

(b) Schedule the following two periodic processes using Earliest-Deadline-First Scheduling. Give the output in the form of a Gantt chart. Justify the scheduling decision made at the arrival of each new CPU burst by giving the deadlines at that point. If at some point, both processes have the same deadline, resolve the tie in favor of the process that currently has the CPU. Stop your scheduling as soon as a process misses its deadline or when you reach Time 80, whichever occurs first. Clearly indicate if a process misses its deadline.

$P_1: p_1=34, t_1=14, d_1=34$

$P_2: p_2=22, t_2=12, d_2=22$

Recall that  $p$  is the period,  $t$  is the length of the CPU burst, and  $d$  is the deadline. So,  $P_1$  will have CPU bursts of length 14 periodically arriving at times 0, 34, 68, ..., and each  $P_1$  burst must complete executing before the arrival of the next  $P_1$  burst. (10 points)

