T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs		Max. Marks: 35
Q.1 Write the simulation	on program to implement demand p	paging and show the
page scheduling and	total number of page faults acc	ording to the LFU page
replacement algorithm	Assume the memory of n frames	S.
Reference String: 3,4,	5,4,3,4,7,2,4,5,6,7,2,4,6	[15]
prompt "myshell\$". I execute it by creating	am to implement the shell whice t accepts the command, tokenize the child process. Also implement	e the command line and
'typeline' as	:- To print first n lines in the file	a a
	:- To print all lines in the file.	[15]
Q.3. Oral/Viva		[05]
	Slip No-1	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max, Marks: 35
Q.1 Write the simulation program for demand pag	ing and show the page
scheduling and total number of page faults ac	
replacement algorithm. Assume the memory	of n frames.
Reference String : 3, 4, 5, 6, 3, 4, 7, 3, 4,	5, 6, 7, 2, 4, 6 [15]
Q.2 Write a program to implement the shell. It sho	ould display the command
prompt "myshell\$". Tokenize the command li	ne and execute the given
command by creating the child process. Addit	ionally it should interpret the
following 'list' commands as	
myshell\$ list f dirname :- To print names	of all the files in current
directory.	
myshell\$ list n dirname :- To print the num	ber of all entries in the current
directory	[15]
Q.3. Oral/Viva	[05]
Slip No-2	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks; 35
Q.1 Write the simulation program to implement demand scheduling and total number of page faults according counter method) page replacement algorithm. Assuframes.	ng to the LRU (using
Reference String: 3,5,7,2,5,1,2,3,1,3,5,3,1,6,2	[15]
count w filename :- To print number of	nd execute the given Ily it should interpret the f characters in the file. words in the file.
count l filename :- To print number of li	ines in the file. [15]
Q.3. Oral/Viva	[05]
Slip No-3	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Mark	s: <u>35</u>
Q.1 Write the simulation program for den scheduling and total number of page replacement algorithm. Assume the n	faults according the MFU p	
Reference String : 8, 5, 7, 8, 5, 7		[15]
Q.2 Write a program to implement the she prompt "myshell\$". Tokenize the co-command by creating the child profollowing commands. myshell\$ search a filename pattern	mmand line and execute the occur. To search all the occur pattern in the file.	e given Id interpret the rence of
myshell\$ search c filename pattern	:- To count the number of of pattern in the file.	
Q.3. Oral/Viva		[05]
Slip No-	4	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marl	ks: 35
Q.1 Write the simulation program for de scheduling and total number of page replacement algorithm. Assume the	e faults according the optim	ATT
Reference String : 8, 5, 7, 8, 5,	7, 2, 3, 7, 3, 5, 9, 4, 6, 2	[15]
Q.2 Write a program to implement the sl prompt "myshell\$". Tokenize the command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command by creating the child program to implement the sl command to implement the child program to implement the sl command to implement the child program to implement the sl command the sl command to implement the sl command to implement the sl command to implement the sl command to implement the sl command the sl	ommand line and execute to process. Additionally it sho ern: To display first occur	he given uld interpret the
myshell\$ search c filename pattern Q.3. Oral/Viva	pattern in the file. :- To count the number of pattern in the file.	
Slip N	No-5	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35	
Q.1 Write the simulation program for de scheduling and total number of pag replacement algorithm. Assume the	e faults according the MRU	
Reference String : 8, 5, 7, 8, 5	, 7, 2, 3, 7, 3, 5, 9, 4, 6, 2	[15]
commands. myshell\$ search f filename patterns.	line and execute the given of ionally it should interpret the	command by ne following
Q.3. Oral/Viva		[05]
	-Slip No-6	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marl	ks: 35
Q.1 Write the simulation program for dense scheduling and total number of page replacement algorithm. Assume the n	faults according the Optim	
Reference String : 7, 5, 4, 8, 5, 7	7, 2, 3, 1, 3, 5, 9, 4, 6, 2	[15]
Q.2 Write a program to implement shell. "myshell\$". Tokenize the command lir creating the child process. Addition commands.	THE REAL PROPERTY AND THE	ommand by
myshel!\$ search a filename pattern	:- To search all the occur pattern in the file.	rrence of
myshell\$ search c filename pattern	:- To count the number of pattern in the file.	of occurrence
Q.3. Oral/Viva		[05]
Slip	No-7	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Mark	s: 35
Q.1 Write the simulation program for den	nand paging and show the	page
scheduling and total number of page	faults according the LRU	page
replacement algorithm. Assume the n	nemory of n frames.	
Reference String : 8, 5, 7, 8, 5, 7	7, 2, 3, 7, 3, 5, 9, 4, 6, 2	[15]
Q.2 Write a programto implement the she	ell. It should display the co	mmand prompt
"myshell\$". Tokenize the command lin	ne and execute the given c	ommand by
creating the child process. Addition	nally it should interpret the	efollowing
commands.		
myshell\$ search f filename patter	n:- To display first occur	rence of
	pattern in the file.	
myshell\$ search c filename pattern	:- To count the number of	of occurrence
	of pattern in the file.	[15]
Q.3. Oral/Viva		[05]
Slip	No-8	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write the simulation program for demand page	ging and show the page
scheduling and total number of page faults ac	ccording the FIFO page
replacement algorithm. Assume the memory	of n frames.
Reference String : 8, 5, 7, 8, 5, 7, 2, 3, 7	7, 3, 5, 9, 4, 6, 2 [15]
Q.2 Write a program to implement the shell. It sh	ould display the command
prompt "myshell\$". Tokenize the command l	
	100 A
command by creating the child process. A	Additionally it should
interpret the following commands.	
myshell\$ search f filename pattern :- To	display first occurrence of
patter	rn in the file.
myshell\$ search a filename pattern :- To s	search all the occurrence of
pattern	in the file. [15]
Q.3. Oral/Viva	[05]
Slip No-9	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

