



B. Tech V Semester Supplementary Examinations, June/July 2023

**LINUX PROGRAMMING**  
(INFORMATION TECHNOLOGY)

Maximum Marks: 70

Date:06.07.2023 Duration: 3 hours

- Note: 1. Question paper contains two parts A and B.  
2. Answer all questions in Part A, Each question carries 1 mark.  
3. Answer 5 questions in Part B out of 10 questions. Each question carries 12 marks.

Part-A

Answer all the following questions

(10x2M=20 Marks)

- 1 List any two disk utility commands?
- 2 Define pipe.
- 3 List the types of a files.
- 4 Define symbolic link.
- 5 Define getenv() function.
- 6 List the features of reliable signals.
- 7 Define FIFO with an example.
- 8 Define semaphore.
- 9 Define Socket.
- 10 List the API's for shared memory.

Part-B

Answer all the questions.

(5X10M=50Marks)

- 11 Explain the layered architecture and kernel role in Linux with neat diagram? [10]  
OR
- 12 Define redirection. How to redirect standard input, output and error. [10]
- 13 Explain in detail about the various types of files? [10]  
OR
- 14 Discuss the need and importance of lseek() system call with its relative merits and drawbacks. [10]
- 15 Discuss about orphan process and zombie process with example. [10]  
OR
- 16 Differentiate wait() and waitpid() with examples. [10]
- 17 Explain about inter process communication. [10]  
OR
- 18 Define semaphore. Write about semaphore system calls. [10]
- 19 Explain socket system call for Connection oriented protocol. [10]  
OR
- 20 Explain about Socket Address Structure. [10]