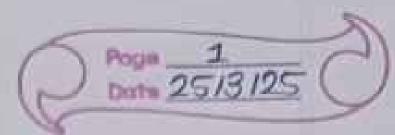
05 Paelims Papes



	Q-1 (A)
1.	Shootest JoB Fiast
2.	FCES - Figst come Figst Segue
3.	
	Q-1 (B)
I.	Context Switching is the process of storing and
	Restoring the Stat of CPU
•	so that execution can be resumed the same Birt lates.
	This allows Multiple processes to sharing a
	single CPV.
٠	
ude l	at the point powess stapped it.
	Q-1(C) = -
1.	Round Robin
•	Round Robin is the premptive process algorithm
	Each process is provided a fix time to
	is alled a quantum
	onec a pascess is executed for a given
	time posiod
	other concess executes for time period.

-VEDE - STIFFE

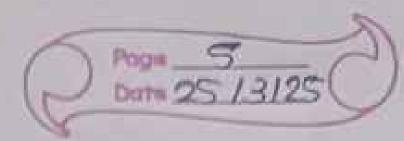
-		
	Poga 2	200
(Date 25/31201	4
R	1	

I

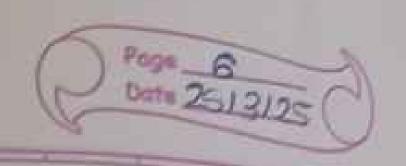
Pacces to Pactual time Busettime Pacces to P2 92 3 2 3 2 3 2 3 3 2 3 3					-			-	
Paces ID									
P1		Deces Th		PD2 IVO	LTime	>	Bugg	HIM	2
P2					0			5(2)	
Py 1 3 Py 1 3 Py 1 3 Py 1 3 Quantum :-3 Step-1 G hast P1 Py P2 P3 P1 0 3 6 4 11 13 Step-2 Than Around time = Competion Time - Assistante waiting Time = Tourne and Time - Bushtime PID Proival Time Bushtime Compition time Tauntime builting to P1 0 5 13 13 8 P2 2 3 4 7 4 4 P3 3 2 11 8 6 P4 1 3 6 8 2 Step-3 AvgTAT = Total TAT/ No. of Process (B+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bubat 1/No. of Process (5+3+2+3) = 13/4 = 3.25 Step-5 (P) Viiization = Total FT/ TEASON					92			3	
Py 1 3 Step-1 G hast P1 P4 P2 P3 P1 O 3 6 4 11 13 Step-2 Twan Assundtime = Competion Time - Assival Time Waiting Time = Trumas and Time - Busitime PTD Assivatime Busitime Compition time Tsuntime withing time P1 O 5 13 13 8 P2 2 3 4 7 4 P3 3 2 11 8 6 P4 1 3 6 5 2 Step-3 AvgIAT = Total TAT/ No. of Process (13+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Busit T/No. of Process (5+3+2+3) = 13/4 = 3.25					3			2	
Quinatum :-3					1			3	
Step-1 G hast P1 P4 P2 P3 P1 0 3 6 4 11 13 Step-2 Twen Assund time = Completion time - Assival time waiting time = Thunas and time - Bust time P1D Province time Bust time Compilion time Town time waiting time P1 0 5 13 13 \$ P2 2 3 4 7 4 P3 3 2 11 8 6 P4 1 3 6 5 2 Step-3 AvgTAT = Total TAT/ No. of Process (18+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bubst T/No. of Process (5+3+2+3) = 13/4 = 3.25		19							
Step-1 G most P1 P4		Qunatum:	- 3						
PID Provival Time Bussitime Compilition time Town Time withing time PI 0 5 13 13 \$ P2 2 3 4 7 4 P3 3 2 11 8 6 P4 1 3 6 9 2 Step-3 AvgTAT = Total TAT/ No. of Process (13+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bussit I/No of Process (5+3+2+3) = 13/4 = 3.25	SHEP-1	G hast	P1 0 3					P1	13
PID Provival Time Bussitime Compilition time Town Time withing time PI 0 5 13 13 \$ P2 2 3 4 7 4 P3 3 2 11 8 6 P4 1 3 6 9 2 Step-3 AvgTAT = Total TAT/ No. of Process (13+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bussit I/No of Process (5+3+2+3) = 13/4 = 3.25	SHEET THE			HI-96	ta will	- 1959	HINDRY!		
PID Provivol time Bussitime Compiliantime Towntime withingtime P1 0 5 13 13 8 P2 2 3 4 7 4 P3 3 2 11 8 6 P4 1 3 6 8 2 Step-3 AvgTAT = Total TAT/ No. of Process (B+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bussit T/No of Process (5+3+2+3) = 13/4 = 3.25	STEP-2	Tuen Asounce	Time =	Compe	ion Tim	e - A99	SvalT'i	ne	
