201-450.38q

201-450

LPIC-2 Exam 201, Part 1 of 2, version 4.5

Exam A

QUESTION 1
Which of the following commands erases the contents of the `/dev/sdb3` partition?

A. `rm /dev/sdb3`

B. `dd if=/dev/zero of=/dev/sdb3`

C. `dd of=/dev/zero if=/dev/sdb3`

D. `umount /dev/sdb3`

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 2
Which of the following files will be looked for and used by GNU make, if one of them exists, unless a different file is specified on the command line when trying to compile software from source code? (Choose two.)

A. `configure`

B. `config.h.in`

C. `makefile`

D. `Makefile`

E. `Makefile.in`

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
QUESTION 3
A regular user has just run

```
./configure && make && make install
```

to build and install a program. However, the installation fails. What could be done to install the program? (Choose two.)

A. Install the binaries manually with `suinstall`
B. Run `make install` with root privileges
C. Do not run `./configure` in order to maintain the default configuration for correct installation
D. Rerun `./configure` with a `--prefix` option where the user has permissions to write
E. Run `make install_local` to install into `/usr/local/`

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 4
The following command has just been run successfully:

```
Cd /opt; tar xvf /dev/nst0;
```

What will happen if the command sequence is run again?

A. An error saying that there is no tape present is generated because the tape has been ejected after being used
B. The contents of `/opt` will be restored again
C. The entire contents of `/opt` will be replaced with the contents of the next file on the tape

D. The contents of `/opt` will have additional content added from the next file on the tape

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
QUESTION 5
What is the minimum number of disks required in a fully redundant RAID5 array?

A. 1
B. 2
C. 3
D. 4
E. 5

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 6
What information is found in the following excerpt from the file `/proc/mdstat`? (Choose two.)

```
Personalities : [raid6] [raid5] [raid4]

md0 : active raid5 sdb1[3] (S) sdc1[7] sda1[4] (S) sdd1[6] sde1[5]

      1046528 blocks super 1.2 level 5, 512k chunk, algorithm 2 [3/2] [UU_]

      [===>.................] recovery = 15.9% (83808/523264) finish=0.1min
speed=71880K/sec

unused devices: <none>
```

A. One of the disks in /dev/md0 has failed and a spare disk is used to recreate full redundancy
B. The spare disk /dev/sda1 is used to restore full redundancy after the current recovery

C. The information [UU_] means, that the raid is missing one disk and is not fully redundant

D. The device is using version 1.2 metadata to allow LILO and GRUB Legacy to use /dev/md0 as the boot partition. This would not have been necessary with GRUB2

E. The information [3/2] means that 3 RAID disks belong to the array and 2 disks are spare. Together they equal the number of available disks

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 7

Due to extreme system use, a Linux system requires some additional swap space. To initialize 5 GB of additional swap space, which combination of commands should be used?

A. `dd if=/dev/zero of=/tmp/swapfile bs=1024 count=5120000; mkswap /tmp/swapfile; mount /tmp/swapfile`

B. `dd if=/dev/zero of=/tmp/swapfile bs=1024 count=5120000; swapon /tmp/swapfile`

C. `dd if=/dev/zero of=/tmp/swapfile bs=1024 count=5120000; mkswap /tmp/swapfile; swapon /tmp/swapfile`

D. `touch -5G /tmp/swapfile; swapon /tmp/swapfile`

E. `mkswap /tmp/swapfile 512000; swapon /tmp/swapfile`

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 8

What is the purpose of a system mount unit?

A. It is used by the command `systemd-mount` and allows users to mount partitions to mount points of their choice
B. It is used only to mount network file systems to local mount points. It cannot be used for local media
C. It is created by the command `systemd-fstab-generator` to integrate entries from `/etc/fstab` into the system boot process

D. It is used by the command `mount` when using system to mount and unmount file systems

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 9
What component of a system does `smartd` monitor?

https://www.vceplus.com/

A. CPU
B. RAM
C. Hard drives
D. Ethernet traffic

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10
How can the label `root` be added to the ext4 filesystem on `/dev/sda1`?

A. `relabel /dev/sda1 root`

B. `tune2fs -L root /dev/sda1`

C. `echo 'root' > /proc/fs/sda1/label`

D. `labelfs --device /dev/sda1 root`

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 11
Which sub command to `crypsetup` shows information about an encrypted LUKS partition?

A. `luks`Dump

B. `luks`Info

C. `luks`Debug

D. `luks`LS

E. `luks`Show

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 12
Which of the following init systems comes along with an own UEFI boot loader?

