**General Instructions:**

* **Follow the instructions given in each section.**
* **Make sure that you attempt the questions in order.**

**SECTION-A (10\*1 mark=10 marks)**

***(All questions are compulsory)***

1) Which command is used to display the current date in Linux?

**a.** **date**

b. time

c. datetime

d. clock

2) Which command is used to display the current uptime of the system in Linux?

**a.** **uptime**

b. up

c. boottime

d. run

3) Which command is used to display the hostname of the system in Linux?

**a.** **hostname**

b. host

c. domainname

d. dnsname

4) Which command is used to display the operating system name and version in Linux?

**a.** **uname**

b. osname

c. version

d. osversion

5) Which command is used to find the location of an executable file in Linux?

**a.** **which**

b. locate

c. find

d. whereis

6) Which command is used to display the calendar for a specific month or year in Linux?

**a.** **cal**

b. date

c. time

d. year

7) Which command is used to perform mathematical calculations in Linux?

**a.** **bc**

b. calc

c. math

d. num

8) Which command is used to display the current time in Linux?

a. date

**b.** **time**

c. datetime

d. clock

9) Which command is used to display the system load average in Linux?

**a.** **uptime**

b. top

c. load

d. process

10) Which command is used to display the system's IP address in Linux?

a. ip

**b.** **ifconfig**

c. dns

d. netstat

**SECTION-B (5\*2 mark=10 marks)**

***(All questions are compulsory)***

11) Which command is used to display the contents of a file in reverse order in Linux?

**a.** **tac**

b. cat

c. rev

d. tail

12) Which command is used to display the amount of free and used memory in Linux?

**a.** **free**

b. mem

c. ram

d. usage

13) Which command is used to display the path of a command in Linux?

**a.** **which**

b. whereis

c. locate

d. find

14) Which command is used to display the time required to execute a command in Linux?

**a.** **time**

b. duration

c. timer

d. elapsed

15) Which command is used to display the list of running processes in Linux?

**a.** **ps**

b. run

c. process

d. jobs

**SECTION-C() (4x5 marks=20 marks)**

Q16) How to you write the shebang line in shell script in linux? What is the purpose of using it?

The shebang line is started by #! Followed by the path of the shell.

The shebang line, also known as the hashbang or interpreter directive, is the first line in a shell script that specifies the interpreter that will be used to execute the script.

Q17) How can you execute the shell script in linux? Please explain.

To create a shell script in Linux-

-Open a text editor and write the shebang line

-Now write the commands that you want to execute in the script.

-Save the file with a .sh extension make it executable using the chmod command.

-Execute the file in the terminal to test

Q18) Create a directory named test\_shell. In this directory create a shell file named checkgt\_file.sh . In this shell script take input of two numbers from the user. If the num1 is greater than num2, print “num1 is greater than num2”, ensure that num1 and num2 here are just for reference, they should be replaced with actual numbers (given as input) in the output. If not, print “Couldn’t enter if block”.

mkdir test\_shell

cd test\_shell

touch checkgt\_file.sh

vi checkgt\_file.sh

!#/bin/bash

read num1

read num2

if [[ $num1 -gt $num2]]

then

echo “num1 is greater than num2”

else

echo “Couldn’t enter if block”

:wq

Q19) Create a directory named test\_shell. In this directory create a shell file named checksm\_file.sh. In this shell script take input of two numbers from the user. If the num1 is less than num2, print “num1 is less than num2”, ensure that num1 and num2 here are just for reference, they should be replaced with actual numbers (given as input) in the output. If not, print “Couldn’t enter if block”.

mkdir test\_shell

cd test\_shell

touch checksm\_file.sh

vi checksm\_file.sh

!#/bin/bash

read num1

read num2

if [[ $num1 -lt $num2]]

then

echo “num1 is less than num2”

else

echo “Couldn’t enter if block”

:wq