

## Quiz-2

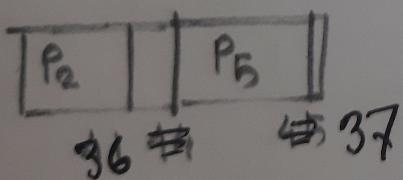
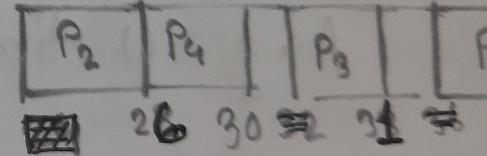
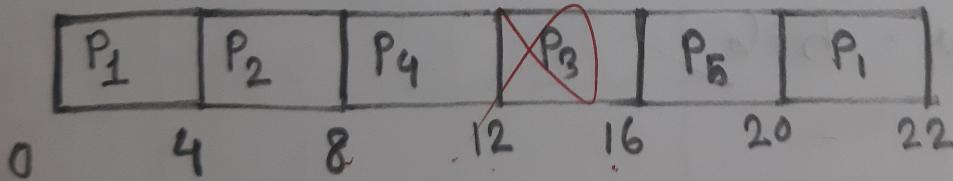
Name: Kazi Sadman Sakib ID: 19101125 Section: 04

[CO3] Apply Round Robin (RR) scheduling algorithm with quantum = 4 and show the following -

- Gantt Chart 2 Marks
- Average Waiting Time & Average Turnaround Time 2 Marks
- Number of Context Switching 1 Marks

time	T. time	Process ID	Arrival Time	Burst Time	T. time	w. time
20	22	P1	0	6'2		
24	37	P2	4	9'5	1	
28	21	P3	8	5'1		
32	22	P4	4	6'2		
36	29	P5	8	9'8	X	

$$Q = 4$$

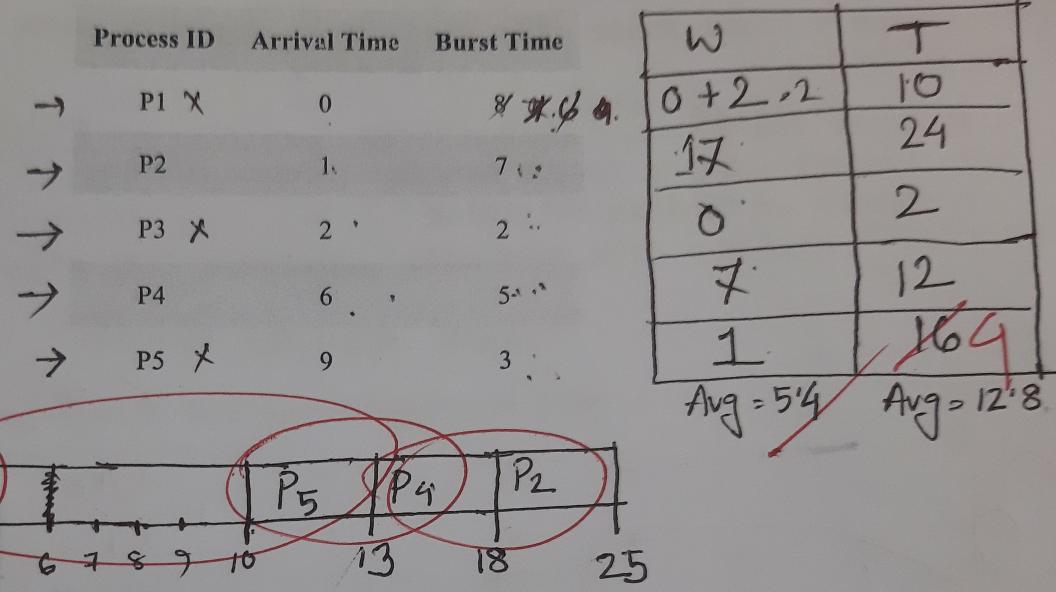


Average Turnaround time = 26.2

Avg. waiting time = 20.8

[CO3] Apply preemptive Shortest Remaining Time First (SRTF) scheduling algorithm and show the following -

- Gantt Chart 2 Marks
- Average Waiting Time & Average Turnaround Time 2 Marks
- Number of Context Switching 1 Marks



Number of context switching :

$$P_1 = 2$$

$$P_2 = 1$$

$$P_3 = 1$$

$$P_4 = 1$$

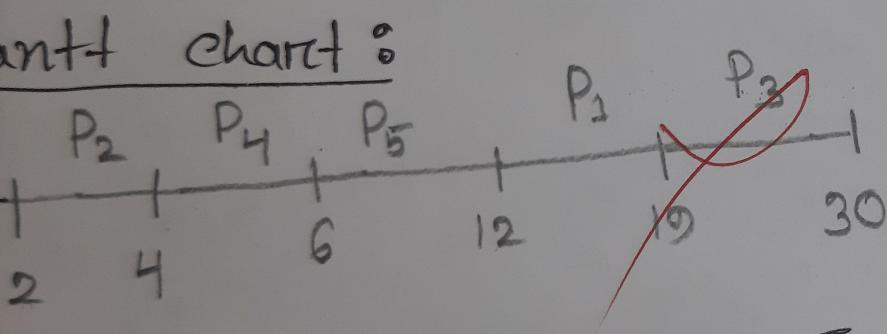
$$P_5 = 1$$

$$\therefore \text{Total} = 6.5$$

[C03] Apply preemptive Shortest Remaining Time First (SRTF) scheduling algorithm and show the following -

