



R17 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY  
(Autonomous, Accredited by NAAC with 'A' Grade)

subject code: 1P7EB

**B.Tech IV Year I Semester Supplementary Examinations, July 2022**  
**LINUX PROGRAMMING**

(CSE)

**Maximum Marks: 70**

**Duration: 3 hours**

**Part-A**

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 What is an operating system?
- 2 What is a filter in UNIX?
- 3 Define Shell
- 4 What are the file permissions for providing security to the files?
- 5 What is a zombie process?
- 6 Define a signal?
- 7 What is a pipe?
- 8 What is a FIFO?
- 9 Give an example for Shared Memory?
- 10 Write fcntl system calls.

**Part-B**

Answer the following questions.

(10M X 5=50Marks)

- 11 Explain and compare sed and grep. With suitable examples. [10]  
OR
- 12 a) Explain the uses of cat command with suitable examples. [5]  
b) Write a shell script to display first n numbers of Fibonacci series. [5]
- 13 Explain Hard link and Soft link and write prototype for link, unlink, symlink. [10]  
OR
- 14 Explain the two ways of file permission with suitable example. [10]
- 15 What is a zombie process? Write a sample program to explain about zombie process. [10]  
OR
- 16 Differentiate between fork( ) and vfork( ). [10]
- 17 Define Inter Process Communication? Explain IPC between two processes. [10]  
OR
- 18 Write a program to illustrate FIFO by using mkfifo(). [10]
- 19 What is socket? Explain various socket system calls used for UDP protocol. [10]  
OR
- 20 Explain how to attach and detach a shared-memory segment. [10]

