

**Reg. No:**

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**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**  
(AUTONOMOUS)

**MCA II Year I Semester Supplementary Examinations Nov/Dec 2019**  
**LINUX PROGRAMMING**

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

**UNIT-I**

- 1 a Explain briefly about text processing and process utilities in Linux. **6M**  
b Write a short note on AWK command. **6M**
- OR**
- 2 Explain the number, string, file comparison operators of shell in Linux **12M**

**UNIT-II**

- 3 a With a neat sketch, explain the Linux file system layout **6M**  
b Write the following in brief: **6M**  
i) Record locking ii) System calls iii) chmod
- OR**
- 4 Explain the following in brief: **12M**  
a) mkdir b) rmdir c) chdir d) getcwd

**UNIT-III**

- 5 Explain the following system calls: **12M**  
a) fork b) vfork c) wait d) exec
- OR**
- 6 a What is a signal? Discuss the signals SIGKILL and SIGSTOP. **6M**  
b Explain the reliable and unreliable signals in brief. **6M**

**UNIT-IV**

- 7 a Explain the advantages of FIFOs over pipes **6M**  
b Write a C program to illustrate two way communication using FIFOs **6M**
- OR**
- 8 Explain the semaphores in detail **12M**

**UNIT-V**

- 9 a Distinguish between threads and processes. **6M**  
b Discuss in detail about the POSIX thread API. **6M**
- OR**
- 10 Explain the Socket APIs in detail. **12M**

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