PTD Provival Time Bussttime Compitiontime Towntime withington P1 0 5 13 13 8 P2 2 3 4 7 4 P3 3 2 11 8 6 P4 1 3 6 8 2 Step-3 AVGTAT = Total TAT/ No. of Process (18+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Busset T/No. of Process (5+3+2+3) = 13/4 = 3.25								6,4	
P1 0 5 13 13 8 P2 2 3 4 7 4 P3 3 2 11 8 6 P4 1 3 6 8 2 Step-3 AvgTAT = Total TAT/ No. of Process (18+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bubst T/No. of Process (5+3+2+3) = 13/4 = 3.25							MHas		
P1 0 5 13 13 8 P2 2 3 4 7 4 P3 3 2 11 8 6 P4 1 3 6 8 2 Step-3 AvgTAT = Total TAT/ No. of Process (18+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bubst T/No. of Process (5+3+2+3) = 13/4 = 3.25	PID	Posival Time	Busst	time (omplition	otime .	Town Tin	e W	mit gritting
P3 3 2 11 8 6 P4 1 3 6 2 Step-3 AVGTAT = Total TAT/ No. of Process (B+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bibst T/No. of Process (5+3+2+3) = 13/4 = 3.25	PI	0	5						8
Step-3 AvgTAT = Total TAT/ No. of Process (13+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Buthet T/No. of Process (5+3+2+3) = 13/4 = 3.25 Step-5 CPU Vitilization = Total ET/TE 225	P2	2	3		4		7	TY 7 2	4
Step-3 AvgTAT = Total TAT/ No. of Process (13+7+8+5) = 33/4 = 8.25 Step-4 Thoughput = Total Bubst T/No. of Process (5+3+2+3) = 13/4 = 3.25 Step-5 CPV Villization = Total FT/ TERRORS	P3	3	2		11		86		6_
Step-4 Thoughput = Total Bushet T/No. of process (5+3+2+3) = $13/4 = 3.25$ Step-5 CPU Villization = total ET/TERRORS	P4	1	3		6		9		2
Step-4 Thoughput = Total Bushet T/No. of process (5+3+2+3) = $13/4 = 3.25$ Step-5 CPU Villization = total ET/TERRORS									
Step-4 Thoughput = Total Bushet T/No. of process (5+3+2+3) = $13/4 = 3.25$ Step-5 CPU Villization = total ET/TERRORS	Step-3	AVSTAT = 7	TAT (pto)	/ No.	of Par	2200			
Step-4 Thoughput = Total Busset T/No. of Process $(5+3+2+3) = 1314 = 3.25$ Step-5 CPU Villization = Total FT/TE = 7									
Step-5 CPU Villization = Total ET/TE 3.25		1							
Step-5 CPU Villization = Total ET/TE 3.25	Step - 4	Thoughput = Total Bushert T/No							
Step-5 CPU Vilization = total ET/TE			(5+3+2+3) = 7314						
Step-5 CPU Villipation = total ET/TE = 700 13/13* 100 = 100%									
13/23 × 100 = 100%	Step-5	CPU Viliz	ation =	total	FT-/-	-1=			
			13/23 × 10	00 = 70	00.1	1 70	0		
					2/5				

	Q-1(A)
	A softwase that allows a uses to run others
1.	application on computing Device.
0	Walting Blocked
3.	Instance of a computes that is being executed.
0 .	Instance of a compares that
	7 7 CP 1
	Q-1CB)
	Stoot :- This is the initial state when a Process
Jo	
	is fiber stabled / Oberted
0	Ready: - The Process is waiting to be assigned to
	Process: - Thay come into this state confies state
0	Running :- State is set to running alond Possessions
	execute "AS instructions execute "AS instru
0	waiting Process Moves into the waiting state if
	"H needs to wait to a resource.
-	Tesminated on Exit: - once the phocess finishes:
	THE execution of it is terminated by the os.
	Q-ICO
1.	FCFS
	Fig.5t Come Fig.5t Segue Scheduling algorithm as
•	a pagres which which
	£1951.

