



R18 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

Subject code: 2P5FE

B.Tech V Semester Regular Examinations, February 2021

LINUX PROGRAMMING

(Information Technology)

Maximum Marks: 70

Date: 01.03.2021 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 What is the use of cat command?
- 2 What are the operations that can be pertained using AWK?
- 3 List out the types of files in Linux
- 4 Write the syntax of removing and creating directory.
- 5 What are the system calls used for process creation.
- 6 State the functionality of raise function
- 7 What do you mean by IPC?
- 8 State the use of the function popen and pclose.
- 9 Define the term socket.
- 10 What is the use of shared memory concept?

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 11 Explain briefly about the various file handling utilities with syntax. (10M)
OR
- 12 What are the responsibilities of a Shell? (10M)
- 13 Discuss in brief about the various systems calls used for input output operations.(10M)
OR
- 14 Explain briefly about directory and the various operations that can be performed that can be performed in them.(10M)
- 15 Explain about the system calls used for process management in Linux with relevant syntax. (10M)
OR
- 16 a) What is a signal and how it is generated and handled. (4M)
b) Explain about the various signal functions. (6M)

- 17 a) Differentiate between named and unnamed pipe. (3M)
b) Explain the FIFO with example. (7M)

OR

- 18 Explain about the APIs the message queue with example. (10M)
- 19 Illustrate the need for Berkely socket and its API functions in detail. (10M)

OR

- 20 Explain in detail about the socket system calls for connection oriented protocol and connectionless protocol. (10M)