102-500.29q

102-500

LPI Level 1

Exam A

QUESTION 1
Which of the following connection types, as seen in `nmcli connection show`, may exist in NetworkManager? (Choose three.).

A. `tcp`
B. `ethernet`
C. `wifi`
D. `ipv6`
E. `bridge`

Correct Answer: BCE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 2
On a Linux workstation, the `route` command takes a long time before printing out the routing table. Which of the following errors does that indicate?

A. The local routing information may be corrupted and must be re-validated using a routing protocol.
B. One of the routers in the routing table is not available which causes the automatic router failure detection mechanism (ARF-D) to wait for a timeout.
C. There may accidentally be more than one default router in which case a default router election has to be done on the network in order to choose one router as the default.
D. The Linux Kernel Routing Daemon (LKRD) is not running and should be started using its init script or systemd unit.
E. DNS resolution may not be working as `route` by default tries to resolve names of routers and destinations and may run into a timeout.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 3
Which of the following `nmcli` subcommands exist? (Choose two.)

A. `nmcli ethernet`
B. `nmcli device`
C. `nmcli wifi`
D. `nmcli address`
E. `nmcli connection`

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 4
Which of the following changes may occur as a consequence of using the command `ip`? (Choose three.)

A. Network interfaces may become active or inactive.
B. New name servers may be added to the resolver configuration.
C. The system's host name may change.
D. IP addresses may change.
E. The routing table may change.

Correct Answer: ADE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 5
How many IP addresses can be used for unique hosts inside the IPv4 subnet 192.168.2.128/26?

A. 6

B. 14

C. 30

D. 62

E. 126

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 6
Which of the following IPv4 networks are reserved by IANA for private address assignment and private routing? (Choose three.)

A. `10.0.0.0/8`

B. `127.0.0.0/8`

C. `169.255.0.0/16`

D. `172.16.0.0/12`

E. `192.168.0.0/16`

Correct Answer: ADE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 7
Which of the following commands configure network interfaces based on the system's existing distribution-specific configuration files? (Choose two.)

A. `ifconf`

B. `ifdown`

C. `ifpause`

D. `ifstart`

E. `ifup`

Correct Answer: BE

Section: (none)
Explanation

Explanation/Reference:

QUESTION 8
Which of the following information is stored in `/etc/shadow` for each user?

A. The timestamp of the user's last login
B. The user's private SSH keys
C. The hashed password of the user
D. The numerical user ID (UID)
E. The path to the user's home directory

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 9
Which of the following commands shows all active systemd timers?

A. `systemctl-timer show`
B. `timectl list`
C. `systemctl -t`
D. `systemctl list-timers`
E. `timeq`

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10

Which of the following tasks can the `date` command accomplish? (Choose two.)

A. Set the system's date and time.
B. Set the system's date but not the time.
C. Calculate the time span between two dates.
D. Print a calendar for a month or a year.
E. Display time in a specific format.

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 11
FILL BLANK

Which file, if present, must contain all users that are allowed to use the cron scheduling system? (Specify the full name of the file, including path.)

Correct Answer: crontab
Section: (none)
Explanation

Explanation/Reference:

QUESTION 12
What can be specified with `useradd`? (Choose two.)

A. Commands the user can run using `sudo`.
B. The absolute path to the user's home directory.
C. Which printers are available for the new user.
D. The SSH keys used to login to the new account.
E. The numeric user ID (UID) of the user.

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 13
What is true about the file `/etc/localtime`?

A. It is a plain text file containing a string such as `Europe/Berlin`
B. It is created and maintained by the NTP service based on the location of the system's IP address.
C. It is a symlink to `/sys/device/clock/ltime` and always contains the current local time.
D. After changing this file, `newtzconfig` has to be run to make the changes effective.
E. It is either a symlink to or a copy of a timezone information file such as `/usr/share/zoneinfo/Europe/Berlin`.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 14
Which of the following statements is true regarding systemd timer units?

A. Timer units can only be defined within a service unit's file.
B. The command executed by the timer is specified in the timer unit's `[Cmd]` section.
C. A dedicated system service, `systemd-cron`, handles the execution of timer units.
D. Timer units only exist in the system scope and are not available for users.
E. Each systemd timer unit controls a specific systemd service unit.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 15
Which of the following fields are available in the standard format of both the global `/etc/crontab` file as well as in user-specific `crontab` files? (Choose two.)

