Reg. No…… Name…… **25U2061**

B A, B SC, B COM DEGREE END SEMESTER EXAMINATION - APRIL 2025

UGP (HONS.) SEMESTER - 2: SKILL ENHANCEMENT COURSE

COURSE: 24UBCASEC102: LINUX OPERATING SYSTEM

(For Regular 2024 Admission)

Time: 1.5 Hours Max. Marks - 50

PART A

Answer any 5 questions. Each question carries 2 marks.

1. Discuss the commands used for Linux documentation. (U, CO1)
2. Enumerate the drawbacks of Linux OS. (U, CO1)
3. Describe the use of the pipe operator in Linux. (U, CO2)
4. Write the syntax of the case statement in bash scripting. (U, CO3)
5. Assume a Firefox process is running. You are required to find its process id and kill it. Write the commands for the same. (A, CO4)
6. The system administrator needs to broadcast the message "TEMPORARY SERVICE INTERRUPTION DUE TO SYSTEM MAINTENANCE" to all users. Identify the command that fits this context best. (A, CO4)
7. List the various run-levels in the booting process of a Linux machine. (U, CO5)

PART B

Answer any 4 questions. Each question carries 5 marks.

8. Illustrate and explain the components of Linux architecture. (U, CO1)
9. Write a shell script to demonstrate the concept of command line arguments. (A, CO3)
10. Write commands for the following:

    a) View file permissions of a file report.txt

    b) Using symbolic mode, assign read, write and execute permissions to the user, and read only for the group and others.

    c) Using octal mode, assign read and write permissions to the user, execute permission for the group and read only for others.

    d) Using octal mode, deny write permission to everyone. (A, CO2)

    e) Change the owner of the file report.txt to Tom.

11. Describe various signals used in inter-process communication. (U, CO4)

12. Illustrate and explain the process state transition diagram. (U, CO1)

13. Write short notes on creating and maintaining user accounts in Linux. (U, CO5)

PART C

Answer any 2 questions. Each question carries 10 marks.

14. Explain any 10 commands with syntax and examples on file and directory operations in Linux. (A, CO2)

15. Discuss the system calls for file management in Linux. (U, CO4)

16. Analyze the duties and responsibilities of a system administrator. (An, CO5)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Marks
CO1	Explain the basic concepts of the Linux operating system.	U	1,2,8	9
CO2	Apply basic Linux commands to manage files and directories.	A	3,10,14	17
CO3	Develop and execute basic shell scripts in Linux to perform system tasks.	A	4,9	7
CO4	Illustrate the inter-process communication in Linux.	A	5,6,11,12,15	24
CO5	Analyze the various duties and responsibilities of a System administrator.	An	7,13,16	17

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;