

**TILAK MAHARASHTRA VIDYAPEETH, PUNE**  
**MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS**  
**EXAMINATION : MAY -2024**  
**SEMESTER - II**  
**Sub: Linux & Shell Programming (MSC – 202-22)**

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**Date : 23/05/2024**

**Total Marks : 60**

**Time:10.00 am to 12.30pm**

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**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 diagrams wherever necessary.

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**Q.1 Answer the following in 2-3lines. (Any 5) (10)**

1. List the various features of Linux operating system.
2. What is the use of /home and /var directories in Linux operating system.
3. Define inodes in Linux.
4. What is the use of touch command in Linux? Explain with examples.
5. List various file permissions in Linux with its numeric value.
6. List various shells used in Linux. Write features of bash shell.
7. Define kernel space in Linux.

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

1. Explain useradd, ,passwd and userdel commands with options and examples.
2. Explain chmod and chown commands with various options and examples.
3. Write a procedure to create , format and mount a data partition in Linux with commands and examples.
4. Define process in Linux? Explain its different states.
5. What is the use of tar command? Explain with various options and examples.
6. Explain working of yum command with various options and examples.

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

1. Write a detail procedure to install Linux operating system with various steps.
  2. Explain working of VIM editor, its differ modes of operating in detail. State its advantages and disadvantages.
  3. What is scheduling in Linux? Explain it using crontab command with example.
  4. Explain the use ifconfig, hostname, ifdown&, ifup commands in detail with examples.
  5. Define shell script in Linux. State its advantages . Write a shell script to display login name, user id, home directory and current date of your system.
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