

CSE325 (Section-2)

Mid-1

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Roll: 28

Ans. to the q. no. 4

a batch process

P <sub>0</sub>			P <sub>1</sub>			P <sub>2</sub>			P <sub>3</sub>		
I <sub>0</sub>			I <sub>1</sub>			I <sub>2</sub>			I <sub>3</sub>		
4			8			11			9		
C <sub>0</sub>			C <sub>1</sub>			C <sub>2</sub>			C <sub>3</sub>		
11			17			18			6		
O <sub>0</sub>			O <sub>1</sub>			O <sub>2</sub>			O <sub>3</sub>		
3			6			3			7		
4	11	3	8	17	6	11	18	3	9	6	7

Total = 103

I = Input

cpu = CPU burst time

O = output

The execution time of the process  
= 103

Ans. to Q. 4(b)

time sharing process  
time slice = 12  
quantum

P <sub>0</sub>	I <sub>0</sub> 4	cpu <sub>0</sub> 4	O <sub>0</sub> 3						
P <sub>1</sub>		I <sub>1</sub> 8	...	cpu <sub>1</sub> 12	...	...	cpu <sub>1</sub> 5	O <sub>1</sub>	
P <sub>2</sub>			I <sub>2</sub> 11	...	cpu <sub>2</sub> 12			cpu <sub>2</sub> 6	O <sub>2</sub> 3
P <sub>3</sub>				I <sub>3</sub> 9			cpu <sub>3</sub> 6	O <sub>3</sub> 7	
	4	4	12	12	6	5	6	3	

total = 59

I = Input

cpu = CPU burst time

O = output

total execution

time = 59

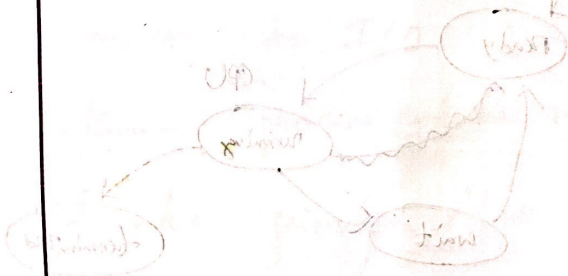
Ans. to the q.n. 2

Parent pid will create child1 in  
`pid = fork();` child1 pid will be equals  
to 0 so it will enter the if block.  
and create child2 in `pid1 = fork();`  
and child2 will print "East West  
University and complete its its execution.  
In the mean time child 1 will also  
print "East West University. The parent pid  
will be greater than 0 so it will go  
to else statement and will print  
"EWU reopens on February 27, 2022".  
Output will be!

Parent prints ~~the~~ EWU mopans on February  
27, 2022

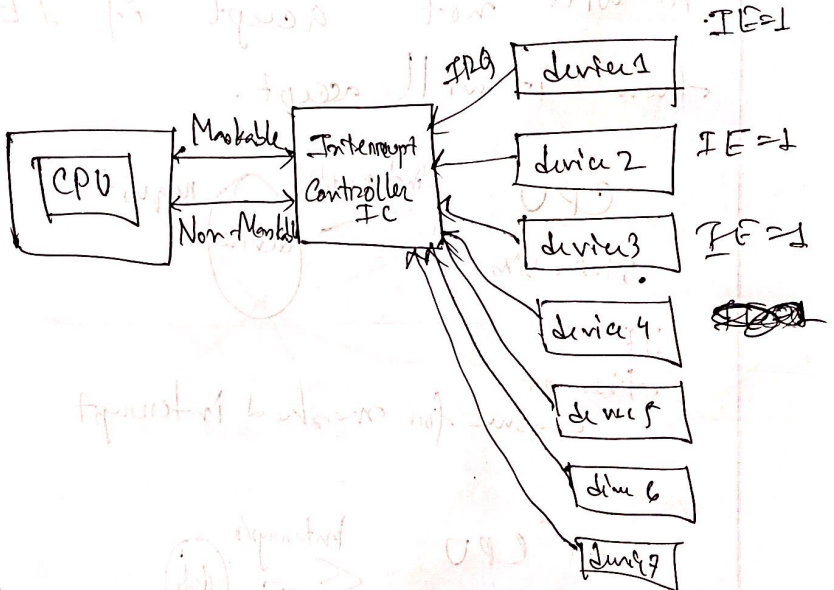
Child 1 prints East West University

Child 2 prints East West University





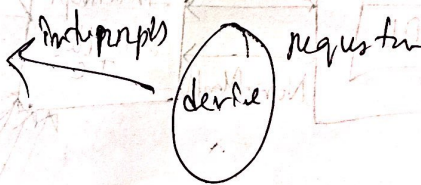
Ans. to the q.n. 3



for non-maskable CPU  $IE = 1$ . So  
no need to check it will always accept  
the interrupt. Interrupt handler will  
always send the interruption to CPU  
for those 3 non-maskable interrupts.

and for the 9 maskable interrupts if the  $IE=0$  then it will not accept if  $IE=1$  then it will accept.

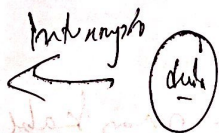
CPU  
status bit



$IE=0$

then it  
enables for masked interrupt

CPU

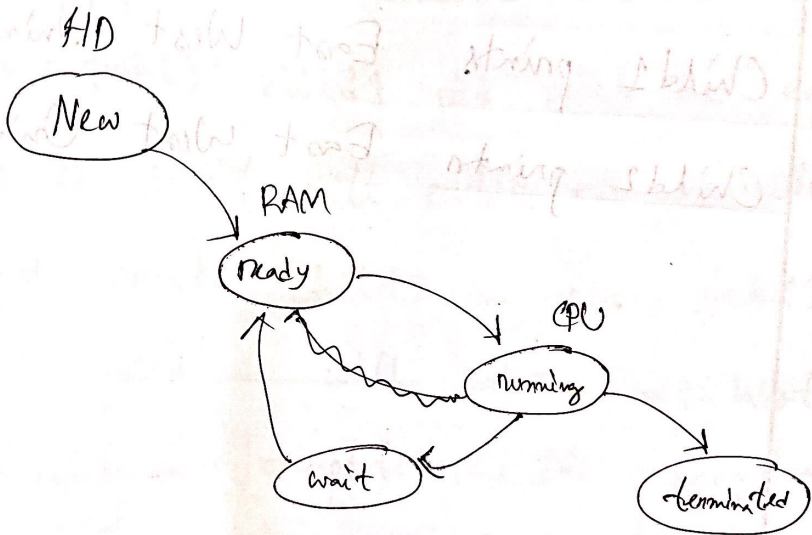


$IE=1$

enable

for non maskable it will not check  
if  $IE=1$  always flag on

Ans: to the q.n. 4



In the new state the process is being created. Then it will be in the job queue. After that it will go into the ready state which is the ready queue. In this case process is



ready to be executed to CPU.

When the software is being calculated it is executing in the running

state. If any input is needed

the device driver code send to process to I/O device queue. From

there process take input according to the priority. After taking input

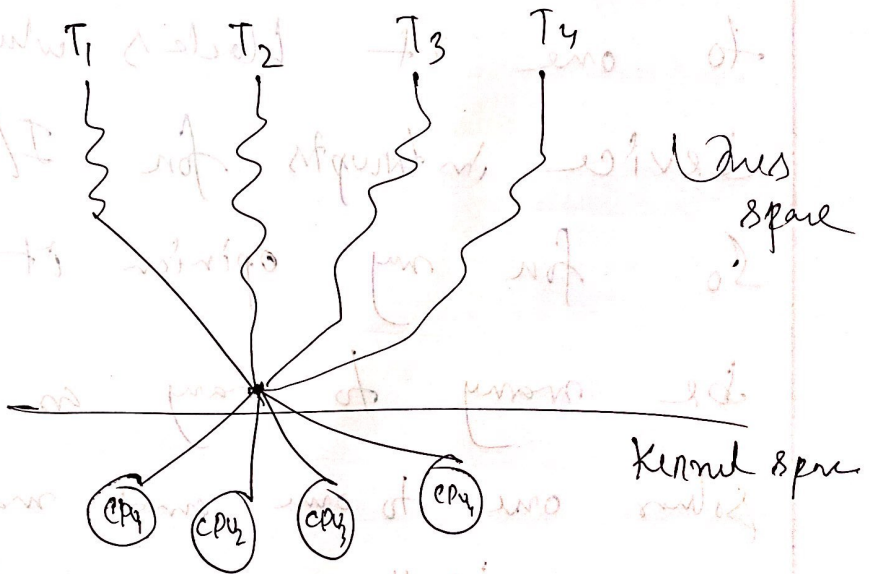
the process go to the ready queue.

Then it again goes to CPU and

after the computation it will

terminate.

Ans. to the q. n. 5



many to many level. Here one or more I/O operations can be done at a time. In one-to-one model 1 thread can have I/O device at a time but it

cannot have ~~an~~ more than one  
model at a time. In many  
to one it blocks when a  
device interrupts for I/O operation.  
So in my opinion it will  
be many to many or to  
solve one to one and many to  
one restrictions and one can  
create as many as possible  
and I/O interruption. So many to  
many will be more efficient  
in this regard.