

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF COMPUTER APPLICATIONS
EXAMINATION : DECEMBER - 2023
SEMESTER - I

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

Date : 21/12/2023

Total Marks : 60

Time: 2.00 pm To 4.30 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 the advantages of Linux operating system.
2. Define user space in Linux.
3. List special types of file permissions in Linux with its full form and its numeric value.
4. State the features of bash shell.
5. What is the use of touch command in Linux? Explain with example.
6. How to set user passwords in Linux? Explain with command options and example.
7. Define signals in Linux.

Q. 2. Answer the following in short. (Any 4) (20)

1. How to shut down and restart Linux operating system with various commands? Explain with examples.
2. Explain useradd and userdel commands with various options and examples.
3. Define hard links and soft links in Linux. Compare both with diagrams. Explain working of ln command to create hard links and soft links with example.
4. Explain working of rpm command with its various options and examples.
5. How ACL (Access Control List) is used in Linux? Explain with examples.
6. Define process in Linux. Explain various process states in Linux.

Q. 3. Answer the following in detail. (Any 3) (30)

1. Write a detail procedure to create and mount a data partition in Linux with appropriate commands with examples.
2. Explain the working of following network management commands in Linux in detail with example. a) ifconfig b) ping c) nmtui d) ifup e) ifdown
3. What is the use of tar command in Linux? Explain in detail with various options and examples.
4. What is scheduling in Linux? Explain it with examples using crontab and at command with various options. What is the difference between crond and atd services?
5. Define shell script in Linux. When shell script should be used? State the advantages and disadvantages of shell scripting.
