# TILAK MAHARASHTRA VIDYAPEETH, PUNE

### MASTER OF COMPUTER APPLICATIONS

### EXAMINATION : DECEMBER – 2023 SEMESTER - I

Sub: Linux & Shell Programming (MCA-102-22)

Date: 29/12/2023 Total Marks: 60 Time: 10.00 am To 12.30 pm

#### Instruction:

- 1. All questions are compulsory unless and otherwise stated.
- 2. Bold figures to the right of every question are the maximum marks for that question.
- 3. Candidates are advised to attempt questions in order.
- 4. Answers written illegibly are likely to be marked zero.
- 5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
- 6. Draw neat and labelled diagram wherever necessary.

## Q. 1. Answer the following in 2 - 3 lines. (Any 5)

(10)

- 1. List various UNIX and Linux flavors (names)
- 2. List the advantages of Linux operating system.
- 3. List various types of shells used in Linux.
- 4. Define kernel space in Linux.
- 5. Explain use of groupadd command with options and example.
- 6. Define process in Linux. List various states of process.
- 7. List various commands to shut down and reboot the Linux operating system.

### Q. 2. Answer the following in short. (Any 4)

(20)

- 1. Write a procedure to configure YUM server.
- 2. Explain working of useradd, passwd commands with various options and examples
- 3. Define RAID. What is RAID1 and RAID5 levels? Explain with diagram. State the advantages and disadvantages of both RAID1 and RAID5.
- 4. Write a note on VIM editor.
- 5. Write a detail procedure to create, format and mount data partition in Linux with various commands used.
- 6. What is the use of ps, top, kill commands in detail with examples.

### Q. 3. Answer the following in detail. (Any 3)

(30)

- 1. Explain Linux directory structure in detail with diagram.
- 2. What is the use of tar command? Explain working of it with various options and examples.
- 3. Write a procedure to schedule a task to display "Good Night" message every day at 11:30 PM using crontab command.
- 4. What is the use of ping, hostname, ifup and ifdown commands in Linux? Explain with various examples.
- 5. What is the use of shell script? State its advantages and disadvantages. When should the shell script used?

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