

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)

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QUESTION BANK (DESCRIPTIVE)

Subject with Code: Unix & Shell Programming (20CI0603)

Course & Branch: B.Tech & CSIT

Year & Sem: II & II

Regulation: R20

UNIT –I
INTRODUCTION TO UNIX
&
UNIX UTILITIES

1	a) Describe in detail about the Architecture of UNIX.	[L1][CO1]	[6M]
	b) How can you say that Unix operating system provides more security than other operating systems?	[L2][CO1]	[6M]
2	What information is presented when the following commands are entered? a) date b) who c) ls d) cal	[L1][CO1]	[12M]
3	Explain Features of Unix.	[L2][CO1]	[12M]
4	a) Express vi Editor and explain its modes.	[L2][CO1]	[6M]
	b) Briefly explain about the commands used in the vi Editor.	[L2][CO1]	[6M]
5	Describe the commands listed below: a) grep b) passwd c) more d) echo	[L1][CO1]	[12M]
6	a) Explain about unix file system?	[L2][CO1]	[6M]
	b) Explain four text processing utility commands.	[L2][CO1]	[6M]
7	a) Illustrate the user and group in Unix? Explain Access modes and how permissions for a file can be changed using chmod.	[L2][CO1]	[8M]
	b) Write syntax for changing ownership and group name on a given files?	[L6][CO1]	[4M]
8	a) Explain about five networking commands.	[L2][CO1]	[6M]
	b) Describe the commands listed below: i) ps ii) du iii) df	[L1][CO1]	[6M]
9	a) Describe the commands listed below: i) cp ii) mv iii) rm iv) man	[L1][CO1]	[8M]
	b) Write the command for the following i. To display time in GMT ii. To display time in format hour : minute : second	[L6][CO1]	[4M]
10	a) Describe the commands listed below: i) mkdir ii) rmdir iii) cat iv) cd	[L1][CO1]	[8M]
	b) Describe the commands listed below: i) head ii) tail	[L1][CO1]	[4M]

UNIT –II
INTRODUCTION TO SHELLS & FILTERS

1	a) What is redirection? Explain it in detail.	[L1][CO2]	[6M]
	b) Explain in detail about command line editing with basic vi commands.	[L2][CO2]	[6M]
2	Explain Variables with its Types and Options.	[L2][CO2]	[12M]
3	What is JOB? Explain in detail foreground and background jobs. Give example and sketch the JOB states diagram.	[L1][CO2]	[12M]
4	a) Explain concatenate command with its options.	[L2][CO2]	[6M]
	b) Distinguish between a user-defined variable and predefined variable ?	[L4][CO2]	[6M]
5	a) Define Filter and discuss any five types of filters.	[L1][CO2]	[6M]
	b) Explain sort command with its options.	[L2][CO2]	[6M]
6	a) Explain command substitution with example.	[L2][CO2]	[6M]
	b) Explain about Command Execution?	[L2][CO2]	[6M]
7	a) Discuss about Standard Streams? Explain Briefly.	[L2][CO2]	[6M]
	b) Discuss pipe and tee command with suitable example.	[L2][CO2]	[6M]
8	Describe the commands listed below : a) wc b) uniq c) paste d) cut	[L2][CO2]	[12M]
9	a) Explain (a) Aliases (b) Unix session	[L2][CO2]	[6M]
	b) what are the three unix commands used to compare the contents of file ? Explain each command in detail.	[L1][CO2]	[6M]
10	a) What is an option? Mention at least three options and their use?	[L1][CO2]	[6M]
	b) Define Shell Customization?	[L1][CO2]	[6M]