		H
	Pogs 4	
	Pogs 4 Date 25/3/25	
	BT BT	
	PID 97	
	2 3 3 3	_
	02	
	PU 7 3	
	CARL ST WELL STREET, TO SEE STREET, TO SEE STREET, TO SEE STREET, TO SERVICE STREET, TO S	
Class - 7	Gont chast	
Slep-1	GOVERNMENT CANCES OF THE PARTY	
-	P1 P2 P3 P4	
	0 5 8 10 13	
~	Total Contract Lands of the Contract Lands o	
	William William Later and	
Step-2	PID AT BT OT TAT WT	
	P1 0 5 5	
	P2 2 3 8 6	
	P3 6 2 10 4 2	
<u></u>	P21 3 13 6 3	
(A CONTRACT OF THE STATE OF THE	
Step-3	AV9 TAT = TO+01 TAT / No. of Process	
	(5141616)/44 = 2)/4 = 5.25 mS	
- 6	ANG INT = TOTAL WIT / NO. OF PROCESS	
	60+3+2+3) $14 = 614 = 2mS$	
Step4		
3101	104a) BT/ 41	
	1 4 - 72)4 - 20	
SIEP-5	CPU Uthlization	
	Total FT /Total CT # 700	
	13 13 100 = 100-1.	

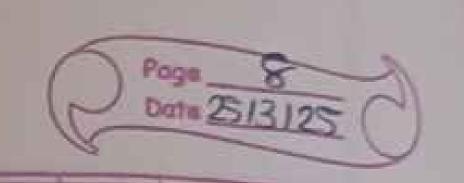


	Program 5 13125 Date 25 13125
	Q-2 (A)
I.	Two ob mobe Boxess are blocked indefinitely
	because each process is writing process.
2.	Stosage space is used in efficiently reducing
	Capacity 09 postos mance.
3.	Paging is Hemogy Management technique in
F 1	which a computed 5-todes and Main memosy.
	Q-2 (B)
-	
4.	Dead lock Phevention aims to ensure that
	to deadlack can't hold.
	OS GEOGLOCK CONT NOIG
	Mutual Exclusion: - Make resource sharable
	No Pseemption: - Allow Beemption os resources
	cisculas mait: - Impose a total asdening on
	resource type and requise Process and
	Q-2 (C)
1.	Contiguous Memosy Allocation
•	Contiguous Memosy allocation is a classical Memosy
	allocation Model that assigns 9 process blocks



· Contiguous Memosy allocation is one of the oldest ollocation when a process needs to memosy is requested by the pancess . It sufficent contigueous Memosy is found The Pascess is ollowied Memosy to Stoot :+5 execution. · otherwise it is added to a querie of wating Process until free Memory is available · Single Pastition allocation · Multiple position allocation - Dynamic Alocation Algosithens NonContiguous Memosy allo ation . The non Contiguous Memosy allocation Memosy allocation, a posocess will acquise the Memost Space. · It is not at one place it is at the different locations according to the process requirement This technique of non-Contiguous Memosy allocation reduces the was tage of Memory Fagnentation . The utilize all the face Memory spoch is George by a paracess.

	Q-2 (A) ·
1.	Formes
2.	Due to the allocated larger than the request Memory
	Simulatoneous Multithereading
	Q-2(B)
	Paging Segmentation:
•	Divides Memosy into Divides Memosy into
	fixed size blacks vasiable size Black
•	Logical address space · Logical address space
	Memosy mon-Comigals is Comiguous
	Q-2 CC)
	Physical Memosy Management
NEC .	
•	Pysical Memosy in the actual Real Memosy
	used in Ram.
	physial Memosy 5 the only Memosy that is a
	disectly accessible CPU.
	coll bonds up in exalictions stopped in the physical.
•	CPU reads the instructions stored in the physical



- CPU reads the instructions stored in the physical
 - · execute them Continuously
 - . The data that in openated will also be stored physical Memory in uniform manner

Vestual Memosy

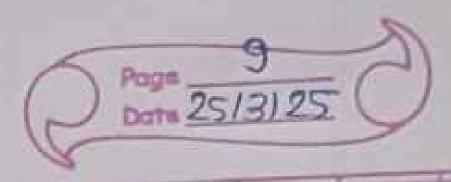
· Vestual Memosy os the os uses vistual.

Memosy as a Memosy Management technique.

