# LX0-103.exam.68q

Number: LX0-103 Passing Score: 800 Time Limit: 120 min



LX0-103

CompTIA Linux+ [Powered by LPI] Exam 1

## Sections

- 1. SysArchitec
- 2. InstallPack
- 3. GNUUnix
- 4. DevFileHier

#### Exam A

#### **QUESTION 1**

Which of the following commands reboots the system when using SysV init? (Choose TWO correct answers.)



- A. shutdown -r now
- B. shutdown -r "rebooting"
- C. telinit 6
- D. telinit 0
- E. shutdown -k now "rebooting"

Correct Answer: AC Section: SysArchitec

Explanation

# **Explanation/Reference:**

#### **QUESTION 2**

Which of the following are init systems used within Linux systems? (Choose THREE correct answers.)

- A. startd
- B. systemd
- C. Upstart
- D. SysInit
- E. SysV init

Correct Answer: BCE Section: SysArchitec

Explanation

# Explanation/Reference:

## **QUESTION 3**

Which of the following environment variables overrides or extends the list of directories holding shared libraries?

- A. LD LOAD PATH
- B. LD LIB PATH
- C. LD LIBRARY PATH
- D. LD SHARE PATH
- E. LD RUN PATH

Correct Answer: C Section: InstallPack Explanation

# Explanation/Reference:

## **QUESTION 4**

Which RPM command will output the name of the package which supplied the file /etc/exports?

- A. rpm -F /etc/exports
- B. rpm -qf /etc/exports
- C. rpm -KI /etc/exports
- D. rpm -qp /etc/exports
- E. rpm -qi /etc/exports

Correct Answer: B Section: InstallPack

**Explanation** 

# **Explanation/Reference:**

# **QUESTION 5**

When removing a package, which of the following dpkg options will completely remove the files including configuration files?



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A. --clean

B. --delete

C. --purge

D. -remove

Correct Answer: C Section: InstallPack Explanation

Explanation/Reference:

#### **QUESTION 6**

Which file should be edited to select the network locations from which Debian installation package files are loaded?

- A. /etc/dpkg/dpkg.cfg
- B. /etc/apt/apt.conf
- C. /etc/apt/apt.conf.d
- D. /etc/apt/sources.list
- E. /etc/dpkg/dselect.cfg

Correct Answer: D Section: InstallPack Explanation

Explanation/Reference:

#### **QUESTION 7**

Which of the following commands overwrites the bootloader located on /dev/sda without overwriting the partition table or any data following it?

A. dd if=/dev/zero of=/dev/sda bs=512

- B. dd if=/dev/zero of=/dev/sda bs=512 count=1
- C. dd if=/dev/zero of=/dev/sda bs=440 count=1
- D. dd if=/dev/zero of=/dev/sda bs=440

Correct Answer: C Section: InstallPack

**Explanation** 

# Explanation/Reference:

## **QUESTION 8**

After modifying GNU GRUB's configuration file, which command must be run for the changes to take effect?

- A. kill -HUP \$(pidof grub)
- B. grub-install
- C. grub
- D. No action is required

Correct Answer: D Section: InstallPack Explanation

Explanation/Reference:

## **QUESTION 9**

Which of the following commands is used to update the list of available packages when using dpkg based package management?

- A. apt-get update
- B. apt-get upgrade
- C. apt-cache update
- D. apt-get refresh
- E. apt-cache upgrade

Correct Answer: A Section: InstallPack

**Explanation** 

# **Explanation/Reference:**

# **QUESTION 10**

Which of the following commands lists the dependencies of a given dpkg package?

- A. apt-cache depends-on package
- B. apt-cache dependencies package
- C. apt-cache depends package
- D. apt-cache requires package

Correct Answer: C Section: InstallPack Explanation

# Explanation/Reference:

## **QUESTION 11**

Which of the following options is used in a GRUB Legacy configuration file to define the amount of time that the GRUB menu will be shown to the user?



