208/ FUES/00

N.B.

Linux

Q.P.Code:04473

(2 1/2 Hours)

1) All questions are compulsory.

[Total Marks: 75]

3) Illustrations, in-depth answers and diagrams will be appreciated. 4) Mixing of sub-questions is not allowed.  Q. 1 Attempt All (Each of 5Marks)  (a) Multiple Choice Questions 1		2) Figures to the right indicate marks.	
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1		Multiple Choice Questions	
2. Which option of Is command used to view file inode number?  a1 b0 ca di  3. Run level		1is a collection of application which is combined to make an OS.	
al bo ca di  3. Run levelimplies Multiple User. a. 0 b. 1 c. 2 d. 3  4. To run date first and then ls -l, which of the following is correct? a. date \$ls -l b. date; ls -l c. date - ls -l d. date > ls -l  5. Which of the following is a text editor? a. GNOME b. LILO c. emacs d. GRUB  (b) Fill in the blanks  1. is a program that puts the operating system into memory. 2. is an interface between process and OS. 3. controls the command prompt settings. 4. wild-card is used to match any number of characters including none. 5TCP/IP protocol is used for remote connection service.  (c) Short Answers  1. State the purpose of pwd command. 2. What do you mean by service in Linux OS? 3. Define the term Kernel. 4. Which command is used to change the password of root? Write the same with proper syntax. 5. Write the name of command which prints the information about system like kernel name, operating system etc. if suitable options are given.  Q.2 Attempt the following (Any THREE)(Each of 5Marks) (a) Explain the relationship between Kernel and Shell with a neat diagram. (b) Discuss the booting process in Linux OS. (c) Explain the options for shutdown process: -a, -r, -h, Time, message (d) What are the different points which make GUI more user friendly compare to command line interface? (e) Justify the importance of Linux as OS on web services and mobiles.			8
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	(0)	Instity the importance of Linux as OS on web services and mobiles.	
	(e)		No 2

(f)	Why people are moving towards free and open source systems like Linux OS? Give reasons with proper justification.				
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Q. 3	Atter	npt the following (Any THREE) (Each of 5Marks)	(15M)		
(a)	Write a note on following:-				
V.37	i.	Launcher			
	ii.	Dash			
	iii.	workspaces	35 6 60		
(b)	State the purpose of following commands:-				
	i.	nslookup	0.00		
	ii.	dig			
	iii.	arp			
	iv.	factor			
	v.	info			
(c)	Expla	in in brief hard link and soft link with suitable example.	8/2		
(d)	What	do you mean by environmental variable? Explain following			
Ç., 7.	envir	onmental variables in one line.			
	i.	PATH	30		
	ii.	PS1			
	· iii.	HOME			
	iv.	PS2			
	v.	TERM			
(e)	State the purpose of following directories:-				
	i.	/bin			
	ii.	/var			
	iii.	/tmp			
	iv.	/boot			
	v.	/mnt			
(f)	Expla	in the use of following commands:-			
	i.	cal			
	ii.	date			
	iii.	who			
	iv.	echo			
	v.	wc			
Q. 4		npt the following (Any THREE) (Each of 5Marks)	(15M)		
(a)	Write a note on IP address and Domain Name System.				
(b)	State the purpose of following Regular Expressions: ^ , \$ , * ,() , ?				
(c)	Write a shell script to print factorial of a entered number.				
(d)	Write a note on telnet.				
	Write a shell script to accept 2 numbers from user and one operator. Perform				
(e)	addition, subtraction, multiplication and division based on operator.				

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(f) Assume that there is a file called "number" with following data:-

1	2
4	5
6	6
8	9

Write the purpose of awk command and command perform following:

- 1) Add two columns.
- 2) Find the average.
- 3) Multiply two columns.
- Q. 5 Attempt the following (Any THREE) (Each of 5Marks)

(15M)

- (a) Explain processes and ps command with its options and usage?
- (b) What are the general purpose utilities in Linux? Explain with syntax and example.
- (c) Define the following terms in one or two lines:-
  - Protocol
  - HTTP
  - TCP/IP
  - UDP
  - FTP
- (d) List details of ls -l command and describe each column in short.
- (e) Provide the syntax of multi-decision making statement in shell script with suitable example.