

**Reg. No:**

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**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**  
(AUTONOMOUS)  
**MCA II Year I Semester Regular 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 file handling utilities. **6M**  
**b** List some linux commands on a directory utilities with examples. **6M**

**OR**

- 2 a** Define shell. Describe the responsibilities of a shell. **6M**  
**b** Write short notes on here documents. **6M**

**UNIT-II**

- 3 a** Explain file system structure with neat diagram. **6M**  
**b** Explain different types of files in linux. **6M**

**OR**

- 4** Explain the following **12M**  
a) fseek    b) fgetc    c) getc    d) fputc    e) putc

**UNIT-III**

- 5 a** Explain fork() and vfork() system calls with their differences. **6M**  
**b** Explain the steps of how kernel supports a process. **6M**

**OR**

- 6** Briefly explain following with program: **12M**  
a) ZOMBIE process.  
b) ORPHAN process.

**UNIT-IV**

- 7 a** Define IPC? Explain IPC using FIFOs. **6M**  
**b** Write short notes on IPC by using Message Queues. **6M**

**OR**

- 8** Explain in detail about Linux APIs for shared memory. **12M**

**UNIT-V**

- 9 a** What is a Thread? Differentiate thread with process. **6M**  
**b** Explain about thread life cycle with neat diagram. **6M**

**OR**

- 10** Explain socket system calls for connection oriented and connectionless protocol. **12M**

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