Code No: **R42029**   **R10**   **Set No. 1**

IV B.Tech II Semester Supplementary Examinations, July/August - 2017
UNIX AND SHELL PROGRAMMING
(Electrical and Electronics Engineering)

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

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

1	a)	With a neat sketch, explain the architecture of UNIX operating system.	[7]
	b)	Explain the following UNIX commands (i) uname (ii) ls (iii) more (iv) cat	[8]
2	a)	Explain the implementation details of UNIX file system.	[6]
	b)	Explain the following UNIX commands (i) grep (ii) sort (iii) diff	[9]
3	a)	What is Redirection? Explain various commands used for redirection.	[7]
	b)	What is a filter in UNIX? List out various filters in UNIX. Explain any two of them.	[8]
4	a)	Define the 'grep' family. Mention the primary difference between fgrep and the other two members of the grep family.	[7]
	b)	Write a 'sed' command to i) display the lines through 10 to 15 in a given text file ii) replace the word 'UNIX' with 'LINUX' in a given text file	[8]
5	a)	Define an associative array and explain the steps in processing an associative array.	[8]
	b)	With a neat diagram, describe an awk utility's view of a file and also explain the file buffers and record buffers of awk.	[7]
6	a)	What is an Environment variable? List out the environment variables that control the user environment in Korn Shell.	[8]
	b)	Demonstrate the execution of Loop redirection with a suitable example.	[7]
7	a)	Explain the echo command in C shell. Demonstrate the use of C shell character codes for each command.	[8]
	b)	What is the application of 'eval' command in C shell and also explain the execution of 'eval' command with suitable example.	[7]
8	a)	Explain the commands that are available in UNIX file system to change the permissions of a file.	[7]
	b)	Explain the following directory API with example (i) opendir (ii) readdir (iii) closedir	[8]