

1. Applications communicate with kernel by using:
 - a) System Calls
 - b) C Programs
 - c) Shell Script
 - d) Shell

2. The permission -rwxr-r- represented in octal expression will be
 - a) 777
 - b) 666
 - c) 744
 - d) 711

3. The permission -rwSr-r- represented in octal expression will be
 - a) 0777
 - b) 2666
 - c) 4744
 - d) 4644

4. If non root user tries to remove (rm) a file set with 444 permission, what will happen?
 - a) The file is removed successfully (and silently)
 - b) The rm command prompts for a confirmation, the command is successful upon confirmation
 - c) The rm command prompts for a confirmation, however the operation fails because of insufficient permissions
 - d) The rm command fails because of insufficient permissions

5. If the umask value is 0002. what will be the permissions of new directory
 - a) 777
 - b) 775
 - c) 774
 - d) 664

6. Which signal is sent by the command "kill -9 " ?
 - a) INT
 - b) TERM
 - c) KILL
 - d) STOP

7. The file system(ext2, ext3) information is stored in
 - a) Boot block
 - b) Super Block
 - c) Inode Table
 - d) Data Block

8. Syntax to suppress the display of command error to monitor?
- a) `command > &2`
 - b) `command 2> &1`
 - c) `command 2> &2`
 - d) `command 2> /dev/null`
9. What does the following command do?
- ```
who | wc -l
```
- a) List the number of users logged in
  - b) List the users
  - c) List the number of users in the system
  - d) Display the content of who command
10. In linux filesystem, the passwords of different users are stored in
- a) `/etc/passwd` file
  - b) `/bin/passwd` file
  - c) `/etc/shadow` file
  - d) `/bin/shadow` file
11. With a umask value of 112, what is the default permission assigned to newly created regular file?
- a) `—x-x-wx`
  - b) `-rw-rw-r—`
  - c) `-r-xr-x-r—`
  - d) `-rw-rw-r—`
12. Which command is used to assign read-write permission to the owner?
- a) `chmod a+r file`
  - b) `chmod o+r file`
  - c) `chmod u=rw file`
  - d) `chmod og-r file`
13. Which of these commands will set the permissions on file `textfile` to read and write for the owner, read for the group, and nothing for everyone else?
- a) `chmod 046 textfile`
  - b) `chmod 640 textfile`
  - c) `chmod 310 textfile`
  - d) `chmod rw r nil textfile`
14. What does `chmod +t` do?
- a) wrong syntax
  - b) set effective userid for filename
  - c) set effective groupid for filename
  - d) set the sticky bit

15. Which of the following is not a valid run-level
- a) S
  - b) 0
  - c) 8
  - d) 1
16. The process id of init process is:
- a) -1
  - b) 0
  - c) 1
  - d) 2
17. Which file is read by init to get the default runlevel
- a) /etc/profile
  - b) /etc/init
  - c) /etc/boot
  - d) /etc/inittab
18. echo "The process id is" \$\$\$\$
- a) The process id is \$\$
  - b) The process id is \$<pid>\$<pid>
  - c) The process id is <pid><pid>
  - d) The process id is \$\$\$\$
19. How do you print the lines between 5 and 10, both inclusive
- a) cat filename | head -10 | tail -6
  - b) cat filename | head | tail -5
  - c) cat filename | tail +5 | head
  - d) cat filename | tail -5 | head -10
20. x = 3; y = 5; z = 10;
- ```
if [( $x -eq 3 ) -a ( $y -eq 5 -o $z -eq 10 )]
then
    echo $x
else
    echo $y
fi
```
- a) 1
 - b) 3
 - c) 5
 - d) Error