **Question 15:**   ✕ Incorrect

You are the administrator for a small company. You need to create a new group for users in the sales department. You need to name the group *sales*.

Which command will accomplish this task?

➡ ○ **groupadd sales**

   ○ **addgroup -x sales**

   ◉ ~~**addgroup sales**~~

   ○ **groupadd -r sales**

Explanation

Use **groupadd** to add a group to the system. By default, the group will be added with an incrementing number above those reserved for system accounts. If you use the **-r** option, it will add the account as a system account (with a reserved group id number). Because this is a group that is created for users, the**-r** option should not be used.

References

▷ 7.1.2 Linux Group Overview

q_group_cf_lp5_01.question.fex

▼ Question 16:   ✔ Correct

During installation, you must create a root user account for the system.

Which of the following user account number does this account use?

➡ ⊙ 0

   ○ 1

   ○ 10

   ○ 100

Explanation

The root user has an account number of 0 and belongs to group 1.

References

▤ **7.1.4 User and Group Facts**

q_users_lp5_01.question.fex

▼ Question 17:   ✔ Correct

Which of the following devices is a hotplug device?

- ○ RAM (Random Access Memory) chips
- ➡ ⦿ USB flash drives
- ○ PCI Express cards
- ○ CPU (Central Processing Unit)

Explanation

The USB flash drive is a hotplug device. Hotplug devices can be removed while the computer is on. Linux uses software designed to detect these changes as the devices are added and removed. Hotplug devices also include FireWire devices.

Coldplug devices should only be removed or replaced when the power to the computer is off. Attempting to remove these devices while the power is on can damage the computer. Coldplug devices include:

- RAM (Random Access Memory) chips
- CPU (Central Processing Unit)
- Expansion cards, such as Peripheral Component Interconnect (PCI) or PCI Express cards
- Hard disk drives

References

▤ **9.3.2 Hotplug and Coldplug Device Facts**

q_hot_cold_dev_f_lp5_01.question.fex

▼ **Question 18:**   ✔ Correct

One of your users, Karen Scott, has recently married, and is now Karen Jones. She has requested that her username be changed from *kscott* to *kjones.*

Which of the following commands will accomplish this task without changing other values?

○ **usermod -u kjones kscott**

○ **usermod -u kscott kjones**

○ **usermod -l kscott kjones**

➡ ◉ **usermod -l kjones kscott**

Explanation

Use the **usermod** utility to modify user settings. Use the **-l** flag to signal a change to the username. The correct syntax requires that the new username value be given followed by the old username. The **-u** flag changes the uid number.

References

▤ **7.2.4 User Management Facts**

q_user_cf_lp5_05.question.fex

▼ Question 19:   ✔ Correct

A developer calls you with a problem. She was trying to debug a new daemon and mistakenly placed it on the production machine instead of on a lab machine. It has now entered runaway mode. The PID number is 2345. She attempted to stop the process with the standard **kill** command, but it had no effect.

Which command would you use to assure that the process will terminate?

- ○ **kill 2345 -9**

➡ ◉ **kill -9 2345**

- ○ **kill 2345 -NOW**

- ○ **kill -NOW 2345**

Explanation

Use **kill -9 2345** to terminate PID 2345 with the strongest signal possible (-9). The other choices presented do not have the syntax required to terminate the runaway process.

References

▷ **10.2.6 Process Termination**

🖥 **10.2.7 Terminating Processes**

🖥 **15.3.2 Disable Login**

q_ps_kill_lp5_05.question.fex

▼ Question 20:   ✔ Correct

You have installed a package called mathpac with **apt-get**. After a system upgrade, the package is not working correctly.

Which of the following commands is the MOST correct method to get the package to work?

- ○ **rpm -U mathpac**
- ➡ ● **apt-get upgrade mathpac**
- ○ **apt-get update mathpac**
- ○ **apt-get dist-upgrade mathpac**

Explanation

The **upgrade** option will ensure all dependencies are met when the latest version is installed. **update** is used to resynchronize the package index files from their sources. The indexes of available packages are fetched from the location(s) specified in **/etc/apt/sources.list**.

rpm -U mathpac may work with apt-get versions specific for rpm based distributions, but not all distributions use rpm for package management. **dist-upgrade**, in addition to performing the function of upgrade, also intelligently handles changing dependencies with new versions of packages. **apt-get** has a "smart" conflict resolution system, and it will attempt to upgrade the most important packages at the expense of less important ones, if necessary. This should not be used to casually upgrade a single package.

