



B.Tech V Semester Regular/Supplementary Examinations, December 2021
LINUX PROGRAMMING

(Information Technology)

Maximum Marks: 70

Date: 10.02.2022 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 Define Shell and mention the properties of LINUX
- 2 Mention the use of the fork system call and command "Passwd"
- 3 Write the syntax of open system call.
- 4 Write the syntax of mounting system call.
- 5 What is zombie process?
- 6 Differentiate user priorities and kernel priorities
- 7 Compare dependent process and independent process.
- 8 Differentiate named and unnamed pipes.
- 9 Give real time examples for shared memory.
- 10 Define Socket. List the system calls which support socket programming.

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 Explain in detail about the process utilities, text processing utilities and backup utilities. (10)
OR
- 12 Explain the various shell commands with proper syntax and example. (10)
- 13 (a) Write short note on file locking and record locking. (5)
(b) Discuss about File permissions. (5)
OR
- 14 Discuss the following commands
(a) mkdir(2) (b) rmdir(2) (c) chdir(2) (d) opendir(2) (e) closedir(2)
- 15 Explain the layout of execution of C program in main memory with example. (10)
OR
- 16 (a) Write short notes on signal. (5)
(b) Differentiate reliable signals and unreliable signals. (5)
- 17 Write in detail about Interprocess communication. (10)
OR
- 18 Define Semaphores. Explain how kernel supports for semaphores. (10)
- 19 Explain in detail about the system calls which support TCP protocol and UDP protocol. (10)
OR
- 20 Discuss in detail about the APIs for shared memory. (10)