Code No: **R32054**   **R10** | **Set No. 1** |

III B.Tech II Semester Supplementary Examinations, November- 2017
UNIX PROGRAMMING
(Common to Computer Science and Engineering and Information Technology)

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

Answer any FIVE Questions
All Questions carry equal marks
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1	a)	With the help of syntax and example explain the various process utility commands.	[8M]
	b)	Discuss the navigation commands supported by vi editor. Give examples for each.	[7M]
2	a)	Write a shell script that accepts a name from the user and displays whether it is a file, directory or something else.	[8M]
	b)	Write about shell variables and environment variables.	[7M]
3	a)	What is a file? What are its characteristics? Explain them in detail.	[7M]
	b)	Explain with example the file and directory maintenance system calls in detail.	[8M]
4	a)	Describe the role of process identifiers in process control.	[8M]
	b)	Write a C program to create zombie process.	[7M]
5	a)	What is the role of the following in signal generation: i) pause and ii) alarm system calls.	[8M]
	b)	What is Race Condition? Explain in detail. Give its use in signals.	[7M]
6	a)	What is a Pipe? Write a program to create a pipe between a parent and its child and send the data between them through pipe.	[8M]
	b)	What is re entrant function? Explain in detail with an example.	[7M]
7	a)	How file loading is implemented using semaphore.	[8M]
	b)	What is a semaphore? Explain the operations that are supported by it.	[7M]
8	a)	How addresses are associated with Sockets? Explain in detail.	[8M]
	b)	Describe the role of port numbers with respect to sockets.	[7M]

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