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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