R13 HYDERABAD	RØ							
Max. Marks: 75								
as in Part A. Part B nit. Each question	2007, 1007, 2007,							
[2] ask. [3] [2] [3] [3] [2]	RØ							
[3] [2] [3] [2] [3]	RO							
ntax, few options and [5+5]	RØ							
d 'until' statements.  ramming. [5+5]  its relative merits and								
example code. [10]	RØ							

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY B. Tech IV Year I Semester Examinations, March -- 2 LINUX PROGRAMMING (Computer Science and Engineering) Time: 3 Hours Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all question consists of 5 Units. Answer any one full question from each un carries 10 marks and may have a, b, c as sub questions. Part- A (25 Marks) What are the responsibilities of a shell? 1.a) Mention the functionality of the following commands: find, lg, uma b) What is the purpose of dot and dot dot directories in the file system Differentiate between soft linking and hard linking. d) Name the advantages of waitpid() over wait(). e) Discuss signal() and abort() system calls briefly. f) Give the advantages of using named pipes. g) ....What is the effect of O-NDELAY flag on pipes and fifos? i) Give the differences between IPv4 and IPv6. Explain the system call used to create a shared memory segment. j) Part-B (50 Marks) ... Write an awk script to find the largest of 10 integers. Explain various networking utilities in LINUX with clear syn b) example. OR With an example script explain the differences between 'while' and 3.a) List and explain the various meta characters available in shell prog Discuss the need and importance of lseek() system call with 4. drawbacks. OR Write the syntax of the following system calls and explain with an b) mkdir. a) telldir What are process identifiers? Mention the commands for getting different IDs of 6.a)calling process. [5+5]Write a program that demonstrates the use of exit(). b) OR What is a signal? How can it be generated? Also explain kernel's action on signal. 7.a) Differentiate between reliable signals and unreliable signals. [5+5]

Code No: 117EE

8. Describe various APIs of Message queues that are used for interprocess communication. [10]							
9.a) Give the advantages and disadvantages of IPC_PERM structure.  b) Describe the operations of semctl() with a sample C program. [5+5]							
10. Explain with a program how to copy file data from server to client using System V IPC mechanism shared memory.  OR  11. Explain briefly about the following socket APIs with clear syntax:  [5+5]							
a) acce	pt()	b) connec	o <b>O</b> oo==	ĶŽ	[5+5] [**; [**]		
RO		RØ	RO	RØ	RØ	RE	
	PO	RØ	RE	RØ	RØ	RØ	
RE	RØ		RØ	RØ	RO	RØ	
RØ	RO	RØ	RØ	RØ	RU	RO	
	RO	E8		RØ	RØ	RØ	
	RE	RE	RØ		RØ	RØ	

\* \*

\*\*

\*\*\*\*

\* \* \*

\* \* \*

\* \* \*

\* \* \*

\* \* \*