

# Section 4: Booting and shutting down the system

## Questions

Please read the following questions carefully and try to answer them. You will find the correct answer, with an explanation where necessary, in the Answers.pdf file, which is located in the same directory.

1. What in the following may cause a system to fail to start?
  - a. Errors in /etc/fstab file
  - b. Errors in of the network script files in /etc/sysconfig/network-scripts
  - c. Misconfigured cron jobs
  - d. Losing the root password
2. The init process, which is the parent of all system processes, has a PID of:
  - a. 0
  - b. 1
  - c. 2
  - d. None of the above
3. A system administrator can control the boot process in the stage before the kernel gets loaded:
  - a. True
  - b. False
4. The amount of memory that the kernel sets aside for itself is shareable
  - a. True
  - b. False
5. A Linux system may have more than one kernel version installed
  - a. True
  - b. False
6. The kernel processes that have their names in square brackets [] are just normal processes that can be dealt with like any other process
  - a. True
  - b. False
7. The startup daemons that gets launched by the init process are binary files that contain machine code:
  - a. True
  - b. False
8. Proprietary systems like AIX use BIOS to startup the machine
  - a. True
  - b. False
9. While in BIOS you can do the following (choose all that apply):
  - a. Choose the first boot device
  - b. Change the root password
  - c. Configure the machine's IP address

- d. Change the boot device order
10. The first 512 bytes of the boot media is called:
- a. MBR
  - b. BIOS
  - c. Boot loader
  - d. GRUB
11. In GRUB you can do the following (choose all that apply):
- a. Format the system
  - b. Install a fresh copy of the OS
  - c. Choose a kernel to boot from
  - d. Choose a different OS to boot from
12. GRUB can be configured by editing the following file (choose all that apply):
- a. /etc/grub.conf
  - b. /boot/grub/grub.conf
  - c. /etc/menu.lst
  - d. /boot/grub/menu.lst
13. In GRUB, disks and partitions are numbered starting from 0
- a. True
  - b. False
14. Anything that can be done in the grub.conf file, or in the GRUB menu can be done in the GRUB command line interface
- a. True
  - b. False
15. In GRUB command line interface, you can use find command to search the whole disk for files and directories:
- a. True
  - b. False
16. To load Microsoft Windows, which was installed on the first disk, from GRUB, the following options must be specified (choose all that apply):
- a. rootnoverify(0,0)
  - b. ro
  - c. quiet
  - d. chainloader +1
17. You can enter single user mode from the GRUB menu by adding the following to the kernel command:
- a. rescue
  - b. 1
  - c. suermode
  - d. 0
18. Switching off SELinux from the GRUB menu will make it remain disabled in subsequent reboots
- a. True
  - b. False
19. When is it advisable to use ro (booting filesystems in read only mode)?
- a. When you don't want users to mess with important files

- b. When you want to increase performance
  - c. When you are intending to run fsck on the disks
  - d. When you want to clone the disk
20. In single user mode, the administrator can connect to the file server over the network to backup important files, since the system is unresponsive
- a. True
  - b. False
21. The following are ways to access the shell as root without being prompted for password:
- a. Enter single user mode
  - b. Boot with a live CD
  - c. Add init=/bin/bash to the kernel arguments in GRUB menu
  - d. None of the above
22. The startup scripts are placed in /etc/init.d directory but they are called from /etc/rc\*.d directories, where \* is one of the run levels:
- a. True
  - b. False
23. The following run level is used to halt the system:
- a. 1
  - b. 2
  - c. 3
  - d. 0
24. The run level that will let the system come up with its full functionality, except that it'll be in CLI mode only is:
- a. 1
  - b. 2
  - c. 3
  - d. 0
25. The letter K in the link in /etc/rc5.d/K15httpd means:
- a. This script should be followed by "stop" to shut down httpd
  - b. This script is one of the kernel processes
  - c. This script uses Korn shell to execute
  - d. None of the above
26. The chkconfig command is used to add, delete, enable, and disable the init.d scripts
- a. True
  - b. False
27. If you want to know whether the ntpd daemon is enabled at startup or not, and in which run level it is available, you'd use the following command:
- a. chkconfig -a | grep ntp
  - b. chkconfig list | grep ntp
  - c. chkconfig --list | grep ntp
  - d. chkconfig -q | grep ntp
28. If you want a Red Hat system to run an application or script for you after the operating system has completely started, you place the command to execute this script in the following path:
- a. /etc/init.d directory

- b. /etc/rc5.d directory
  - c. /etc/rc.local file
  - d. None of the above
29. The shutdown command can also be used to enter single user mode
- a. True
  - b. False
30. The shutdown command cannot be used to reboot the system
- a. True
  - b. False