CS-357 Lab Course-I Operating System-I

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write the simulation program for scheduling and total number of preplacement algorithm. Assume Reference String : 2, 4, 5, 6	page faults according the FIFO page the memory of n frames.
prompt "myshell\$". Tokenize the command by creating the child p following 'list' commands as myshell\$ list f dirname :- To direct	e shell. It should display the command command line and execute the given rocess. Additionally it should interpret the print names of all the files in current ctory. print names and inodes of the files in the cent directory. [15]
Q.3. Oral/Viva	[05]
	Slip No-10

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write the simulation program for demands scheduling and total number of page far replacement algorithm. Assume the me Reference String : 3, 4, 5, 6, 3, 4, 7	ults according the LFU page mory of n frames.
Q.2 Write a C program to implement the she prompt "myshell\$". Tokenize the commommand by creating the child process. following 'list' commands as myshell\$ list f dirname :- To print directory.	and line and execute the given Additionally it should interpret the
myshell\$ list n dirname :- To print th	ne number of all entries in the current
directory	[15]
Q.3. Oral/Viva	[05]
Slip No-11	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write the simulation program for dem scheduling and total number of page	
replacement algorithm. Assume the n	
Reference String : 3, 4, 5, 6, 3, 4	7, 3, 4, 5, 6, 7, 2, 4, 6 [15]
Q.2 Write a program to implement the she prompt "myshell\$". Tokenize the command by creating the child proces following 'list' commands as myshell\$ list f dirname :- To print directors.	s. Additionally it should interpret the
director	520 Sept.
Q.3. Oral/Viva	[05]
Slip	No-12

