Code No: 117EE

R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, April/May - 2018
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)	Write a short note on Filters.	[2]
b)	What is a Field Buffer and a Record Buffer.	[3]
c)	Explain briefly FIFO file in UNIX File System.	[2]
d)	Write a short note on "mkdir" command.	[3]
e)	Write a short note on Signal function.	[2]
f)	Compare and Contrast Reliable and Unreliable Signals.	[3]
g)	Write a short note on UNIX system V IPC methods.	[2]
h)	Write a short note on "rclose()" library function.	[3]
i)	Explain briefly about "setsockopt" system call.	[2]
j)	Write a short note on Berkeley Socket.	[3]

PART-B
(50 Marks)

2.   Explain in detail about Control Structures.   [10]

OR

3.a)   Explain in detail about Process Utilities.
b)   Write a short notes on security using file permissions.   [5+5]

4.   Explain in detail about following File Operations:
        a) seek   b) fcntl   [5+5]

OR

5.   Explain in detail about File and Record Locking in UNIX.   [10]

6.   Explain in detail about Kernel support for Signals.   [10]

OR

7.   Write a detailed note on following processes:
        a) Zombie processes   b) Orphan processes.   [5+5]

8.   Explain in detail about IPC between related processes using unnamed pipes.   [10]

OR

9.   Explain in detail about Kernel support for Semaphores.   [10]

10. Make a comparison of various IPC mechanisms. [10]

OR

11. Explain the usage of Stream Sockets using Client-Server Message handling example. [10]

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