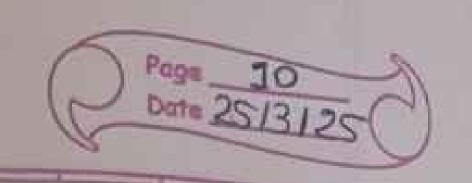
ALLES FRANCE EST - SERVICE CONTRACTOR OF THE SERVICE CONTRACTOR OF THE

THE RESIDENCE OF THE PARTY OF T

- . which non-Contiguous premosy is presented to Software Contiguous premosy.
- · vistual addsess one Mapped into real addressed vistual Memosy is one classifications of Memosy which was created by hasd disak
- Simulation additional Ram the addressable space available for uses



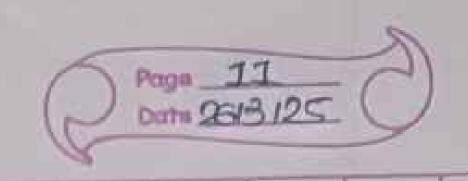
	Q-3 CA)
	Dennis Ritchies and Kenthompson of Bell labs
1.	
2	Sh exth, xfs, 2FS
0.	
	Q-3CB)
1.	c shell (csh): Has a syntax similar to the c
	Pagaming language.
	Bowsne shell (Rish): An enchanced vession of Shell
	Bourne-Again Shell (Bosh):- The obfault Shell on
	Most linux system.
	2 shell CZSW :- An extended Boushe Shell with Mony
	imposovements
	a designate designation of the contract design and the contract of the contrac
	Q-3CC)
pl.	
2	
=	
000	display the put fierone into a buffer
	and display the file on the screen.
27	on display.
	Con display.
	The scacen will act as a window into file



- AT The beging of a session, The Scheen will display the fight past of file
 - if the name does not exist, vi will checke
- scacen editoss are also called display editoss,
- editos that run o the unix system.
- · Modes vi atitos :
 - one of the Most aspects of to remember about vi is that most of those modes

The state of the s

- (I) Command Mode: This is the default Mode of VI editos
- (2) Input 09 Insent Mode: This Mode is used to uses in vi editon.
- (3) VEXPOUTE Mode: This Mode is used to sole



Q-	3	CAL

- 1. The Bourne stell washitten By Stephen Bourne at Belllabs.
- 2. Bash Bourne Agains shell

CALL DE LOCATION D

3. How many Types of Resmission in linux or is

Read (r) , white (w) execute (x)

Q-3 (B)

Cat: This command is severally used to create a

file see the content of the file and

as append days to a fix

Sy 1:- 4 Cat > filename

Ex: \$ Cat > abc tx | hi

hello

P-3 CO

I CMP - This and compases two files byte by

byte, that moons the first byte of

first file with the first byte if

the second file, if both one same it

thanks the next bytes

wherever the bytes are not same it displays the Message.

Second file differs: - byte number line

number as shown below

& REX & comp file 1 -file2

File I File 2 differs : byte 13, line I

- Comm: This and is useful to Compase

 two Sosted fire line by line

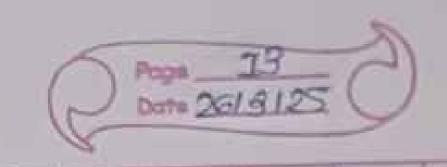
 the output of Comm and Consists

 of three cours, the fisst column

 is the lines which are unique to

 the file
- The Second column displays the line which use which the second file and the thired column lines the file
- · Diff: This (md finds difference between two files.
 - diff and Compages Fille I and File 2 ff
 both file I and File 2 ap directosies,
 diff and Compages Cossenspondins files
 in both disectosies in osdes
- Sy & Ex :-

diff Filez File 2



Q-4 CA)

- I. Shell unsiables store data within the shell envisorment used to store value for use in scripts.
 - 2. If , for
- 3. The test and (or []) is used to execute a expressions and return a status code

Q-4 (B)

- I to . The name of Scaipt Helf.
 - \$2, \$2. \$3: The first, second, Thised and-line

19# :- The numbers of cond-line as

- 9 * :- All cond-line agguments as single stains
- \$@ =- All cond-line assymments as sepassotte words

0-400

1. #! / bin / bash

while tome 5 do

clean # dean the gracen

date + "-1. I" # Display the Current time

HH: MM : 55

Sleep I # wait too I second

done

O OWPUT :-

14:35:27

14:35:28

14135: 29

Q-4 CA

1 - / Proc specifically, 1 Proc | Cprifo for processes

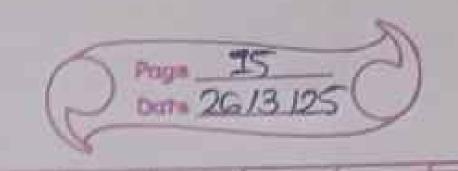
2 How many Types of Looping Stau CHAE in is

System variable are pre-defined variable in the shell environment that Control the System and Shell.

