Code No: **R32054** 

Set No. 1

## III B.Tech II Semester Supplementary Examinations, April/May - 2019 UNIX PROGRAMMING

(Common to Computer Science and Engineering, Information Technology)

Time: 3 hours Max. Marks: 75

## **Answer any FIVE Questions All Questions carry equal marks**

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1	a)	Explain in detail about file permissions and process utilities with suitable examples.	[8M]
	b)	Describe about the following commands: awk, tar, cpio, tr, tee, uniq, and sort.	[7M]
2	a)	What is a shell? List out the shell responsibilities, shell meta characters and shell variables.	[8M]
	b)	Write a shell script to reverse the rows and columns of a matrix.	[7M]
3	a)	Discuss on UNIX file system structure with a neat sketch.	[7M]
	b)	Give the details about file and directory maintenance System calls.	[8M]
4	a)	What is a process? Explain waiting for a process in detail.	[7M]
	b)	Demonstrate about system call interface for process management of <i>exec</i> and <i>exit</i> .	[8M]
5	a)	Explain about interrupted system calls with example.	[7M]
	b)	Write the syntax of following alarm, pause functions. Explain each argument.	[8M]
6	a)	What is a pipe? Using pipe, how IPC can be implemented.	[7M]
	b)	Give brief description about the name spaces.	[8M]
7	a)	Write the structure for the semaphore set which is maintained by the kernel.	[7M]
	b)	Write a comparative study of adversary and mandatory locking.	[8M]
8	a)	Show the socket functions for elementary TCP client/server.	[7M]
	b)	Describe about Socket addresses and compare various socket address structures.	[8M]

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