A. Year
B. Minute
C. Username
D. Effective group ID
E. Command

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 16
Which option in the chrony configuration file changes the initial interval of polls to a NTP server in order to speed up the initial synchronization?

A. `iburst`
B. `quickstart`
C. `fast`
D. `fsync`
E. `flood`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 17
Why is the correct configuration of a system's time zone important?

A. Because the timezone is included in checksum calculations and timezone changes invalidate existing checksums.
B. Because the time zone is saved as part of the modification times of files and cannot be changed after a file is created.
C. Because the environment variables `LANG` and `LC_MESSAGES` are, by default, set according to the time zone.
D. Because NTP chooses servers nearby based on the configured time zone.
E. Because the conversion of Unix timestamps to local time relies on the time zone configuration.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 18
Which of the following commands lists all queued print jobs?

A. `lpd`
B. `lpr`
C. `lp`
D. `lsq`
E. `lpq`

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 19
Which of the following entries in `/etc/syslog.conf` writes all mail related events to the file `/var/log/maillog` and sends all critical events to the remote server `logger.example.com`?

A. `mail.*          /var/log/maillog`
   `mail,crit       @logger.example.org`
B. `mail.*          /var/log/maillog`
   `mail.crit       syslog://logger.example.org`
C. `mail            /var/log/maillog`

```
   mail.crit       @logger.example.org
D. mail.*          /var/log/maillog
   mail.crit       @logger.example.org
E. mail *          /var/log/maillog
   mail crit       @logger.example.org
```

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 20
Which of the following protocols is related to the term open relay?

A. SMTP
B. POP3
C. NTP
D. IMAP
E. LDAP

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 21
Which of the following comparison operators for `test` work on elements in the file system? (Choose two.)

A. `-z`
B. `-eq`
C. `-d`
D. `-f`
E. `-lt`

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 22
Which of the following configuration files should be modified to globally set shell variables for all users?

A. `/etc/profile`
B. `/etc/bashrc`
C. `~/.bash_profile`
D. `/etc/.bashrc`
E. `/etc/shellenv`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 23
What output does the command `seq 10` produce?

A. A continuous stream of numbers increasing in increments of 10 until the command is stopped.
B. It creates no output because a second parameter is missing.
C. The number 0 through 9 with one number per line.
D. The number 10 to standard output.
E. The numbers 1 through 10 with one number per line.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 24
Which of the following commands can be used to limit the amount of memory a user may use?

A. `umask`
B. `usermod`
C. `passwd`
D. `ulimit`
E. `chage`

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 25
What is a purpose of an SSH host key?

A. It must be sent by any SSH client in addition to a user key in order to identify the client's host.
B. It is root key by which all user SSH keys must be signed.
C. It provides the server's identity information to connecting SSH clients.
D. It authenticates any user that logs into a remote machine from the key's host.
E. It is used by system services like cron, syslog or a backup job to automatically connect to remote hosts.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 26
Given the following excerpt of the `sudo` configuration:
`jane ANY=NOPASSWD: /bin/kill, /bin/id, PASSWD: /sbin/fdisk`

Which of the following statements are true? (Choose three.)

A. Jane can run `/bin/id` only after specifying her password.

B. Jane can run `/sbin/fdisk` after specifying `root`'s password.

C. Jane can run `/sbin/fdisk` after specifying her password.

D. Jane can run `/bin/kill` without specifying a password.

E. Jane can run `/bin/id` without specifying her password.

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 27
Which configuration file contains the default options for SSH clients?

A. `/etc/ssh/sshd_config`

B. `/etc/ssh/ssh`

C. `/etc/ssh/ssh_config`

D. `/etc/ssh/client`

E. `/etc/ssh/ssh_client`

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 28
Depending on a system's configuration, which of the following files can be used to enable and disable network services running on this host?

A. `/etc/profile`

B. `/etc/xinetd.conf`

C. `/etc/ports`

D. `/etc/services`

E. `/etc/host.conf`

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:

QUESTION 29
Which of the following commands preloads and manages existing SSH keys that are used for automatic authentication while logging in to order machines using SSH?

A. `sshd`
B. `ssh-keyring`
C. `ssh-keygen`
D. `ssh-pki`
E. `ssh-agent`

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference: