

INT249 MCQs – System Administration

Unit – 4

1. What is the core philosophy behind Linux design?

- A. Monolithic design
- B. Single-user, single-task system
- C. Everything is a file
- D. Closed-source development

Answer: C. Everything is a file

2. Which command is used to display the current working directory in Linux?

- A. pwd
- B. ls
- C. cd
- D. dir

Answer: A. pwd

3. How can you view the manual page for the `ls` command?

- A. ls --help
- B. help ls
- C. man ls
- D. info ls

Answer: C. man ls

4. What command would you use to list all files, including hidden ones, in a directory?

- A. ls -l
- B. ls -a
- C. ls -h
- D. ls -R

Answer: B. ls -a

5. Which command can be used to search for commands related to a specific topic in the man pages?

- A. man -k
- B. man -a
- C. man -s
- D. man -t

Answer: A. man -k

6. Which command allows a user to assume superuser privileges temporarily?

- A. sudo
- B. su -
- C. root
- D. admin

Answer: A. sudo

7. How do you create a new user in Linux?

- A. useradd
- B. adduser
- C. newuser
- D. createuser

Answer: A. useradd

8. Which file contains user account information in Linux?

- A. /etc/group
- B. /etc/shadow
- C. /etc/passwd

- D. /etc/users

Answer: C. /etc/passwd

9. How do you delete a user account in Linux?

- A. userdel
- B. deluser
- C. rmuser
- D. remuser

Answer: A. userdel

10. Which command can you use to modify an existing user account?

- A. usermod
- B. modifyuser
- C. chuser
- D. changeuser

Answer: A. usermod

11. How do you create a new group in Linux?

- A. groupadd
- B. addgroup
- C. newgroup
- D. creategroup

Answer: A. groupadd

12. Which command is used to delete a group?

- A. groupdel
- B. delgroup

- C. rmgroup
- D. remgroup

Answer: A. groupdel

13. How can you query details of a user account?

- A. id
- B. userquery
- C. whoami
- D. finger

Answer: A. id

14. Which file contains group information in Linux?

- A. /etc/groups
- B. /etc/gshadow
- C. /etc/group
- D. /etc/grp

Answer: C. /etc/group

15. How do you change a user's password in Linux?

- A. passwd
- B. chpasswd
- C. modpasswd
- D. changepw

Answer: A. passwd

16. Which command is used to change the permissions of a file or directory?

- A. chmod

- B. chown
- C. chperm
- D. setperm

Answer: A. chmod

17. How can you modify the ownership of a file or directory?

- A. chown
- B. chmod
- C. chperm
- D. setowner

Answer: A. chown

18. What does the `rwx` permission stand for in Linux?

- A. read, write, execute
- B. read, write, extract
- C. read, write, exclude
- D. read, write, export

Answer: A. read, write, execute

19. Which special permission allows a user to run an executable with the permissions of the executable's owner?

- A. SUID
- B. SGID
- C. Sticky bit
- D. ACL

Answer: A. SUID

20. How do you set the sticky bit on a directory?

- A. chmod +t
- B. chown +t
- C. chmod +s
- D. chperm +s

Answer: A. chmod +t

21. Which command can you use to troubleshoot permissions issues?

- A. ls -l
- B. permcheck
- C. chktrouble
- D. permtroubleshoot

Answer: A. ls -l

22. How can you view the current permissions of a file?

- A. ls -l
- B. perm -l
- C. viewperm
- D. checkperm

Answer: A. ls -l

23. What is the numeric representation of `rwxr-xr--` permissions?

- A. 754
- B. 744
- C. 755
- D. 745

Answer: A. 754

24. Which command is used to create a new partition on a disk?

- A. fdisk
- B. mkpart
- C. newpart
- D. cfdisk

Answer: A. fdisk

25. How do you manage logical volumes in Linux?

- A. lvm
- B. lvcreate
- C. lvmanage
- D. volcreate

Answer: A. lvm

26. Which command is used to mount a filesystem?

- A. mount
- B. umount
- C. mnt
- D. mountfs

Answer: A. mount

27. How do you unmount a filesystem?

- A. umount
- B. unmount
- C. dmount
- D. dismount

Answer: A. umount

28. Which command is used to check the disk usage of a filesystem?

- A. df
- B. du
- C. disku
- D. diskcheck

Answer: A. df

29. What is the command to navigate to the root directory?

- A. cd /
- B. cd ~
- C. cd ..
- D. cd root

Answer: A. cd /

30. Which directory contains device files in Linux?

- A. /dev
- B. /bin
- C. /lib
- D. /etc

Answer: A. /dev

UNIT – 5

1. Which command is used to create an empty text file?

- A. touch
- B. cat
- C. edit
- D. newfile

Answer: A. touch

2. What command would you use to edit a text file in the terminal?

- A. vi
- B. open
- C. view
- D. read

Answer: A. vi

3. How do you search for files by name in a directory and its subdirectories?

- A. find
- B. search
- C. locate
- D. grep

Answer: A. find

4. Which command can be used to perform text searches within files?

- A. grep
- B. find
- C. search
- D. awk

Answer: A. grep

5. How do you copy a file from one location to another?

- A. cp
- B. mv
- C. copy
- D. paste

Answer: A. cp

6. What command would you use to rename a file?

- A. mv
- B. ren
- C. cp
- D. name

Answer: A. mv

7. How can you delete a directory and its contents?

- A. rm -r
- B. rmdir
- C. deldir
- D. rm

Answer: A. rm -r

8. Which command is used to display the contents of a text file?

- A. cat
- B. show
- C. view
- D. read

Answer: A. cat

9. How do you append the output of a command to an existing file?

- A. >>
- B. >
- C. |
- D. <

Answer: A. >>

10. Which command is used to count the number of lines, words, and characters in a file?

- A. wc
- B. count
- C. stat
- D. info

Answer: A. wc

11. How can you sort the contents of a file alphabetically?

- A. sort
- B. arrange
- C. order
- D. alphabetize

Answer: A. sort

12. What command is used to display the beginning of a file?

- A. head
- B. top
- C. start

- D. view

Answer: A. head

13. Which command would you use to display the last 10 lines of a file?

- A. tail
- B. end
- C. bottom
- D. view

Answer: A. tail

14. How do you combine multiple files into one in Linux?

- A. cat
- B. combine
- C. merge
- D. union

Answer: A. cat

15. Which command is used to display file type information?

- A. file
- B. type
- C. info
- D. stat

Answer: A. file

16. Which file is the main configuration file for GRUB2?

- A. /etc/default/grub
- B. /boot/grub/grub.cfg

- C. /etc/grub2.conf
- D. /etc/boot/grub.cfg

Answer: A. /etc/default/grub

17. What command is used to update GRUB2 configuration after making changes?

- A. update-grub
- B. grub-update
- C. grub2-mkconfig
- D. grub-mkconfig

Answer: A. update-grub

18. How can you access the GRUB2 boot menu during system startup?

- A. Press and hold Shift
- B. Press Esc
- C. Press F12
- D. Press Ctrl+Alt+Del

Answer: A. Press and hold Shift

19. What command is used to install GRUB2 on a device?

- A. grub-install
- B. install-grub
- C. grub-setup
- D. setup-grub

Answer: A. grub-install

20. Which directory contains the GRUB2 modules?

- A. /boot/grub

- B. /boot/grub2
- C. /lib/grub
- D. /lib/grub2

Answer: A. /boot/grub

21. Which command is used to list all currently loaded kernel modules?

- A. lsmod
- B. modinfo
- C. modprobe
- D. listmod

Answer: A. lsmod

22. How do you load a kernel module into the Linux kernel?

- A. modprobe
- B. insmod
- C. loadmod
- D. addmod

Answer: A. modprobe

23. What command is used to remove a module from the Linux kernel?

- A. rmmod
- B. delmod
- C. removemod
- D. modrm

Answer: A. rmmod

24. How can you get information about a specific kernel module?

- A. modinfo
- B. infomod
- C. moduleinfo
- D. lsmodinfo

Answer: A. modinfo

25. Which file lists modules to be loaded at boot time in Debian-based systems?

- A. /etc/modules
- B. /etc/modprobe.conf
- C. /etc/rc.modules
- D. /etc/init.modules

Answer: A. /etc/modules

26. How can you automatically load kernel modules at boot time?

- A. Add the module name to /etc/modules
- B. Use modprobe at boot time
- C. Configure GRUB2 to load modules
- D. Edit the kernel parameters

Answer: A. Add the module name to /etc/modules

27. Which command allows you to view the dependencies of a kernel module?

- A. modprobe --show-depends
- B. depmod
- C. modinfo --depends
- D. lsmod --depends

Answer: A. modprobe --show-depends

28. How do you check the kernel ring buffer messages?

- A. dmesg
- B. syslog
- C. logread
- D. journalctl

Answer: A. dmesg

29. Which command helps to resolve module dependencies and update module dependency files?

- A. depmod
- B. moddep
- C. update-mod
- D. modprobe

Answer: A. depmod

30. How do you explore the version of the currently running Linux kernel?

- A. uname -r
- B. kernelversion
- C. version -k
- D. uname -v

Answer: A. uname -r

UNIT – 6

1. Which of the following is a character device in Linux?

- A. Hard disk
- B. Keyboard
- C. Network interface
- D. USB drive

Answer: B. Keyboard

2. What is the major and minor number used for in Linux device files?

- A. To identify the device type and the specific device
- B. To determine device permissions
- C. To specify device size and speed
- D. To set device read/write limits

Answer: A. To identify the device type and the specific device

3. Which command is used to display all the block devices on a system?

- A. lsblk
- B. blkid
- C. fdisk
- D. blockshow

Answer: A. lsblk

4. How can you view the details of a USB device connected to your system?

- A. lsusb
- B. lspci
- C. lsdev
- D. usbview

Answer: A. lsusb

5. Which file contains information about the devices connected to the system and their drivers?

- A. /proc/devices
- B. /etc/devices
- C. /dev/drivers
- D. /proc/drivers

Answer: A. /proc/devices

6. What is the purpose of the udev system in Linux?

- A. To manage device nodes in /dev
- B. To configure network interfaces
- C. To monitor system logs
- D. To manage file permissions

Answer: A. To manage device nodes in /dev

7. Which command can be used to load a kernel module for a device?

- A. modprobe
- B. insmod
- C. loadmod
- D. addmod

Answer: A. modprobe

8. How do you check if a specific device driver is loaded?

- A. lsmod
- B. modinfo
- C. lspci
- D. lsdev

Answer: A. lsmod

9. Which tool can you use to monitor hardware health, such as CPU temperature and fan speed?

- A. lm-sensors
- B. hwmonitor
- C. sysctl
- D. iotop

Answer: A. lm-sensors

10. What command can be used to check for hardware errors in the system logs?

- A. dmesg
- B. syslog
- C. logread
- D. hardwarecheck

Answer: A. dmesg

11. Which command is used to view detailed information about PCI devices?

- A. lspci
- B. lsusb
- C. lsdev
- D. pciinfo

Answer: A. lspci

12. How can you display the kernel messages related to device initialization?

- A. dmesg
- B. syslog
- C. kernelmsg

- D. devlog

Answer: A. dmesg

13. What is the purpose of the `hdparm` utility?

- A. To configure and tune hard disk parameters
- B. To monitor network performance
- C. To manage USB devices
- D. To list hardware details

Answer: A. To configure and tune hard disk parameters

14. Which command would you use to create a device file manually?

- A. mknod
- B. mkdev
- C. makedev
- D. createdev

Answer: A. mknod

15. What does the `smartctl` command do?

- A. Monitors and controls SMART (Self-Monitoring, Analysis, and Reporting Technology) for storage devices
- B. Configures network interfaces
- C. Manages virtual memory
- D. Checks file system integrity

Answer: A. Monitors and controls SMART (Self-Monitoring, Analysis, and Reporting Technology) for storage devices

16. What does the acronym TCP/IP stand for?

- A. Transmission Control Protocol/Internet Protocol

- B. Transfer Control Protocol/Internet Protocol
- C. Transmission Communication Protocol/Internet Protocol
- D. Transfer Communication Protocol/Internet Protocol

Answer: A. Transmission Control Protocol/Internet Protocol

17. Which command is used to display all active network connections and listening ports?

- A. netstat
- B. ifconfig
- C. ip addr
- D. ping

Answer: A. netstat

18. How do you assign an IP address to a network interface?

- A. ifconfig eth0 192.168.1.10
- B. setip eth0 192.168.1.10
- C. ipconfig eth0 192.168.1.10
- D. ip addr set 192.168.1.10 dev eth0

Answer: D. ip addr set 192.168.1.10 dev eth0

19. Which file is typically used to configure DNS client settings on a Linux system?

- A. /etc/resolv.conf
- B. /etc/dns.conf
- C. /etc/nsswitch.conf
- D. /etc/dhcp.conf

Answer: A. /etc/resolv.conf

20. What is the purpose of the DHCP service?

- A. To automatically assign IP addresses to devices on a network
- B. To resolve domain names to IP addresses
- C. To manage network firewalls
- D. To monitor network traffic

Answer: A. To automatically assign IP addresses to devices on a network

21. Which command is used to test the reachability of a network host?

- A. ping
- B. netstat
- C. traceroute
- D. ifconfig

Answer: A. ping

22. How can you display the routing table on a Linux system?

- A. route -n
- B. netstat -r
- C. ip route show
- D. all of the above

Answer: D. all of the above

23. Which service translates domain names to IP addresses?

- A. DNS
- B. DHCP
- C. NFS
- D. FTP

Answer: A. DNS

24. What is the role of a Linux server configured as an NFS server?

- A. To share files over the network
- B. To manage network printers
- C. To assign IP addresses
- D. To monitor network traffic

Answer: A. To share files over the network

25. Which command can be used to configure a network interface to obtain an IP address via DHCP?

- A. dhclient
- B. dhcp
- C. ifconfig
- D. ipconfig

Answer: A. dhclient

26. How do you display the IP address and other network information for all interfaces?

- A. ifconfig
- B. ip addr show
- C. ip link show
- D. netstat -i

Answer: B. ip addr show

27. Which tool can be used to capture and analyze network traffic?

- A. tcpdump
- B. netcat
- C. iftop
- D. nmap

Answer: A. tcpdump

28. What command is used to display detailed information about the current TCP/IP configuration?

- A. ifconfig
- B. ip addr
- C. netstat -i
- D. ipconfig

Answer: A. ifconfig

29. Which file contains the static hostname configuration on most Linux systems?

- A. /etc/hostname
- B. /etc/hosts
- C. /etc/host.conf
- D. /etc/nsswitch.conf

Answer: A. /etc/hostname

30. What is the purpose of the `iptables` command?

- A. To configure firewall rules
- B. To display network statistics
- C. To assign IP addresses
- D. To monitor network traffic

Answer: A. To configure firewall rules