A. systemd
B. SysVinit
C. Upstart
D. OpenRC

E. launchd

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 13
Which command is used to install a GRUB boot loader into the master boot record?

A. `grub-install`

B. `grub-mkconfig`

C. `grub-install-mbr`

D. `grub-glue-mbr`

E. `grub-mbr-setup`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 14
If the file containing the Linux kernel is deleted, what happens when the system boots?

A. The system starts normally since the bootloader copies the kernel to the master boot record of the hard disk
B. Instead of the kernel, the initramfs is loaded and instructed to mount the root filesystem and reinstall the kernel from the original package or from source
C. The bootloader mounts the root filesystem read-only and launches /bin/sh directly in order to allow the administrator to reinstall the kernel
D. Without a kernel system cannot boot and, depending on the bootloader, an error is displayed

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 15
Which of the following is a userspace application used to modify EFI entries on a Linux system?

A. `efieditor`

B. `configefi`

C. `efimanager`

D. `efiboottmgr`

E. `efibootedit`

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 16
In which directory tree are files modified when changing kernel parameters using the command `sysctl`?

A. `/sys/kernel/`

B. `/proc/kernel/`

C. `/proc/sys/`

D. `/lib/sys/`

E. `/sys/proc/`

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 17
What is the purpose of the command udevadm monitor?

A. It listens to kernel events produced by a udev rule and prints information to the console
B. It monitors the /dev/ directory for new devices
C. It monitors the udev process and prints performance statistics to the console
D. It communicates with D-Bus to setup new devices

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 18
How is the source code for the main Linux kernel modules distributed?

A. It is included with the Linux kernel source code
B. The kernel modules are downloaded on demand as they are used during compilation
C. The kernel modules have their own release cycle and can be maintained separately from the Linux kernel source
D. It is provided as a separate download alongside the Linux kernel source code for the same version
Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 19
After the downloading `patch-4.6.4.xz` from http://kernel.org, what are the next steps to prepare the build of a version 4.6.4 Linux kernel? (Choose two.)

A. Uncompress the file and move the resulting directory to `/usr/src/linux`
B. Apply the patch file to the kernel source directory containing kernel version 4.6.0
C. Apply the patch file to the kernel source directory containing kernel version 4.6.3
D. Uncompress the file using `xz` to get the uncompressed patch file

E. Use `patch` to apply the uncompressed patch file to the source directory of any previous kernel version

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 20
After manually compiling and installing a new kernel, what has to be done regarding the initramfs?

A. To initramfs is independent of the kernel and should not be modified unless the hardware configuration of the machine has changed
B. Since the initramfs contains kernel modules, a new initramfs must be built for the new kernel
C. During the compilation of the Linux kernel, a new initramfs is built automatically. The new initramfs only needs to be installed
D. The system should be restarted since the initramfs reconfigures itself for the new kernel during the startup of the system

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 21
Which of the following commands displays the physical path of the kernel module named `dummy`?

A. `modprobe -i dummy`

B. `modinfo -n dummy`

C. `modpath -v dummy` D. `depmod -n dummy`

E. `modshow -p dummy`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 22
Which of the following parameters instructs the kernel at boot time to use only one of the available processors?
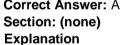
A. `maxcpus=1`

B. `usecpus=1`

C. `smpcpus=1`

D. `vcpumx=1`

E. `vmxcpus=1`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 23
On a server running the 3.4.50-11 Linux kernel, which file in the /boot directory contains the kernel configuration parameters?

A. `config-linux-3.4.50-11`

B. `config-3.4.50-11`

C. `system-3.4.50-11`

D. `vmlinuz-3.4.50-11`

E. `rc.config-3.4.50-11`

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 24
Which of the following commands by default provides the PIDs of the processes sorted by which are using the most CPU cycles on the Linux system?

A. `top`

B. `uptime`

C. `ps aux`

D. `vmstat`

E. `freemem`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 25
In the output of `sar -b`, what does tps stand for?

A. Terrabyte per second
B. Traffic per second
C. Transfers per second
D. Total data per second
E. Terrabit per second

Correct Answer: C

QUESTION 26
In the following output of the command uptime, the load averages represent the system load averages for what time frames?
```
12:10:05 up 18 days, 19:00, 2 users, load average: 0.47, 24.71, 35.31
```

A. 1, 5 and 15 minutes
B. 1, 15 and 30 minutes
C. 5, 20 and 25 seconds
D. 15, 30 and 60 minutes
E. 15, 45 and 90 seconds

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 27
Which of the following properties should be recorded in order to monitor the quality of a network link? (Choose two.)