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- A. hidemenu
- B. splash
- C. timeout
- D. showmenu

Correct Answer: C Section: InstallPack

**Explanation** 

# **Explanation/Reference:**

#### **QUESTION 12**

What can the Logical Volume Manager (LVM) be used for? (Choose THREE correct answers.)

- A. To create RAID 9 arrays.
- B. To dynamically change the size of logical volumes.
- C. To encrypt logical volumes.
- D. To create snapshots.
- E. To dynamically create or delete logical volumes.

Correct Answer: BDE Section: InstallPack

**Explanation** 

# Explanation/Reference:

## **QUESTION 13**

Which of the following commands updates the linker cache of shared libraries?

- A. mkcache
- B. soconfig
- C. mkldconfig
- D. Iddconfig
- E. Idconfig

Correct Answer: E Section: InstallPack

**Explanation** 

# Explanation/Reference:

#### **QUESTION 14**

Which of the following commands can be used to download the RPM package kernel without installing it?

- A. yum download --no-install kernel
- B. yumdownloader kernel

- C. rpm --download --package kernel
- D. rpmdownload kernel

Correct Answer: B Section: InstallPack Explanation

# Explanation/Reference:

#### **QUESTION 15**

When using rpm --verify to check files created during the installation of RPM packages, which of the following information is taken into consideration? (Choose THREE correct answers.)

- A. Timestamps
- B. MD5 checksums
- C. Inodes
- D. File sizes
- E. GnuPG signatures

Correct Answer: ABD Section: InstallPack Explanation

Explanation/Reference:

## **QUESTION 16**

Which of the following is correct when talking about mount points?

- A. Every existing directory can be used as a mount point.
- B. Only empty directories can be used as a mount point.
- C. Directories need to have the SetUID flag set to be used as a mount point.
- D. Files within a directory are deleted when the directory is used as a mount point.

Correct Answer: A Section: InstallPack

**Explanation** 

# Explanation/Reference:

## **QUESTION 17**

Which function key is used to start Safe Mode in Windows NT?



A. F10

B. F8

C. F6

D. Windows NT does not support Safe Mode

Correct Answer: D Section: InstallPack Explanation

# Explanation/Reference:

# **QUESTION 18**

In Bash, inserting 1>&2 after a command redirects

- A. standard error to standard input.
- B. standard input to standard error.
- C. standard output to standard error.
- D. standard error to standard output.
- E. standard output to standard input.

Correct Answer: C Section: GNUUnix Explanation

**Explanation/Reference:** 

#### **QUESTION 19**

What command will generate a list of user names from /etc/passwd along with their login shell?

A. column -s: 1,7 /etc/passwd

B. chop -c 1,7 /etc/passwd

C. colrm 1,7 /etc/passwd

D. cut -d: -f1,7 /etc/passwd

Correct Answer: D Section: GNUUnix Explanation

# Explanation/Reference:

# **QUESTION 20**

In a nested directory structure, which find command line option would be used to restrict the command to searching down a particular number of subdirectories?

- A. -dirmax
- B. -maxdepth
- C. -maxlevels
- D. -n
- E. -s

Correct Answer: B Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 21**

Which of the following statements is correct regarding the command foo 1> bar?

- A. The stdout from the command foo is appended to the file bar.
- B. The stdout from the command foo overwrites the file bar.
- C. The command foo receives its stdin from the file bar.

D. The command foo receives its stdin from the stdout of the command bar. E. The stderr from the command foo is saved to the file bar. Correct Answer: B Section: GNUUnix **Explanation** Explanation/Reference: **QUESTION 22** Which of the following commands kills the process with the PID 123 but allows the process to "clean up" before exiting? A. kill -PIPE 123 B. kill -KILL 123 C. kill -STOP 123 D. kill -TERM 123 Correct Answer: D Section: GNUUnix **Explanation** Explanation/Reference: **QUESTION 23** What is the maximum niceness value that a regular user can assign to a process with the nice command when executing a new process? A. 9 B. 19 C. 49 D. 99

Correct Answer: B Section: GNUUnix Explanation

**Explanation/Reference:** 

## **QUESTION 24**

Immediately after deleting 3 lines of text in vi and moving the cursor to a different lin	ine, which single character command will insert the deleted content below the
current line?	

