Register No.: .... Name: ....

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FOURTH SEMESTER INTEGRATED MCA DEGREE EXAMINATION (R), MAY 2023

(2020 SCHEME)

Course Code: **20IMCAT202**

Course Name: **Linux/Unix Fundamentals**

Max. Marks: **60**   **Duration: 3 Hours**

PART A

(Answer all questions. Each question carries 3 marks)

1. Explain Linux architecture with a neat diagram.
2. What is GRUB? List the features of GRUB.
3. What are the functions of a text editor? List the different text editors available with Linux OS.
4. Differentiate local and global shell variables.
5. Explain the 'find' command in Linux with a proper example.
6. How do you schedule tasks in Linux?
7. Differentiate 'tar' and 'zip' commands in Linux.
8. List any four commands used for networking in Linux.
9. Explain the differences between cron and atd commands in Linux.
10. Differentiate *'sudo snap remove gimp'* and *'sudo apt-get remove gimp'.*

PART B

(Answer one full question from each module, each question carries 6 marks)

MODULE I

11. Explain the file system and directory structure of the Linux operating system.   (6)

OR

12. a) What are file access permissions?   (2)
    b) Discuss the different commands used for viewing and changing the file access permissions.   (4)

MODULE II

13. a) Write a simple shell script for displaying digits in words.   (3)
    b) How do you manage repetitive tasks using shell scripts? Explain.   (3)

OR

14. a) Explain the case...esac construct with proper example.   (3)
    b) Explain conditional execution in shell scripts.   (3)

MODULE III

15. a) List the different commands used to manage documents in Linux. Give examples. (4)

    b) Differentiate 'cat' and 'ls' commands. (2)

OR

16. a) Explain the various commands used to deal with background processing in Linux. (4)

    b) Differentiate 'bg' and 'fg' commands in Linux. (2)

MODULE IV

17. a) Explain the 'restore' command in Linux with examples. Discuss various options available to restore commands. (4)

    b) Explain file transfer protocol in Linux. (2)

OR

18. a) What are the different commands used for compressing files in Linux? (3)

    b) Explain the various methods used to send email in Linux from command line. (3)

MODULE V

19. a) What is Red Hat Package Manager? Explain the working with Red Hat Package Manager. (4)

    b) What do you mean by Daemons in Linux? (2)

OR

20. a) What are Xinetd and Inetd Manage Daemons? Provide proper examples. (2)

    b) What are packages in Linux? Explain how to install packages in Linux. Also specify the steps to remove an installed package. (4)

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