A. Bandwidth in both directions
B. Number of nodes using the link
C. Effective Latency
D. Number of IPv4 and IPv6 packets
E. Number of used TCP ports

Correct Answer: AC
Section: (none)
Explanation
Explanation/Reference:

QUESTION 28
Which command reports information on memory usage, paging and block input/output?

A. `free`

B. `memshow`

C. `lsof`

D. `pidof`

E. `vmstat`

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 29
In order to gather performance data with `sar` over a longer period of time, which command should be run periodically from cron?

A. `sa1`

B. `sarmon`

C. `sarec`

D. `sadf`

E. `sarcron`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 30
Which commands below are useful to collect data about remote filesystem connections? (Choose two.)

A. `pidstat`

B. `nfsiostat`

C. `sadf`

D. `cifsiostat`

E. `fsiostat`

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 31
A web application server contains 64GB of RAM and two swap partitions on normal hard disk drives, each with a size of 64 GB. Within the last month, the average number of user sessions on this server has grown by 20 percent. At the same time, the average usage of RAM increased from 65 to 75 percent, while the swap space is almost not used at all. It is expected that the number of user sessions will continue to increase by about 15 to 20 percent each month. Which of the following reactions would be appropriate in response to these observations? (Choose two.)

A. Delay any hardware upgrade until there is a significant consumption of swap space to ensure an efficient usage of the available hardware
B. Create a RAID 1 device on the two swap partitions to avoid data loss in case swap space has to be used in the future
C. Consider the installation of an additional application server to distribute the load if the expected growth continues over several months
D. Move the web application's scripts and content a ram disk in order to ensure fast access and to avoid the need for swap space
E. Update the hardware to increase the amount of available RAM to avoid using swap space

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 32
Which of the following configuration files are used by tcpwrapper?

A. `/etc/tcpd.allow` and `etc/tcpd.deny`

B. `/etc/tcpwrapper.allow` and `/etc/tcpwrapper.deny`

C. `/etc/hosts.allow` and `/etc/hosts.deny`

D. `/etc/service.allow` and `/etc/service.deny`

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 33
A network client has an Ethernet interface (eth0) configured with an IP address in the subnet 192.168.0.0/24. This subnet has a router, with the IP address 192.168.0.1, that connects this subnet to the Internet. Which of the following commands can be used on the client to enable it to use the router as its default gateway? (Choose two.)

A. `route add default gw 192.168.0.1 eth0`

B. `ifconfig eth0 defaultroute 192.168.0.1`

C. `ip route add default via 192.168.0.1`

D. `echo defaultroute 192.168.0.1 >>/etc/resolv.conf`

E. `route add defaultgw=192.168.0.1 if=eth0`

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 34
Which of the filter keywords below could be used in the following command:
`tcpdump -i eth0 _____ 203.0.113.8`
(Choose three.)

A. `host`

B. `ip`

C. `src`

D. `dst`

E. `ipv6`

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 35
Which of the following commands adds a static IPv6 address to the network interface eth0?

A. `ip add addr 2001:db8::1337/64 dev eth0`

B. `ip -6 add addr 2001:db8::1337/64 dev eth0`

C. `ip addr add 2001:db8::1337/64 dev eth0`

D. `ip -6 addr add new 2001:db8::1337/64 dev eth0`

E. `ip addr add -6 2001:db8::1337/64 dev eth0`

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 36
The following is an excerpt from the output of `tcpdump -nli eth1`:

```
13:03:17.277327 IP 192.168.123.5.1065 > 192.168.5.112.21: Flags [.], ack 1 (truncated)

13:03:17.598624 IP 192.168.5.112.21 > 192.168.123.5.1065: Flags [P.], seq (truncated)
```

Which network service or protocol was used?
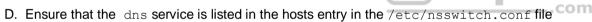
A. FTP
B. HTTP
C. SSH
D. DNS
E. DHCP

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 37
What should be done to ensure a client machine uses the recursive nameserver running on the IP address 192.168.0.1? (Choose two.)

A. Add `nameserver 192.168.0.1` to `/etc/resolv.conf`

B. Run `route` add `nameserver 192.168.0.1`

C. Run `ifconfig eth0 nameserver 192.168.0.1`

D. Ensure that the `dns` service is listed in the hosts entry in the `/etc/nsswitch.conf` file

E. Run `bind` add `nameserver 192.168.0.1`

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 38
Which of the following commands shows capabilities and usable frequencies for the wireless interface `wlan0`?

A. `iw phy pyh0 info`

B. `iw dev wlan0 info`

C. `iw dev wlan0 show`

D. `iw phy wlan0 show`

E. `iw phy0 show`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference: