OS227 Quiz on ch6: Cpu Schedueling

QUESTION 1 — 2 points — Saved

Suppose that the following processes arrive for execution at the times indicated below. Each process will run for the amount of the time listed as burst time.

In answering the questions, please use the specified scheduling algorithm, and base all decisions on the information you have at the time the decision must be made. (Hint: Use Gantt chart to find the answer)

Question Completion Status:

P1	0.0	4
P2	0.5	5
P3	3.0	3
P4	7.0	2

The Average Turnaround time for these processes when applying FCFS scheduling algorithm is (Hint: Average waiting time = 3.625)

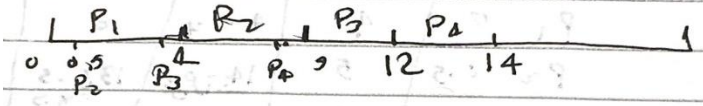
- (•) 7.125
- ( ) 7.725
- ( ) 6.125
- ( ) 6.5

QUESTION 2 — 2 points — Saved

The Waiting Times when applying FCFS scheduling algorithm for processes (Hint: Average waiting time = 3.625)

- ( ) P1=0, P2=4.5, P3=6, P4=4
- (•) P1=0, P2=3.5, P3=6, P4=5
- ( ) P1=3.5, P2=0, P3=6, P4=5
- ( ) P1=5, P2=3.5, P3=6, P4=0

fcfs → Non Preemptive:



P	Arrive	bTime	Sin - Arrive (TT)	WT = TT - bTime
P1	0	4	4-0 = 4	4-4 = 0
P2	0.5	5	9-0.5 = 8.5	8.5-5 = 3.5
P3	3.0	3	12-3 = 9	9-3 = 6
P4	7.0	2	14-7 = 7	7-2 = 5

$\frac{29}{4} = 7.125$

QUESTION 3 — 2 points — Saved

The Turnaround time for these processes when applying the Shortest Remaining Time First (Preemptive SJF) scheduling algorithm is (Hint: Average Turnaround time = 5.875)

A. P1=4, P2=13.5, P3=4, P4= 0

B. P1=2, P2=15.5, P3=2, P4=4

C. P1=4, P2=13.5, P3=4, P4= 2

D. P1=2, P2=12.5, P3=5, P4= 4

QUESTION 4 — 2 points — Saved

The average waiting time when applying the Shortest Remaining Time First (Preemptive SJF) scheduling algorithm is (Hint: Average Turnaround time = 5.875)

A. 3.375

B. 3.0

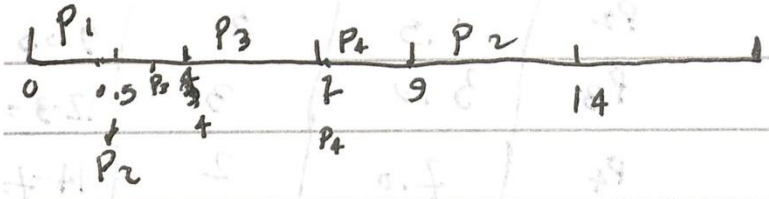
C. 2.5

D. 2.375

SRTF → Preamtive: you can stop

Simple

	A	cb	TT	WT
P1	0	4	4-0=4	0
P2	0.5	5	14-0.5=13.5	13.5-5=8.5
P3	3.0	3	7-3=4	4-3=1
P4	7	2	9-7=2	2-2=0
			5.875	2.375 Avg



QUESTION 5 — 2 points — Saved

The Average Turnaround time for these processes when applying the Round Robin (Time Quantum =4) scheduling algorithm is (Hint: Average waiting time = 4.375)

- A. 4.875
- B. 7.5
- C. 9.5
- D. 7.875 (selected)

QUESTION 6 — 2 points — Saved

The Waiting Times with the Round Robing scheduling algorithm (Time Quantum =4) for processes are (Hint: Average waiting time = 4.375)

- A. P1 = 4 ; P2 = 8.5; P3 = 5; P4 = 0
- B. P1 = 0 ; P2 = 7.5; P3 = 6; P4 = 4
- C. P1 = 0 ; P2 = 8.5; P3 = 5; P4 = 4 (selected)
- D. P1 = 3 ; P2 = 8.5; P3 = 2; P4 = 4