R07

Set No.1

IV B.Tech I Semester Supplementary Examinations, February/March, 2011 UNIX PROGRAMMING

(Electronics & Computer Engineering)

Time: 3 hours Max. Marks: 80

Answer any FIVE Questions All Questions carry equal marks

- 1. What is Operating System? With a neat diagram, describe in detail about the architectures and features of Unix Operating System.
- 2. (a) What is a file? With examples and syntax, briefly describe any five file handling utilities.
 - (b) With an example and syntax, briefly describe mount, cut, paste and sort commands.
- 3. (a) What is Unix session? Briefly describe the standard streams and redirections.
 - (b) Briefly describe command execution.
- 4. (a) With an example briefly describe the process of concatenations.
 - (b) What is grep? Briefly describe the grep family commands.
- 5. (a) What is name completion? With an example, describe the process file name completion in ksh?
 - (b) Does ksh support command completion? Is completion programmable?
- 6. (a) With an example script, briefly describe the c shell command execution script.
 - (b) What is an environment? What is an environment variable? With an example, briefly describe c shell environment variables.
- 7. (a) Briefly describe Startup and Shutdown Scripts.
 - (b) With an example script, briefly describe the process of changing Positional Parameters
- 8. Write short notes on the following:
 - (a) create
 - (b) lseek
 - (c) lstat
 - (d) telnet

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Set No.2

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Time: 3 hours Max. Marks: 80

Answer any FIVE Questions All Questions carry equal marks

- 1. (a) What is a kernel? Briefly describe UNIX kernel.
 - (b) With an example, briefly describe the *user command* required to change and print terminal line settings.
- 2. (a) List and describe the UNIX redirection operators
 - (b) Briefly describe Text processing utilities and backup utilities.
- 3. (a) Briefly describe Command Substitution and Aliases
 - (b) What is a shell variable? Briefly describe the purpose of using #, *, @, ?, ! variables.
- 4. (a) Briefly describe the applications of grep and sed.
 - (b) With an example awk script, describe the usage of conditional expressions.
- 5. (a) Briefly describe String functions and Mathematical functions of awk.
 - (b) Briefly describe patterns and associated arrays of awk.
- 6. (a) With an example and syntax, briefly describe unlink, ulimit, umask and diff commands.
 - (b) Write a shell program to count the number of word and lines in a text file.
- 7. (a) Briefly describe the features of c shell.
 - (b) What is korn shell? Is korn shell line editor can be used for other commands?
- 8. Write short notes on the following:
 - (a) symlink
 - (b) lstat
 - (c) opendir API
 - (d) rlogin

R07

Set No.3

IV B.Tech I Semester Supplementary Examinations, February/March, 2011 UNIX PROGRAMMING

(Electronics & Computer Engineering)

Time: 3 hours Max. Marks: 80

Answer any FIVE Questions All Questions carry equal marks

- 1. (a) Is UNIX operating system multitasking or multithreading? Justify your answer.
 - (b) With syntax describe printf, script, passwd, uname, who, date commands.
- 2. What is *vi* editor? What are the available modes? With an example, describe in detail about the switches for moving the cursor, inserting and deleting text, cutting and pasting the text, searching the text, to display the line number and saving the file.
- 3. (a) With an example, briefly describe sorting and translating characters
 - (b) Briefly describe Shell Predefined Variables and job control.
- 4. What is egrep? In what way it is different from fgrep? With an example and options, describe the additional functions / operations supported by egrep, when compared with grep and fgrep?
- 5. (a) Briefly describe the features of C shell.
 - (b) Describe the process of customizing C Shell environment.
- 6. (a) Briefly describe the purpose of using -n option in korn shell?
 - (b) What is key binding? How is key binding done in korn shell?
- 7. (a) What is an environment? What is an environment variable? Briefly describe C shell environment variables.
 - (b) With a sample script, describe an executable awk script by utilizing dynamic variables.
- 8. Write short notes on the following:
 - (a) File structures
 - (b) fstat
 - (c) lstat
 - (d) arp

R07

Set No.4

IV B.Tech I Semester Supplementary Examinations, February/March, 2011 UNIX PROGRAMMING

(Electronics & Computer Engineering)

Time: 3 hours Max. Marks: 80

Answer any FIVE Questions All Questions carry equal marks

- 1. (a) With syntax and options, briefly describe the *user command* used to dump files in octal and other formats.
 - (b) With syntax and options, briefly describe the *BSD command* used to make typescript of terminal session.
- 2. (a) With syntax, describe du, df, mount, umount, find, unmask.
 - (b) What is a filter? Briefly describe, with syntax and options, fgrep and tr commands.
- 3. (a) What is egrep? With an example, describe in detail about the purpose of using -a, -A,-b, -B, -c, -C, -d, -D options.
 - (b) Briefly describe the applications of *sed* command in UNIX environment.
- 4. (a) With an example briefly describe the process of removing duplicating duplicate lines in a file.
 - (b) What is the purpose of \$'...'? Why are both `...` and \$(...) used for command substitution?
- 5. (a) Write an awk script to print seven random numbers from 0 to 100.
 - (b) What is an escape sequence? With an example awk script, describe the usage of escape sequences in array assignments.
- 6. (a) With an example script, briefly describe the process of changing Positional Parameters.
 - (b) With an example, briefly describe the process and purpose of Argument Validation?
- 7. (a) Why do use spaces around { and } but not around (and)? Briefly describe the difference between ((expr)) and \$((expr))?
 - (b) How can a write a ksh script that responds directly to each character so that you user just has to enter y, not y<return>?
- 8. Write short notes on the following:
 - (a) tee
 - (b) pg
 - (c) tr
 - (d) ftp