HW 3 -3600 Operating System

Submit your answers in Canvas as a pdf document on or before (02/27/2021).

1. A MLF algorithm uses 5 priority levels. At level 5, a process executes for Q = 1 ms. At each of the lower levels the quantum is doubled (2Q, 4Q, 8Q, 16Q).

   The following processes are to be scheduled:

Process	Arriva l	Total CPU time
p1	0	1
p2	1	3
p3	1	14

After termination, process p1 blocks for 4 ms and then reenters the queue again at level 5. Similarly, process p2 blocks for 5 ms and then reenters the queue again at level 5

(a) Draw a Gantt Chart (timing diagram) for the first 33 ms. On each of the 3 lines (one per process) show when the process is running and at which priority level. **(15 points)**

(b) Determine the Average Turn Around Time for each process. Make a table of Arrival time,Completion Time, Turn Around Time and WaitTime of the processes **(10 points)**

Program	**Arrival**	**Burst Time**	**Completion**	**Turnaround Time**	**Waiting Time**
p1	0	1	6	6 - 0 = 6	6 - 1 = 5
p2	1	3	15	15 - 1 = 14	14 - 3 = 11
p3	1	14	22	22 - 1 = 21	21 - 14 = 7

What to turn in Canvas:

Solution as a pdf document.