References

▤ 6.3.4 Debian Package Management Facts

q_debian_f_lp5_01.question.fex

▼ **Question 21:**   ✔ Correct

Which of the following functions does the **-d** option perform when using the **apt-get** command to install a package?

○ Package installation is simulated without an actual installation.

○ The package database is checked for consistency and errors.

➡ ◉ Packages are downloaded to the system, but not installed.

○ All installed packages are upgraded to the latest versions in with the information **in /etc/apt/sources.list**.

Explanation

The **apt-get install** command downloads and installs packages. Inserting the **-d** option downloads packages without installing them.

apt-get upgrade upgrades all installed packages to the latest versions in accordance with the information in **/etc/apt/sources.list**. **apt-get -check** checks the package database for consistency and errors. **apt-get -s** simulates package installation without doing an actual install.

References

▤ **6.3.4 Debian Package Management Facts**

q_debian_f_lp5_05.question.fex

▼ **Question 22:**   ✔ Correct

A file contains the following entry:

`sales:x:1001:pclark,mmckay,hsamson`

Which of the following files contains similar entries?

○ /etc/passwd

○ /etc/shadow

➡ ◉ /etc/group

○ /etc/gshadow

Explanation

The following line is a sample entry in the /etc/group file:

`sales:x:1001:pclark,mmckay,hsamson`

The /etc/group file holds group information, including the group name, group password, group ID, and group membership information. Be aware of the following details:

- Each entry in the group file identifies a group.
- Each entry contains multiple fields, and fields are separated by colons.

References

🗒️ **7.1.4 User and Group Facts**

q_users_lp5_05.question.fex

▼ **Question 23:**   ✔ Correct

Which of the following device categories do RAM chips, CPUs, expansion cards (such as PCI cards), and standard hard disk drives belong to?

○ Hardware abstraction devices

➡ ◉ Coldplug devices

○ Hotplug devices

○ Desktop bus devices

Explanation

RAM chips, CPUs, expansion cards (such as PCI cards), and standard hard disk drives are all examples of coldplug devices. Coldplug devices should only be removed or replaced when the power to the computer is off. Attempting to remove these devices while the power is on can damage the device or the computer.

References

▤ **9.3.2 Hotplug and Coldplug Device Facts**

q_hot_cold_dev_f_lp5_05.question.fex

▼ Question 24:   ✔ Correct

For what purpose would you edit the **/**etc/localtime file?

○ Set the system date and time.

○ Change the value of the time zone (TZ) environment variable.

○ Set the hardware clock time.

➡ ⦿ Set the current time zone.

Explanation

Use /etc/localtime (found typically on RPM distributions or /etc/timezone for Debian based distributions) to see the current time zone and change the time zone. The /etc/localtime file identifies the current time zone file used on the system. This is a symbolic link to a time zone file in the /usr/share/zoneinfo directory. Replacing this link changes the time zone.

Use **date** to view and manually set the system date and time. Use **hwclock** to view and set the hardware clock time and synchronize the hardware clock and the system time. Use **tzselect** to change the value of the time zone (TZ) environment variable.

References

▤ **10.5.3 Time Zone Facts**

q_time_zone_lp5_01.question.fex

▼ **Question 25:**   ✔ Correct

You have been currently using a cable to connect your Linux laptop to the company network. You are now, however, required to attend several meeting a week in other parts of the building and you would like to be able to bring your laptop with you, but still need access to the network while in the meeting.

Which of the following device types would BEST meet your needs?

- ○ SATA

- ○ HBA

➡ ◉ WiFi

- ○ SCSI

Explanation

WiFi (wireless fidelity) is a technology that uses radio waves to provide network connectivity. A WiFi connection is established using a wireless adapter to create hotspots - areas in the vicinity of a wireless router that are connected to the network and allow users to access internet services.

Small Computer System Interface (SCSI), is a set of standards for physically connecting and transferring data between computers and peripheral devices. SCSI is most commonly used for hard disk drives and tape drives.

A Host bus adapter (HBA) is a hardware device, such as a circuit board or integrated circuit adapter, that provides I/O processing and physical connectivity between a host system, such as a server, and a storage device.

Serial ATA (SATA) is a computer bus interface that connects host bus adapters to mass storage devices such as hard disk drives.

References

⊞ **9.1.2 Device Types Facts**

q_device_types_facts_lp5_wifi.question.fex