55230

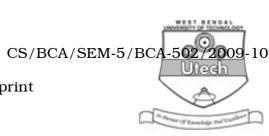
Name :								Utech
							a c	Anna (y Exemples 2nd Explicat
Invigilato	r's Si	gnature :						
			CS/	BCA/	SEM-	5/BC	A-5	602/2009-10
				2009)			
	U	NIX &	SHEL	L PR	OGR	AMN	IIN	NG
Time Allotted: 3 Hours							F	full Marks : 70
	Th	e figures i	in the n	nargin	indica	te full	та	rks.
Candidai	tes ar	e required	U	e their as pra			hei	r own words as
			GF	ROUP -	- A			
		(Multip	le Cho	ісе Ту	pe Qu	estion	ns)	
1. Choose the correct alternatives of the following :								
								$10 \times 1 = 10$
i)	UNI	X uses	1s to	list	files	in a	a (directory. The
corresponding command in MS environment is								
	a)	if			b)	listdi	r	
	c)	dir			d)	none	of	these.
ii)	Whi	ch of the	follow	ing file	es in	the cu	ırre	ent directory is
identified by the regular expression a?b* ?								?
	a)	afile b)			aab			
	c)	abb			d)	none	of	these.

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- iii) For some file the acess permissions are modified to 764. Which of the following interpretations is valid?
 - a) everyone can read, group can execute only and the owner can read and write.
 - b) everyone can read and write, but owner alone can execute
 - c) everyone can read, group including owner can write, owner alone can execute
 - d) none of these.
- iv) Which of the following information is contained in inode structure?
 - a) The file size
 - b) The name of the owner of the file
 - c) The access permissions for the file
 - d) None of these.
- v) How could you cheek two strings are equal?
 - a) test \$a eq \$b
- b) test \$s equal \$b
- c) test \$a = \$b
- d) test a = b.

- vi) sort -n emp
 - a) sort by primary key
 - b) numeric sorting
 - c) sort by secondary key
 - d) none of these.



- vii) echo '\$SHELL' will print
 - a) SHELL
 - b) \$SHELL
 - c) value of SHELL variable
 - d) none of these.
- viii) \$? represents
 - a) no. of arguments specified in command line
 - b) name of executed command
 - c) exit status of last command
 - d) none of these.
- ix) The available disk space can be determined under UNIX using the command
 - a) dir

b) df

c) du

- d) file.
- x) The command cp [!0-9] ?? Prog will
 - a) copy all files started with not a number to Prog directory
 - b) copy all files whose filename is three characters in length started with not a number to Prog directory
 - c) both of these
 - d) none of these.

GROUP - B

(Short Answer Type Questions)

Answer any three of the following.

 $3 \times 5 = 15$

- 2. Write short notes on the following Unix commands with different options : 2 + 2 + 1
 - a) Date
- b) who
- c) passwd.
- 3. Write a shell script that will accept a pattern and a filename from the user and display all lines containing the pattern within the file.
- 4. What is *i*-node? What does it contain?

1 + 4

- 5. When is a process forked? What are the attributes inherited from the parent process by its child process? What is the common to know the PID of the current shell? 1 + 3 + 1
- 6. a) What is meant by command line arguments in shell programming?
 - b) Explain \$#, \$?, \$* special parameters in shell. 2 + 3

GROUP - C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

- 7. a) Briefly explain the features of UNIX Operating System.
 - b) What are absolute and relative paths? Explain with example.
 - c) What are the security levels available in UNIX?
 - d) What is filter? Is it possible to append contents using cat command? How to display the 5th to 10th line of a file *f*1? How to open the last modified file in vi editor?

4 + 4 + 3 + 1 + 1 + 1 + 1

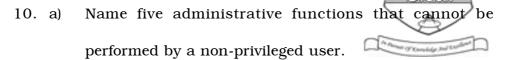
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- 8. a) Name five administrative functions that cannot be performed by a general user.
 - b) What are the commands used by system administrator to create, modify and delete user accounts? Give example.
 - c) What is the difference between su and su-aloke?
 - d) What are the activities performed by shutdown command?
 - e) What are block and character devices?
 - f) What are the different run levels in UNIX?

$$2 + 2 + 2 + 4 + 2 + 3$$

- 9. a) Describe internal and external commands in Unix with example.
 - b) Explain with examples the flexibilities of Unix command usage.
 - c) Write short notes on the following:
 - i) man
 - ii) uname
 - iii) script. 4 + 4 + (3 + 2 + 2)

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- b) Why is the su command terminated with exit? What is the difference between su and su-vivek?
- c) What are block and character devices?
- d) What are the different run levels in Unix?

3 + 5 + 4 + 3

- 11. a) What are the differences between scheduling processes using batch command and using at command?
 - b) What do you mean by a daemon?
 - c) How will you kill a daemon?
 - d) Which process cannot be killed using the kill command?
 - e) What is the function of exec system call? What is the difference between a process run & and run wtih nohup?

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- f) Interpret the following crontab entries and explain if they will work :
 - i) ***** dial.sh
 - ii) 00-60 22-24 30 2* find.sh
- g) Frame a crontab entry to execute the connect.sh script every 30 minutes on every Monday, Wednesday and Friday between times 8 a.m. and 6 p.m.

$$2 + 1 + 1 + 1 + (2 + 2) + 3 + 3$$

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