Reg.	No	Name	23U152

B.C.A DEGREE END SEMESTER EXAMINATION: NOVEMBER 2023 SEMESTER 1: MOBILE APPLICATIONS AND CLOUD TECHNOLOGY

COURSE: 19U1CRBCA3: INTRODUCTION TO LINUX

(For Regular 2023 Admission and Improvement/Supplementary 2022/2021/2020/2019/2018/2017/2016 Admissions)

Time: Three Hours Max. Marks: 75

PART A Answer All (1 mark each)

- 1. What is kernel mode?
- 2. Define pattern in vi editor.
- 3. What is relative address of a process?
- 4. What are the two types of backup in Unix environment?
- 5. What is the open() file system call?
- 6. Define operating system.
- 7. How to make a task run in the background even when the user is not currently on the system?
- 8. What do you mean by double indirection mechanism?
- 9. What is the use of wall command?
- 10. What is uucp command?

 $(1 \times 10 = 10)$

PART B Answer any 8 (2 marks each)

- 11. Differentiate between submit and ready state of a process.
- 12. How to create a file in vi editor? Explain with example.
- 13. Write short note on startup of the system.
- 14. What is the need of 'su' command?
- 15. What do you mean by multi-user system?
- 16. What is the difference between write() and read() system call?
- 17. Define kernel mode and user mode.
- 18. How to implement a system call?
- 19. What are the different options to quit from vi editor?
- 20. What are the limitations to run a process in the background?

 $(2 \times 8 = 16)$

PART C Answer any 5 (5 marks each)

- 21. Explain cat and touch command with examples.
- 22. Explain how does Unix access files.
- 23. Write short note on working with vi editor.
- 24. Explain in detail about the different commands used for printing files.
- 25. Explain the role of the system administrator.
- 26. Write short note on signal.
- 27. Write short note on surrogating the super block and inode table.

 $(5 \times 5 = 25)$

PART D Answer any 2 (12 marks each)

- 28. Explain in detail various duties that system administrator needs to perform.
- 29. List and explain 10 basic Unix commands.
- 30. Elaborate on the structure and layout of process in detail.
- 31. How is a file represented internally in Unix?

 $(12 \times 2 = 24)$