Operating Systems	ClassWork 6 – Scheduling	Page 1 of 2

Week _____ Student Name: ____ ID: ____

Consider a set of processes, which arrive at a system as follows:-

Process Name	Arrival Time	Burst/ Service time (amount of time it needs to complete its processing)
P1	0	4
P2	2	1
P3	3	6
P4	8	2
P5	9	5
P6	12	2

For each of the scheduling algorithms

- Shortest Remaining Process First
- Round Robin (burst 2)

Answer the following questions (for each algorithm!):

- 1. Show the order in which the processes would be selected for execution
- 2. Calculate the average waiting time for processes, for each algorithm.
- 3. Calculate the average turnaround time for processes, for each algorithm.

The following guidelines will help you to get the right answer for each of the algorithms below.

- Mark on each grid the time at which the processes arrive at the system. (see 'A' in the grid).
- Processes cannot start executing before they arrive at the system so in each row of the grid you will never have any shaded cells before the 'A'.
- Only one process can be executing at a time. So only one cell in each column will be shaded.
- As far as possible the system should never be idle. So, avoid empty columns.

(1) Shortest Remaining Process First

Time -> 0	1	2	3	4	5	6	7	8	9	1	11	1 2	1	1 4	1 5	1 6	1 7	1 8	1 9	2
P1 A																				
P2		Α																		
P3																				
P4																				
P5																				
P6																				

Average Turnaround time:

Average Response time:

(2) Round Robin (burst 2)

Time -> 0	1	2	3	4	5	6	7	8	9	1 0	11	1 2	1	1 4	1 5	1 6	1 7	1 8	1 9	2 0
P1																				
P2																				
P3																				
P4																				
P5																				
P6																				

Average Turnaround time:

Average Response time: