**R16**

**SET - 1**

**III B. Tech I Semester Supplementary Examinations, May - 2019**
# UNIX PROGRAMMING
(**Common to** Computer Science Engineering, Information Technology)

Time: 3 hours                                                                                     Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answer **ALL** the question in **Part-A**
3. Answer any **FOUR** Questions from **Part-B**

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## PART –A

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| 1. | a) | Write a short note on Unix components. | [2M] |
| | b) | Give the purpose of chmod command. | [2M] |
| | c) | Explain the significance of 'ls' command. | [2M] |
| | d) | Give a short note on GREP family of commands. | [3M] |
| | e) | Write a short note on shell variables. | [3M] |
| | f) | What do you mean by internal commands? | [2M] |

## PART -B

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| 2. | a) | What is command substitution and output redirection? Explain with illustrative examples. | [7M] |
| | b) | What are filters? Write in detail about any five filter commands. | [7M] |
| 3. | a) | Explain the Unix directory hierarchy. | [7M] |
| | b) | What are system calls? How are they differing from library functions? Explain with the help of suitable examples. | [7M] |
| 4. | a) | Write about the significance of Unix environment variables and describe the related commands. | [7M] |
| | b) | Write a script illustrating **" case ........ esac"** selection statement. | [7M] |

5.  Use the following file . Name it addresses.txt:                        [14M]
Roger Longtwig:35 Midvale Ave.:Austin, TX:35432
Brad Brookstone:1044 E. 32nd St.:NY, New York:10001
Richard Smack:845 Pleasant Ter.:Dauberville, CT:06239
Django Steinbart:10 E. Point Way:Atlanta, GA:30374
Cliff Claymore:111 S. Main St.:Clevenger, IA:55472
i) Create a command that will sort these by ZIP code into a file called addresses-sorted.txt.
ii) Create a sed script that will replace any street abbreviation (such as St. or Ave.) or cardinal abbreviation (N., S., E., W.) with the full word.
iii) Create a command that will reverse the "NY, New York" in the second line to "New York, NY".

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| 6. | a) | Write a shell script to find the given string is palindrome or not. | [7M] |
| | b) | Write a note on shell's loop control structures. | [7M] |
| 7. | a) | What is a process? How do you create a process in Unix? Write about Zombie and orphan processes. | [7M] |
| | b) | Write a short note on the following commands: | [7M] |
| | | i) trap      ii) stty      iii) bg      iv) at      v) kill | |

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