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

CS-357 Lab Course-I Operating System-I

Duration: 3 Hrs

Max. Marks: 35

Q.1 Write a C program to implement the shell which displays the prompt "myshell\$". It accepts the command, tokenize the coexecute it by creating the child process. Also implement the command 'typeline' as	ommand line and
typeline -a filename :- To print all lines in the file.	[15]
Q.2 Write the simulation program for Round Robin scheduling quantum. The arrival time and first CPU-burst of different j to the system. Accept no. of Processes, arrival time and bur should give the Gantt chart, turnaround time and waiting time process. Also display the average turnaround time and av	jobs should be input est time. The output me for each
Q.3. Oral/Viva	[05]
Slip No-13	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

CS-357 Lab Course-I Operating System-I

Duration: 3 Hrs Max. Marks: 35

- Q.1 Write a C program to implement the shell which displays the command prompt "myshell\$". It accepts the command, tokenize the command line and execute it by creating the child process. Also implement the additional command 'typeline' as typeline +n filename :- To print first n lines in the file. [15]
- Q.2 Write a C program to simulate Non-preemptive Shortest Job First (SJF) scheduling. The arrival time and first CPU-burst of different jobs should be input to the system. Accept no. of Processes, arrival time and burst time. The output should give Gantt chart, turnaround time and waiting time for each process. Also find the average waiting time and turnaround time [15]

Q.3. Oral/Viva [05]

Slip	No-14

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write a C program to implement the s	shell. It should display the command
prompt "myshell\$". Tokenize the con	nmand line and execute the given
command by creating the child proces	ss. Additionally it should interpret the
following 'list' commands as	
myshell\$ list f dirname :- To print	names of all the files in current directory.
	[15]
Q.2 Write the program to simulate preemp	otive Shortest Job First (SJF) -
scheduling. The arrival time and fir	st CPU-burst of different jobs should be
input to the system. Accept no. of P	rocesses, arrival time and burst time. The
output should give Gantt chart, turn	around time and waiting time for each
process. Also find the average wait	ing time and turnaround time [15]
Q.3. Oral/Viva	[05]
	Slip No-15

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write a programto implement the toy	
prompt "myshell\$". Tokenize the cor	nmand line and execute the given
command by creating the child proce	ss. Additionally it should interpret the
following commands.	
count c filename :- To pr	int number of characters in the file.
count w filename :- To pri	nt number of words in the file. [15]
Q.2 Write the program to simulate Non pr	eemptive priority scheduling. The
arrival time and first CPU-burst of	different jobs should be input to the
system. Accept no. of Processes, a	rrival time and burst time. The output
should give Gantt chart, turnaroun	d time and waiting time for each process.
Also find the average waiting time	and turnaround time. [15]
Q.3. Oral/Viva	[05]
Slip	No-16

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35	
Q.1 Write the simulation program for demand paging and show the page scheduling and total number of page faults according the Optimal page replacement algorithm. Assume the memory of n frames. Reference String : 7, 5, 4, 8, 5, 7, 2, 3, 1, 3, 5, 9, 4, 6, [15]		
first CPU-burst of different jobs sh Processes, arrival time and burst ti	S CPU-scheduling. The arrival time and would be input to the system. Accept no. of me. The output should give Gantt chart, for each process. Also find the average	
waiting time and turnaround time.	[15]	
Q.3. Oral/Viva	[05]	
Slip	No-17	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write the simulation program for dema scheduling and total number of page for replacement algorithm. Assume the man Reference String : 3, 4, 5, 6, 3, 4,	aults according the LRU page emory of n frames.
Q.2 Write a C program to simulate FCFS C first CPU-burst of different jobs shoul Processes, arrival time and burst time. turnaround time and waiting time for e waiting time and turnaround time.	d be input to the system. Accept no. of The output should give Gantt chart,
Q.3. Oral/Viva	[05]
Slip 1	No-18

