

Question 1

1.1 How do you switch between virtual consoles? (3)

- **Hold down CTRL**
- **and ALT keys**
- **and press F1 through F7 to switch between consoles.**

1.2 Give three reasons why you may opt to use a shell other than *bash*. (3)

- **You are used to using shells from other environments.**
- **You want to run scripts created for a particular shell.**
- **You prefer the features of a shell over those of another shell.**

1.3 What does Ctrl-D, Ctrl-A, Ctrl-F and Ctrl-T do in terms of command line editing? (6)

- **Ctrl-D delete current character**
- **Ctrl-A go to beginning of current line**
- **Ctrl-F go forward one character**
- **Ctrl-T transpose this character with the previous one**

1.4 Give the command you would use to:

- a) create a directory. (1)
- b) get the name of the current working directory. (1)
- c) list the contents of a directory. (1)

a) mkdir

b) pwd

c) ls

1.5 List five redirection characters and briefly explain what each one does. (10)

- **< directs the content of a file to a command as input**

- **>** directs the standard output of a command to a file
- **2>** directs the standard error to a file
- **&>** directs the standard error and output to a file
- **>>** directs the output of a command to a file appending it to the end

1.6 Give the chmod command that will result in rw-r--r--permissions for a file called *design.txt*. (7)

chmod 644 design.txt

Two marks each for 6,4 and 4 plus one for using the filename correctly.

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Question 2

2.1 Give a command that will ensure that all files with *-rwxr-xr-x* permissions in the /bin directory are found and listed. (7)

find /bin -perm 755 -ls

2.2 Which two signals cannot be blocked by a process? (4)

SIGKILL and SIGSTOP

2.3 Copy the following table to your book and complete the table regarding shell script operators. (10)

Operator	What this operator tests is:
-a file	
-e file	
-n string	
-r file	
-s file	
-w file	
file1 -nt file2	
-x file	
-h file	
-k file	

Operator	What this operator tests is:
-a file	whether the file exists
-e file	whether the file exists
-n string	whether the string is greater than 0 bits
-r file	whether the file is readable by you
-s file	whether the file exists and is larger than 0 bytes
-w file	whether the file is writable by you
file1 -nt file2	whether the first file is newer than the second file
-x file	whether the file is executable by you
-h file	whether the file is a symbolic link
-k file	whether the file has the sticky bit set

2.4 Briefly describe what can be found in the following directories: (10)

- a) /etc/skel
- b) /etc/postfix
- c) /etc/xinetd.d
- d) /etc/ppp
- e) /etc/cups

- a) /etc/skel :files that are copied to a user's home directory when a user is added.
- b) /etc/postfix :configuration files for the postfix mail agent
- c) /etc/xinetd.d :files that define on demand network services that the daemon monitors
- d) /etc/ppp :configuration files to set up a point to point protocol
- e) /etc/cups :files used to configure the printing service

2.5 What steps would you put in the installation procedure to install Linux in the Enterprise? (5)

- **Launch installation medium**
- **Start anaconda kernel**

- Add kickstart and other boot options
- Find software packages
- Modify the installation with kickstart scripts

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Question 3

3.1 Give the command that will:

- a) download the latest version of firefox to your current directory. (2)
- b) remove the package *emacs* using RPM. (2)
- c) determine what dependencies *emacs* has using yum. (2)

- a) **yumdownloader firefox**
- b) **rpm -e emacs**
- c) **yum deplist emacs**

3.2 Briefly state the purpose of the following *useradd* options.

- a) -c (2)
- b) -d (2)
- c) -D (4)
- d) -m (4)
- e) -M (2)
- f) -s (2)

- a) -c description of the new account
- b) -d the home directory for the new account
- c) -D do not create new account, use information supplied as default for new accounts
- d) -m automatically create home directory and copy files from skeleton directory
- e) -M do not create new home directory regardless of default behaviour

f) **-s** specify the shell to use

3.3 An Access Control List (ACL) is an alternative way for users to share files without having root user setting permissions. How would you:

a) add an ACL to a file? (1)

b) determine what ACL's exist for a file? (1)

a) **setfacl**

b) **getfacl**

3.4 Give the command you would use to mount a disk *sdb2* using an *ext3* file system. The mount point *mnt/olddisk* already exists and it must be mounted as read only. (8)

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mount -t ext3 -o ro /dev/sdb1 /mnt/olddisk
```

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TOTAL 100