- A. i (lowercase)
- B. P (uppercase)
- C. p (lowercase)
- D. U (uppercase)
- E. u (lowercase)

Correct Answer: C Section: GNUUnix Explanation

# Explanation/Reference:

# **QUESTION 25**

A user accidentally created the subdirectory \dir in his home directory. Which of the following commands will remove that directory?

- A. rmdir '~/\dir'
- B. rmdir "~/\dir"
- C. rmdir ~/'dir'
- D. rmdir ~/\dir
- E. rmdir ~/\\dir

Correct Answer: E Section: GNUUnix Explanation

# **Explanation/Reference:**

# **QUESTION 26**

In compliance with the FHS, in which of the directories are man pages found?



- A. /usr/share/man
- B. /opt/man
- C. /usr/doc/
- D. /var/pkg/man
- E. /var/man

Correct Answer: A Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 27**

Which of the following commands will send output from the program myapp to both standard output (stdout) and the file file1.log?

- A. cat < myapp | cat > file1.log
- B. myapp 0>&1 | cat > file1.log
- C. myapp | cat > file1.log
- D. myapp | tee file1.log
- E. tee myapp file1.log

Correct Answer: D Section: GNUUnix Explanation

# **Explanation/Reference:**

## **QUESTION 28**

Which of the following commands will NOT update the modify timestamp on the file /tmp/myfile.txt?

- A. file /tmp/myfile.txt
- B. echo "Hello" >/tmp/myfile.txt
- C. sed -ie "s/1/2/" /tmp/myfile.txt
- D. echo -n "Hello" >>/tmp/myfile.txt
- E. touch /tmp/myfile.txt

Correct Answer: A Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 29**

What is the default nice level when a process is started using the nice command?

- A. -10
- B. 10
- C. 20
- D. 0

Correct Answer: B Section: GNUUnix Explanation

# **Explanation/Reference:**

#### **QUESTION 30**

What is the default action of the split command on an input file?

- A. It will break the file into new files of 1,024 byte pieces each.
- B. It will break the file into new files of 1,000 line pieces each.
- C. It will break the file into new files of 1,024 kilobyte pieces each.
- D. It will break the file into new files that are no more than 5% of the size of the original file.

**Correct Answer:** B **Section:** GNUUnix

## **Explanation**

## Explanation/Reference:

#### **QUESTION 31**

What is the difference between the i and a commands of the vi editor?

- A. i (interactive) requires the user to explicitly switch between vi modes whereas a (automatic) switches modes automatically.
- B. i (insert) inserts text before the current cursor position whereas a (append) inserts text after the cursor.
- C. i (independent rows) starts every new line at the first character whereas a (aligned rows) keeps the indentation of the previous line.
- D. i (interrupt) temporarily suspends editing of a file to the background whereas a (abort) terminates editing.

Correct Answer: B Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 32**

SIMULATION

Which command displays a list of all background tasks running in the current shell? (Specify ONLY the command without any path or parameters.)

Correct Answer: jobs Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 33**

Which of the following commands moves and resumes in the background the last stopped shell job?

- A. run
- B. bg
- C. fg
- D. back

Correct Answer: B Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 34**

What is the effect of the egrep command when the -v option is used?

- A. It enables color to highlight matching parts.
- B. It only outputs non-matching lines.
- C. It shows the command's version information.
- D. It changes the output order showing the last matching line first.

Correct Answer: B Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 35**

What does the ? symbol within regular expressions represent?



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- A. Match the preceding qualifier one or more times.
- B. Match the preceding qualifier zero or more times.
- C. Match the preceding qualifier zero or one times.
- D. Match a literal? character.

Correct Answer: C Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 36**

In the vi editor, how can commands such as moving the cursor or copying lines into the buffer be issued multiple times or applied to multiple rows?

- A. By using the command :repeat followed by the number and the command.
- B. By specifying the number right in front of a command such as 4l or 2yj.
- C. By selecting all affected lines using the shift and cursor keys before applying the command.
- D. By issuing a command such as :set repetition=4 which repeats every subsequent command 4 times.

Correct Answer: B Section: GNUUnix Explanation

# **Explanation/Reference:**

#### **QUESTION 37**

Which of the following files, located in the user home directory, is used to store the Bash history?

- A. .bash\_history
- B. .bash\_histfile
- C. .history
- D. .bashrc\_history
- E. .history\_bash

Correct Answer: A Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 38**

SIMULATION

Which Bash environment variable defines in which file the user history is stored when exiting a Bash process? (Specify ONLY the variable name.)

**Correct Answer: HISTFILE** 

Section: GNUUnix Explanation

# **Explanation/Reference:**

#### **QUESTION 39**

Which of the following commands displays the contents of a gzip compressed tar archive?

- A. gzip archive.tgz | tar xvf -
- B. tar ztf archive.tgz
- C. gzip -d archive.tgz | tar tvf -
- D. tar cf archive.tgz

Correct Answer: B Section: GNUUnix Explanation

# Explanation/Reference:

## **QUESTION 40**

Which grep command will print only the lines that do not end with a / in the file foo?

- A. grep '/\$' foo
- B. grep '/#' foo
- C. grep -v '/\$' foo
- D. grep -v '/#' foo

Correct Answer: C Section: GNUUnix Explanation

# **Explanation/Reference:**

## **QUESTION 41**

Which of the following commands is used to change options and positional parameters for a running Bash?

- A. history
- B. set
- C. bashconf
- D. setsh
- E. envsetup

Correct Answer: B Section: GNUUnix Explanation

# **Explanation/Reference:**

## **QUESTION 42**

Which of the following commands replaces each occurrence of 'bob' in the file letter with 'Bob' and writes the result to the file newletter?

- A. sed '/bob/Bob' letter > newletter
- B. sed s/bob/Bob/ letter < newletter
- C. sed 's/bob/Bob' letter > newletter
- D. sed 's/bob/Bob/g' letter > newletter
- E. sed 's/bob, Bob/' letter > newletter

Correct Answer: D Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 43**

From a Bash shell, which of the following commands directly executes the instruction from the file /usr/local/bin/runme.sh without starting a subshell? (Please select TWO answers.)

- A. source /usr/local/bin/runme.sh
- B. . /usr/local/bin/runme.sh
- C. /bin/bash /usr/local/bin/runme.sh
- D. /usr/local/bin/runme.sh

E. run /usr/local/bin/runme.sh

Correct Answer: AB Section: GNUUnix Explanation

Explanation/Reference:

# **QUESTION 44**

Regarding the command:

nice -5 /usr/bin/prog

which of the following statements is correct?

- A. /usr/bin/prog is executed with a nice level of -5.
- B. /usr/bin/prog is executed with a nice level of 5.
- C. /usr/bin/prog is executed with a priority of -5.
- D. /usr/bin/prog is executed with a priority of 5.

Correct Answer: B Section: GNUUnix Explanation

Explanation/Reference:

#### **QUESTION 45**

Which shell command is used to continue background execution of a suspended command?



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- A. &
- B. bg

C. cont D. exec E. :&
Correct Answer: B Section: GNUUnix Explanation
Explanation/Reference:
QUESTION 46 Which of the following shell redirections will write standard output and standard error output to a file named filename?
<ul> <li>A. 2&gt;&amp;1 &gt;filename</li> <li>B. &gt;filename 2&gt;&amp;1</li> <li>C. 1&gt;&amp;2&gt;filename</li> <li>D. &gt;&gt;filename</li> <li>E. 1&amp;2&gt;filename</li> </ul>
Correct Answer: B Section: GNUUnix Explanation
Explanation/Reference:
QUESTION 47 In the vi editor, which of the following commands will copy the current line into the vi buffer?
A. c B. cc C. 1c D. yy E. 1y
Correct Answer: D

Section: GNUUnix

# **Explanation Explanation/Reference: QUESTION 48** Which of the following sequences in the vi editor saves the opened document and exits the editor? (Choose TWO correct answers.) A. esc ZZ B. ctrl:w! C. esc zz D. esc:wq! E. ctrl XX Correct Answer: AD Section: GNUUnix **Explanation Explanation/Reference: QUESTION 49** When starting a program with the nice command without any additional parameters, which nice level is set for the resulting process? A. -10 B. 0 C. 10 D. 20 Correct Answer: C **Section: GNUUnix Explanation** Explanation/Reference:

## **QUESTION 50**

Which of the following commands will reduce all consecutive spaces down to a single space?

- A. tr '\s' ' ' < a.txt > b.txt
- B. tr c'' < a.txt > b.txt
- C. tr d'' < a.txt > b.txt
- D.  $tr r'' \ n' < a.txt > b.txt$
- E. tr -s ' ' < a.txt > b.txt

Correct Answer: E Section: GNUUnix Explanation

# **Explanation/Reference:**

# **QUESTION 51**

Which character, added to the end of a command, runs that command in the background as a child process of the current shell?

- A. !
- B. +
- C. &
- D. %
- E. #

Correct Answer: C Section: GNUUnix Explanation

# **Explanation/Reference:**

## **QUESTION 52**

Which of the following commands will print the last 10 lines of a text file to the standard output?

- A. cat -n 10 filename
- B. dump -n 10 filename
- C. head -n 10 filename
- D. tail -n 10 filename

Correct Answer: D

Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 53**

What happens after issuing the command vi without any additional parameters?

- A. vi starts and loads the last file used and moves the cursor to the position where vi was when it last exited.
- B. vi starts and requires the user to explicitly either create a new or load an existing file.
- C. vi exits with an error message as it cannot be invoked without a file name to operate on.
- D. vi starts in command mode and opens a new empty file.
- E. vi starts and opens a new file which is filled with the content of the vi buffer if the buffer contains text.

Correct Answer: D Section: GNUUnix Explanation

# **Explanation/Reference:**

#### **QUESTION 54**

Which of the following command sets the Bash variable named TEST with the content FOO?



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- A. set TEST="FOO"
- B. TEST = "FOO"
- C. var TEST="FOO"
- D. TEST="FOO"

Correct Answer: D Section: GNUUnix Explanation

# Explanation/Reference: **QUESTION 55** Which variable defines the directories in which a Bash shell searches for executable commands? A. BASHEXEC B. BASHRC C. PATH D. EXECPATH E. PATHRC Correct Answer: C Section: GNUUnix **Explanation** Explanation/Reference: **QUESTION 56** Which of the following commands determines the type of a file by using a definition database file which contains information about all common file types? A. magic B. type C. file D. pmagic E. hash Correct Answer: C **Section: GNUUnix Explanation Explanation/Reference:**

## **QUESTION 57**

SIMULATION

Which command is used in a Linux environment to create a new directory? (Specify ONLY the command without any path or parameters.)

Correct Answer: mkdir -or- /usr/bin/mkdir

Section: GNUUnix Explanation

# **Explanation/Reference:**

#### **QUESTION 58**

Which of the following commands prints all files and directories within the /tmp directory or its subdirectories which are also owned by the user root? (Choose TWO correct answers.)

- A. find /tmp -uid root -print
- B. find -path /tmp -uid root
- C. find /tmp -user root -print
- D. find /tmp -user root
- E. find -path /tmp -user root -print

Correct Answer: CD Section: GNUUnix Explanation

# **Explanation/Reference:**

#### **QUESTION 59**

When running the command

sed -e "s/a/b/" /tmp/file >/tmp/file

while /tmp/file contains data, why is /tmp/file empty afterwards?

- A. The file order is incorrect. The destination file must be mentioned before the command to ensure redirection.
- B. The command sed did not match anything in that file therefore the output is empty.
- C. When the shell establishes the redirection it overwrites the target file before the redirected command starts and opens it for reading.
- D. Redirection for shell commands do not work using the > character. It only works using the | character instead.

**Correct Answer:** C **Section:** GNUUnix

# **Explanation**

# **Explanation/Reference:**

# **QUESTION 60**

When given the following command line. echo "foo bar" | tee bar | cat

Which of the following output is created?

- A. cat
- B. foo bar
- C. tee bar
- D. bar
- E. foo

Correct Answer: B Section: GNUUnix Explanation

# **Explanation/Reference:**

## **QUESTION 61**

Which of the following commands can be used to determine how long the system has been running? (Choose TWO correct answers.)

- A. uptime
- B. up
- C. top
- D. uname -u
- E. time -up

Correct Answer: AC Section: GNUUnix Explanation

# Explanation/Reference:

#### **QUESTION 62**

Which of the following commands changes the ownership of file.txt to the user dan and the group staff?

- A. chown dan/staff file.txt
- B. chown dan:staff file.txt
- C. chown -u dan -g staff file.txt
- D. chown dan -g staff file.txt

Correct Answer: B Section: DevFileHier

Explanation

# **Explanation/Reference:**

## **QUESTION 63**

Which of the following commands makes /bin/foo executable by everyone but writable only by its owner?



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- A. chmod u=rwx,go=rx /bin/foo
- B. chmod o+rwx,a+rx /bin/foo
- C. chmod 577 /bin/foo
- D. chmod 775 /bin/foo

Correct Answer: A Section: DevFileHier Explanation

Explanation/Reference:

## **QUESTION 64**

Which of the following commands can be used to search for the executable file foo when it has been placed in a directory not included in \$PATH?

- A. apropos
- B. which
- C. find
- D. query
- E. whereis

**Correct Answer:** C **Section: DevFileHier** 

**Explanation** 

# Explanation/Reference:

## **QUESTION 65**

What does the command mount -a do?

- A. It ensures that all file systems listed with the option noauto in /etc/fstab are mounted.
- B. It shows all mounted file systems that have been automatically mounted.
- C. It opens an editor with root privileges and loads /etc/fstab for editing.
- D. It ensures that all file systems listed with the option auto in /etc/fstab are mounted.
- E. It ensures that all file systems listed in /etc/fstab are mounted regardless of their options.

**Correct Answer:** D **Section: DevFileHier** 

**Explanation** 

# **Explanation/Reference:**

#### **QUESTION 66**

Which of the following settings for umask ensures that new files have the default permissions -rw-r----?

- A. 0017
- B. 0640
- C. 0038
- D. 0027

Correct Answer: D Section: DevFileHier Explanation
Explanation/Reference:
QUESTION 67 Which of the following is the device file name for the second partition on the only SCSI drive?
<ul><li>A. /dev/hda1</li><li>B. /dev/sda2</li><li>C. /dev/sd0a2</li><li>D. /dev/sd1p2</li></ul>
Correct Answer: B Section: DevFileHier Explanation
Explanation/Reference:
QUESTION 68 In order to display all currently mounted filesystems, which of the following commands could be used? (Choose TWO correct answers.)
<ul> <li>A. cat /proc/self/mounts</li> <li>B. free</li> <li>C. mount</li> <li>D. Ismounts</li> <li>E. cat /proc/filesystems</li> </ul>
Correct Answer: AC Section: DevFileHier Explanation
Explanation/Reference:

