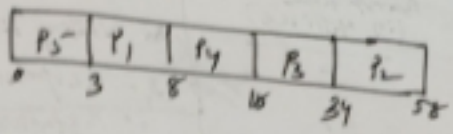
SJF

process	CPU Burst
P_1	3
P_2	24
P_3	16
P_4	10
P_5	3



(1) WT = ST − A.T

WT for $P_1 = 3 - 0 = 3$
$P_2 = 34 - 0 = 34$
$P_3 = 18 - 0 = 18$
$P_4 = 8 - 0 = 8$
$P_5 = 0$

Avg W.T = $\frac{3+34+18+8+0}{5} = \frac{63}{5} = 12.5$ ms

(2) T.A.T = ET − A.T

TAT for $P_1 = 8 - 0 = 8$
$P_2 = 58 - 0 = 58$
$P_3 = 34 - 0 = 34$
$P_4 = 18 - 0 = 18$
$P_5 = 3 - 0 = 3$

AVT TAT = $\frac{8+58+34+18+3}{5} = \frac{121}{5} = 24.2$ ms

(3) Response Time = First response − Arr. Time

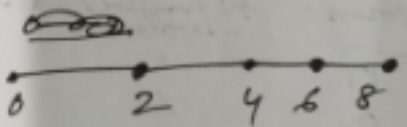
response time for $P_1 = 3 - 0 = 3$
$P_2 = 34 - 0 = 34$
$P_3 = 18 - 0 = 18$
$P_4 = 8 - 0 = 8$
$P_5 = 0$

Avg response time = $\frac{3+34+18+8+0}{5} = \frac{63}{5} = 12.6$

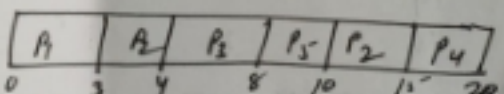
preemptive SRTF

process	CPU Burst time	arrival time
P_1	3	0
P_2	6	2
P_3	4	4
P_4	5	6
P_5	2	8

Arrival Chart



Gantt Chart



T.A.T = f.T − A.T

TAT for $P_1 = 3 - 0 = 3$
$P_2 = 15 - 2 = 13$
$P_3 = 8 - 4 = 4$
$P_4 = 20 - 6 = 14$
$P_5 = 10 - 8 = 2$

Avg T.AT = 36/5 = 7.2

Relative delay = TAT/BT

Relative delay for $P_1 = 3/3 = 1.0$
$P_2 = 13/6 = 2.17$
$P_3 = 4/4 = 1.00$
$P_4 = 14/5 = 2.80$
$P_5 = 2/2 = 1.00$

Avg relative delay
$= \frac{1+2.17+1+2.80+1}{5} = \frac{7.97}{5} = 1.59$