

**Started on** Tuesday, 28 October 2025, 5:27 PM**State** Finished**Completed on** Tuesday, 28 October 2025, 5:29 PM**Time taken** 2 mins 10 secs**Marks** 5.00/10.00**Grade** 50.00 out of 100.00**Question 1**

Complete

Mark 0.00 out of 1.00

In Linux, which command displays real-time I/O statistics for all storage devices?

- ☐ a. du -sh
- ☐ b. iostat -xz 1
- ☒ c. df -h
- ☐ d. lsblk -f

**Question 2**

Complete

Mark 0.00 out of 1.00

The command `rsync -avz /data/ user@192.168.1.5:/backup/` is used for:

- ☐ a. Synchronizing data directories with compression.
- ☒ b. Backing up only changed files with checksum verification.
- ☐ c. Cloning system partitions.
- ☐ d. Mounting a remote directory.

**Question 3**

Complete

Mark 1.00 out of 1.00

What does the following command do? `find /var/log -type f -mtime +7 -exec rm {} \;`

- ☐ a. Compresses logs older than 7 days.
- ☐ b. Displays log files larger than 7 MB.
- ☒ c. Finds and deletes files in /var/log modified more than 7 days ago.
- ☐ d. Deletes empty directories in /var/log older than 7 days.

**Question 4**

Complete

Mark 0.00 out of 1.00

What is the effect of the following command? `chmod 2755 mydir`

- ☐ a. Removes write permission for group.
- ☐ b. Makes directory immutable.
- ☒ c. Makes the directory readable and executable by all users.
- ☐ d. Gives owner all permissions and sets SGID bit.

**Question 5**

Complete

Mark 1.00 out of 1.00

What will be the output of the command below if `file1.txt` does not exist? `cat file1.txt >> output.txt`

- ☐ a. Appends "file1.txt not found" to output.txt.
- ☒ b. Displays error but still creates/updates output.txt.
- ☐ c. Displays an error and terminates.
- ☐ d. Creates file1.txt automatically.

**Question 6**

Complete

Mark 0.00 out of 1.00

Which command displays both file permissions and hidden files in a directory in long listing format?

- ☒ a. `ls -l`
- ☐ b. `ls -la`
- ☐ c. `ls -h`
- ☐ d. `ls -a`

**Question 7**

Complete

Mark 0.00 out of 1.00

Which command would you use to count the number of running processes for a specific user named john?

- ☐ a. `ps -u john | wc -l`
- ☒ b. `pgrep john | wc`
- ☐ c. `ps aux | grep john`
- ☐ d. `top | grep john`

**Question 8**

Complete

Mark 1.00 out of 1.00

Which of the following commands correctly displays the top 10 CPU-consuming processes?

- ☐ a. `top -10`
- ☐ b. `cat /proc/cpuinfo | head`
- ☐ c. `ps -ef | sort -r`
- ☒ d. `ps aux --sort=-%cpu | head -10`

**Question 9**

Complete

Mark 1.00 out of 1.00

Which statement about the `umask` command is true?

- ☐ a. It assigns ownership of files to a specific group.
- ☐ b. It sets the maximum permission allowed for any user.
- ☐ c. It locks the user account after failed login attempts.
- ☒ d. It defines the default permission mask for new files and directories.

**Question 10**

Complete

Mark 1.00 out of 1.00

You run the command: `tar -czvf backup.tar.gz /home/user`. What does each flag mean?

- ☒ a. Create, compress (gzip), verbose, output to file
- ☐ b. Create, zip, verbose, file
- ☐ c. Compress, zip, verify, folder
- ☐ d. Copy, zero, verbose, file