Code No: 127EE

R15

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, May/June - 2019

LINUX PROGRAMMING

(Computer Science and Engineering)

Time: 3 Hours **Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART- A

(25 Marks)

1.a)	Explain briefly about Associative Arrays.	[2]
b)	Write a short note on Disk Utility.	[3]
c)	What is a Regular File in UNIX System?	[2]
d)	Write a short note on "lseek".	[3]
e)	Differentiate between Threads and Processes.	[2]
f)	Write a short note on Environment Variables.	[3]
g)	Write a short note on IPC.	[2]
h)	Explain briefly about "popen" library function.	[3]
i)	What is a Socket?	[2]
j)	Write a short note on "fcntl" system call.	[3]

PART-B

(50 Marks)

2. Explain in detail about Text Processing Utilities and Backup Utilities. [10]

OR

3.a) Write a detailed note on Shell Responsibilities.
b) Explain in detail about Shell Meta Characters. [5+5]

4. Explain in detail about following File Operations :
a) open b) creat c) read d) write [10]

OR

5. Explain in detail about File Ownership Commands. [10]

6. Explain in detail about Process Creation Mechanism. [10]

OR

7. Write a detailed note on following functions:
a) kill b) raise c) alarm d) pause [10]

8.a) Discuss about Kernel support for Message Queues.
b) Demonstrate client/server communication using message queues. [5+5]

OR

9. Explain in detail about IPC between unrelated processes using FIFO's. [10]

10. Explain in detail about Socket System Calls for Connection Oriented and Connection less protocol. [10]

OR

11. Write a short note on API's for Shared Memory. [10]

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