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write a C program to implement the	shell. It should display the command
prompt "myshell\$". Tokenize the cor	nmand line and execute the given
command by creating the child proce	ss. Additionally it should interpret the
following 'list' commands as	
myshell\$ list f dirname :- To pri	nt names of all the files in current
directo	ory. [15]
to the system. Accept no. of Processe should give the Gantt chart, turnarous	PU-burst of different jobs should be input es, arrival time and burst time. The output and time and waiting time for each
process. Also display the average tu	urnaround time and average waiting time. [15]
Q.3. Oral/Viva	[05]
Slip No-19	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Ouration: 3 Hrs Max. Marks: 35		5
prompt "myshell\$". It as execute it by creating the command 'typeline' as	plement the shell which displays the common common to the command, tokenize the command e child process. Also implement the addition :- To print all lines in the file.	d line and
scheduling. The arrival input to the system. Ac output should give Gar	nulate Non-preemptive Shortest Job First (Sal time and first CPU-burst of different jobs accept no. of Processes, arrival time and bursent chart, turnaround time and waiting time average waiting time and turnaround time	should be t time. The
Q.3. Oral/Viva		[05]
	Slip No-20	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

CS-357 Lab Course-I Operating System-I

Duration: 3 Hrs	Max. Marks: 35	
Q.1 Write a C Program to create a child process using child process id. Child process will display the me and the parent process should display "I am Paren	essage "I am Chile	d Process"
Q.2 Write a C program to simulate Preemptive Priorit time and first CPU-burst and priority for differ processes should be input to the algorithm. A waiting time (2 units). The next CPU-burst should output should give Gantt chart, turnaround time process. Also find the average waiting time and tu	ty scheduling. The ent n number of ssume the fixed IO d be generated ran and waiting time	e arrival O domly. The
Q.3. Oral/Viva		[05]
Slip No-21		

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

CS-357 Lab Course-I Operating System-I

May Market 35

Duration: 3 Hrs

Duración: 5 1115	Max. Marks. 55
Q.1 Write a C program that demonstrate child Process is started using fork ()	s the use of nice() system call. After a , assign higher priority to the child using
nice () system call.	[15]
Q.2 Write a C program to simulate Nor arrival time and first CPU-burst of of system. Accept no. of Processes, arr should give Gantt chart, turnaround process. Also find the average wait time.	lifferent jobs should be input to the ival time and burst time. The output time and waiting time for each
Q.3. Oral/Viva	[05]
Slip	No-22

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write a C program to illustrate the conceptoreates a child and terminates before child process becomes orphan process. (Use for process)	has finished its task. So child
	[15]
Q.2 Write the simulation program for demand scheduling and total number of page fault replacement algorithm. Assume the memor Reference String : 7, 5, 4, 8, 5, 7, 2, 3	s according the Optimal page ory of n frames.
Q.3. Oral/Viva	[05]
Slip No-23	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

CS-357 Lab Course-I Operating System-I

Max Marks: 35

Duration: 3 Hrs

Duration, 5 III 5		Max. Marks. 55
Q.1 Write a C program to according creates child process using using bubble sort and waits	fork system call. Parent p for child process using v	vait system call. Child
process sorts the integers us	sing insertion sort.	[15]
Q.2 Write a C program to imp prompt "myshell\$". Token command by creating the following commands. count c filename count w filename count l filename	nize the command line ar child process. Additional :- To print number of	ly it should interpret the characters in the file.
Q.3. Oral/Viva		[05]
Q.5. Olal viva		[05]
	Slip No-24	

T.Y.B.Sc.(Computer Science) Practical Examination, March/October (2019 Pattern)

Duration: 3 Hrs	Max. Marks: 35
Q.1 Write a C program that accepts an	integer array. Main function forks child
process. Parent process sorts an in	nteger array and passes the sorted array to
child process through the comma	nd line arguments of execve() system call.
The child process uses execve() sy	ystem call to load new program that uses this
sorted array for performing the bin	ary search to search the particular item in
the array.	[15]
Q.2 Write a programto implement the	00 May 10
prompt "myshell\$". Tokenize the	command line and execute the given
	process. Additionally it should interpret
the following commands.	
myshell\$ search f filename par	ttern: To display first occurrence of
	pattern in the file. [15]
Q.3. Oral/Viva	[05]
	-Slip No-25