UNIT –III
INTERACTIVE KORN SHELL
&
KORN SHELL PROGRAMMING

1	What is Korn Shell and its Features ?	[L1][CO3]	[12M]
2	a) What is the eval command ?	[L1][CO3]	[6M]
	b) Explain about Korn shell input and output commands with examples.	[L2][CO3]	[6M]
3	a) What is K shell ? Explain startup scripts in K shell.	[L1][CO3]	[6M]
	b) What is an Environment variable ? List out the environment variables.	[L1][CO3]	[6M]
4	a) Explain the command history of Korn shell.	[L2][CO3]	[6M]
	b) Explain about the command execution process of Korn shell.	[L2][CO3]	[6M]
5	Explain : (a) special parameters (b) special variables	[L2][CO3]	[12M]
6	List and explain the expressions involved in Korn shell.	[L1][CO3]	[12M]
7	How decision making is done in ? Explain with a program.	[L2][CO3]	[12M]
8	a) How argument validation is done ?	[L2][CO3]	[6M]
	b) Write a shell script for performing the arithmetic operations.	[L6][CO3]	[6M]
9	Discuss about repetition statements in Korn shell with examples.	[L2][CO3]	[12M]
10	a) Write a korn shell script that accept two file names as arguments and copies the contents of first file in to the second file.	[L6][CO3]	[6M]
	b) Explain about debugging process in korn shell with various debugging scripts	[L2][CO3]	[6M]

UNIT –IV
INTERACTIVE C SHELL
&
C SHELL PROGRAMMING

1	What is C Shell and its Features ?	[L1][CO4]	[12M]
2	a) What is the eval command ?	[L1][CO4]	[6M]
	b) Explain about C shell input and output commands with examples	[L2][CO4]	[6M]
3	a) Explain startup and shutdown scripts in C shell.	[L2][CO4]	[6M]
	b) What is C Shell ? Explain two Special files.	[L1][CO4]	[6M]
4	Explain : (a) environmental variables (b) on-off variable	[L2][CO4]	[12M]
5	a) Explain the command history of C shell.	[L2][CO4]	[6M]
	b) Explain about the command execution process of C shell.	[L2][CO4]	[6M]
6	How decision making is done in C shell ? Explain with a program.	[L2][CO4]	[12M]
7	List and explain the expressions involved in C shell.	[L1][CO4]	[12M]
8	a) How argument validation is done in C shell ?	[L2][CO4]	[6M]
	b) How debugging scripts work in C shell ?	[L2][CO4]	[6M]
9	Discuss about repetition statements and repetition control statements in C shell with examples.	[L3][CO4]	[12M]
10	Explain : (a) special parameters (b) special variables	[L2][CO4]	[12M]

UNIT –V
FILE MANAGEMENT

1	a) What is a File ? Explain about any four system calls used with files.	[L1][CO5]	[6M]
	b) Explain any four operations that can be performed on a directory.	[L2][CO5]	[6M]
2	a) Define System call. Differentiate between system calls and library functions.	[L1][CO5]	[6M]
	b) Explain any two API directories.	[L2][CO5]	[6M]
3	What is File structure ? Explain the file structure of UNIX.	[L1][CO5]	[12M]
4	Explain various types of system calls in UNIX.	[L2][CO5]	[12M]
5	a) What is a File ? What are different types of files available in UNIX.	[L1][CO5]	[6M]
	b) Explain the command that is available in Unix file system to change the permissions of a file.	[L2][CO5]	[6M]
6	a) Explain the following System call with syntax : i) creat ii) write	[L2][CO5]	[6M]
	b) Explain the following Directory API with example : i) closedir ii) opendir	[L2][CO5]	[6M]
7	a) Explain the following System call with syntax : i) open ii) close	[L2][CO5]	[6M]
	b) Explain the following Directory API with example : i) umask ii) mkdir	[L2][CO5]	[6M]
8	a) Explain the following System call with syntax : i) read ii) lseek	[L2][CO5]	[6M]
	b) Explain the following Directory API with example : i) readdir ii) rmdir	[L2][CO5]	[6M]
9	Briefly explain about the following system calls with syntax : link, symlink, unlink, stat, lstat, fstat	[L2][CO5]	[12M]
10	Explain the following system calls : (a) File management system calls (b) Device management system calls (c) Process control system calls	[L2][CO5]	[12M]

PREPARED BY :

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