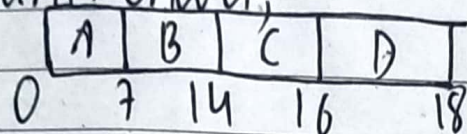


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11.  
a. FCFS  
Soln;

Gantt chart,



Now

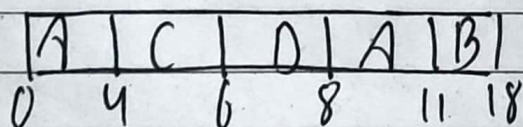
	CT	TAT	WT
A	7	0	0
B	14	11.99	4.99
C	16	12.99	10.99
D	18	14.98	12.98

$$\text{Avg WT} = 28.96 / 4 = 7.24$$

$$\text{Avg TAT} = (46.96 / 4) = 11.74$$

b. SRTN

Gantt chart:





Process	TAT	WT
A	11	4
B	15.99	8.99
C	2.99	0.99
D	4.98	2.98

$$\text{Avg WT} = 19.96/4 = 4.99$$

$$\text{Avg TAT} = 34.96/4 = 8.74$$

### C. Priority Scheduling

Gantt chart:

A	C	D	B	
0	7	9	11	18

Process	TAT	WT
A	7	0
B	15.99	8.99
C	5.99	3.99
D	7.98	5.98

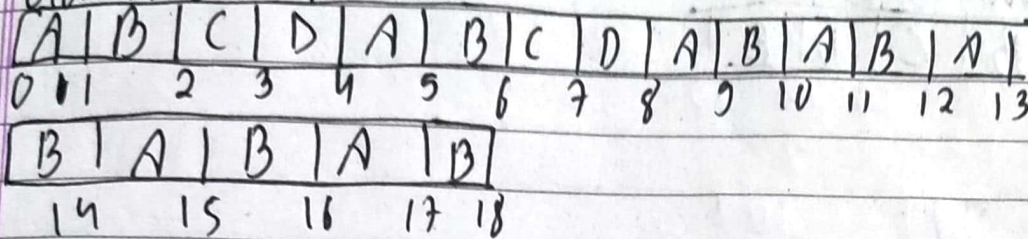
$$\text{Avg WT} = 18.96/4 = 4.74$$

$$\text{Avg TAT} = 36.96/4 = 9.24$$



d) RR (Quantum = 1 sec)

Gantt chart:



Process	TAT	WT
A	17	10
B	15.75	8.75
C	3.75	1.75
D	4.75	2.75

$$\text{Avg WT} = 23.75 / 4 = 5.94$$

$$\text{Avg TAT} = 41.96 / 4 = 10.49$$

12.

Soln;

Process	BT	AT	Priority
A	16	0	3
B	1	0	1
C	2	0	3
D	1	0	4
E	5	0	2

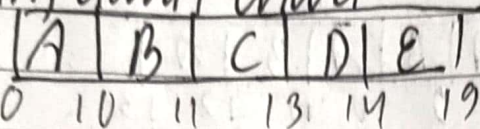
Quantum = 1 sec.



a)

i) FCFS

Soln: Gantt chart



Now

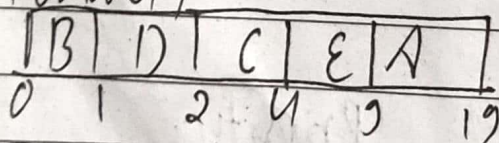
	TAT	WT
A	10	0
B	11	10
C	13	11
D	14	13
E	19	14

$$\text{Avg WT} = 47/5 = 9.4$$

$$\text{Avg TAT} = 67/5 = 13.4$$

ii) SJF

Gantt chart,



Now

	TAT	WT
A	19	9
B	1	0
C	4	2
D	2	1
E	9	4



Avg WT = 3.2  
Avg TAT = 7

### III) Priority Scheduling

Gantt Chart

D	C	A	E	B	
0	1	3	13	18	19

	TAT	WT
A	13	3
B	19	18
C	3	1
D	1	0
E	18	13

Avg WT =  $35/5 = 7$

Avg TAT =  $54/5 = 10.8$

### IV) RR

A	B	C	D	E	A	C	E	A	E	A	E	A	E	A	
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

A	A	A	A	
15	16	17	18	19

Process	TAT	WT
A	19	9
B	2	1
C	7	5
D	4	3
E	14	9

$$\text{Avg WT} = 27/5 = 5.4$$
$$\text{Avg TAT} = 46/5 = 9.2$$