0-400

scriping allow the conditional executive as and the second and whether a condition

The primary decision outrement is their



Q-4 CC

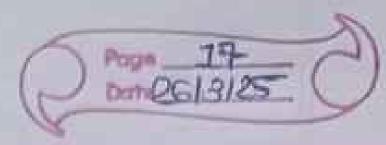
- · Nono is simple text editos
- It was created as post of the GNU Project
 - Standed by Richard Stallman.
- . Most linux distable vi and lon vimeditoss
- . And you can always download the emacs
- But both of these editors tack some
 - time to leasing
- But it is specific from people who spec Just
 - work with unix

The second of th

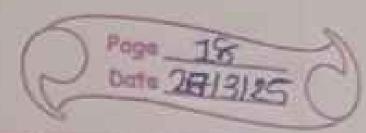
THE REST OF THE PARTY OF THE PA

- bos who want to Greate a file quickly
 - with a minima of fuss.
- · Running Namo: To run nono you type
 - followed by the name of file
 - · Nuno fliename: If the file does not yet
 - exist it will be coecred foo
 - <u>you</u>.
 - · So if I wanted to Geate a file named bush profile.
 - · Nono foo was d: This will boing up a text window with the name of the file on the top line.

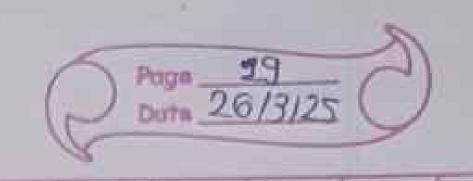
	Date 26/3/25 ()	
	Q-5 (A)	
		7
I.	GPL - General Public License	
2.	white syntax to add usen to particular	
	Broup stdo usermod as group nome	
	usemame	7
3	UFW - uncomplicated firewall.	
	Q-5 (B)	
I DESTRUCTION		
1.	LJ10 GRUB	#1
	Linux Londen . Grand unified Boot	×100
	Loades	
	Lile andres not Goull boot from boot from network bottlings	
	1110 00101 00000	
	upto different boot unlimited entires	
	Selection	
	9-5 CC	
1.	A Sombo file seaves crobles file	
	shooting actions	- H
	network.	
	access your destop file	
	brise Sila with	
	Window and makes uses.	



f	Trestalling Samba
	\$ swlo apt update
#	\$ sudo apt Install Sambo
	\$ where is sampo
#	setting up Sampo
	\$ MKdis /home/ Lusesmme> / Samba Shase/
#	he and acente new folder sampo share in
	ous home disectory which will share
	lates.
#	The configuration file for sampo is located
26 600	at 1ets 1 Sambo 1 Smb. Con.f.
	Ac - 1 Couch a / cuch Court
-	\$ Sudo nono /etc/ Sambo /smb. Conf
#	At the button of the file add
	Comment = Sombo on Vountu.
	Poth = /home / Usenname / Sambashase
	head only = no
	beausoble = yes.
#	Abth: The disectory of our Ghase



	Page 18 Date 2813125
	Q-5 CAJ
7	uncomplicated firewall
2.	wine 6 not on Emulator
3.	
	conffile> Egloball, Thomes], [Paintess]
	Land Land Land Land Land Land Land Land
	Q-5CB)
1	
9	17 firewall is a network Security gystem
	that monitoss and contable incuming and
	but coming net work teasific based on predete
	Secusity rules
	In linux, UFW a common and Uses-friendly
	firewall tod.
1	
	2-500
-	
1.	Make supes uses
	toming and use following and to
-	Moke yourself to super uses and goulde st
8	\$Sudo apt update.
	Instal Apache:-



The status of Apache Geoves can be checked by using the following and). Statis apache 2:- open the boowses and type localhost on 177.0.0.1 on the odd9655 bas. - It will display the default page of the Apache serves. Adjusting the fisewall:-\$ Sudo of w app 11st. \$ sudo after allow a Apache \$ sudo ofw status. · Mona ging Apoche psacess:-\$ sudo systmat (Stop apache 2 \$ Sudo Systmod Start apache2 \$ Sudo Systmolt1 restablt apache2 \$50 do Systmet reload apache2 Soudo systmet enable apache? \$ Sudo systmet I disable apache? # This is change Libux uses pass word \$ Sudo password abc.