- Gantt Chart 2 Marks
- Average Waiting Time & Average Turnaround Time 2 Marks
- Number of Context Switching 1 Marks

Process ID	Arrival Time	Burst Time
P1	0	9 7
P2	2	2
P3	6	11
P4	4	10 8
P5	6	6



Waiting time :

$$(0-0) + (12-2) = 10$$

$$(2-2) = 0$$

$$(19-6) = 13$$

$$\cancel{(4-4)} = 0$$

$$\text{Avg W.T} = 4.6$$

Turnover time

$$P_1 \Rightarrow (19-0) = 19$$

$$P_2 \Rightarrow (4-2) = 2$$

$$P_3 \Rightarrow (30-6) = 24$$

$$P_4 \Rightarrow (6-4) = 2$$

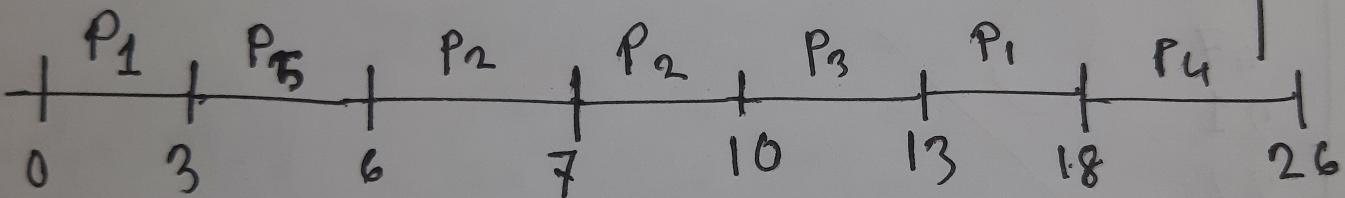
$$P_5 \Rightarrow (12-6) = 6$$

$$\text{Avg T.T} = 10.6$$

[CO3] Apply preemptive Shortest Remaining Time First (SRTF) scheduling algorithm and show the following -

- Gantt Chart 2 Marks
- Average Waiting Time & Average Turnaround Time 2 Marks
- Number of Context Switching 1 Marks

Process ID	Arrival Time	Burst Time	T. time	w. time
P1	0	8 5	18	10
P2	3	4 3	7	3
P3	7	3	6	3
P4	6	8	20	12
P5	3	3	3	0



Avg T. time = 16.8

Avg. w. time = 5.6

# CSE321: Operating Systems

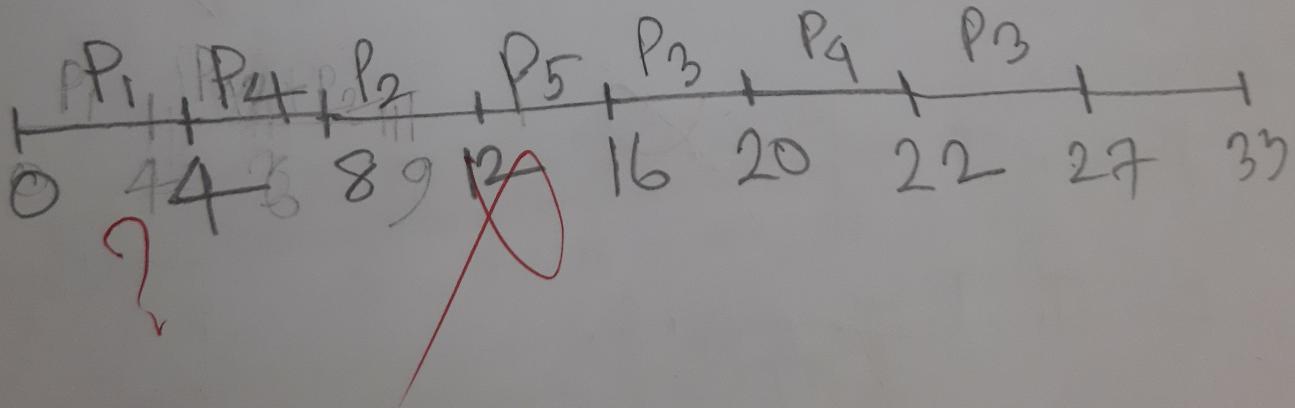
## Quiz-2

Name: Tahsin Alam ID: 19301171 Section: 04.

[CO3] Apply Round Robin (RR) scheduling algorithm with quantum = 4 and show the following -

- Gantt Chart 2 Marks
- Average Waiting Time & Average Turnaround Time 2 Marks
- Number of Context Switching 1 Marks

Process ID	Arrival Time	Burst Time	A.T	T.T
P1	0	2		
P2	3	6		
P3	8	5		
P4	2	4		
P5	6	1		



$$A.W.T =$$

$$A.T.T =$$

[C03] Apply preemptive Shortest Remaining Time First (SRTF) scheduling algorithm and show the following -

- Gantt Chart 2 Marks
  - Average Waiting Time & Average Turnaround Time 2 Marks
  - Number of Context Switching 1 Marks

Process ID	Arrival Time	Burst Time
P1	0	10 8
P2	2	1
P3	9	3
P4	3	7 4
P5	2	2

~~P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>~~

$P_1, P_6, P_5, P_4$

## Grant chart

