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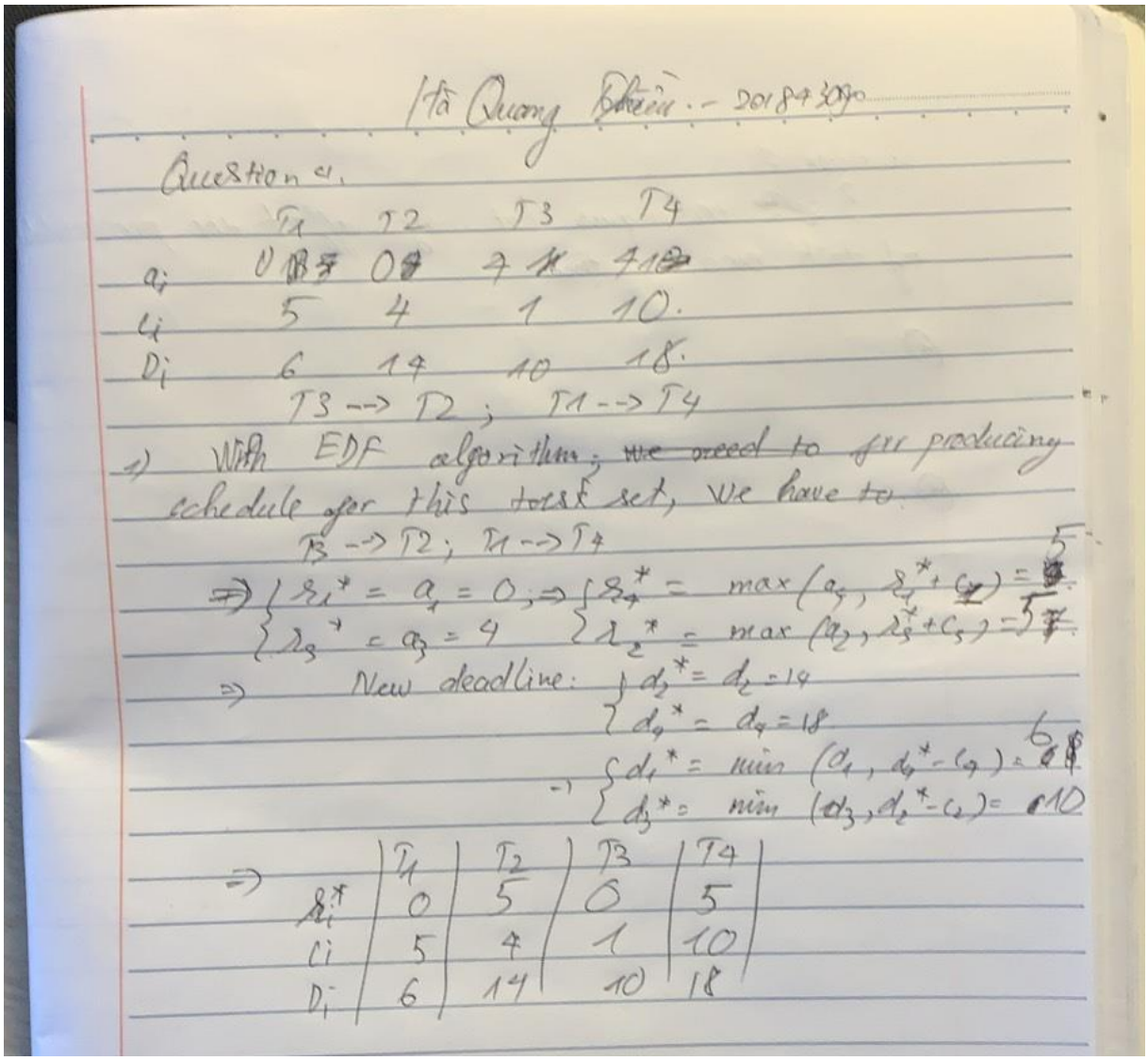
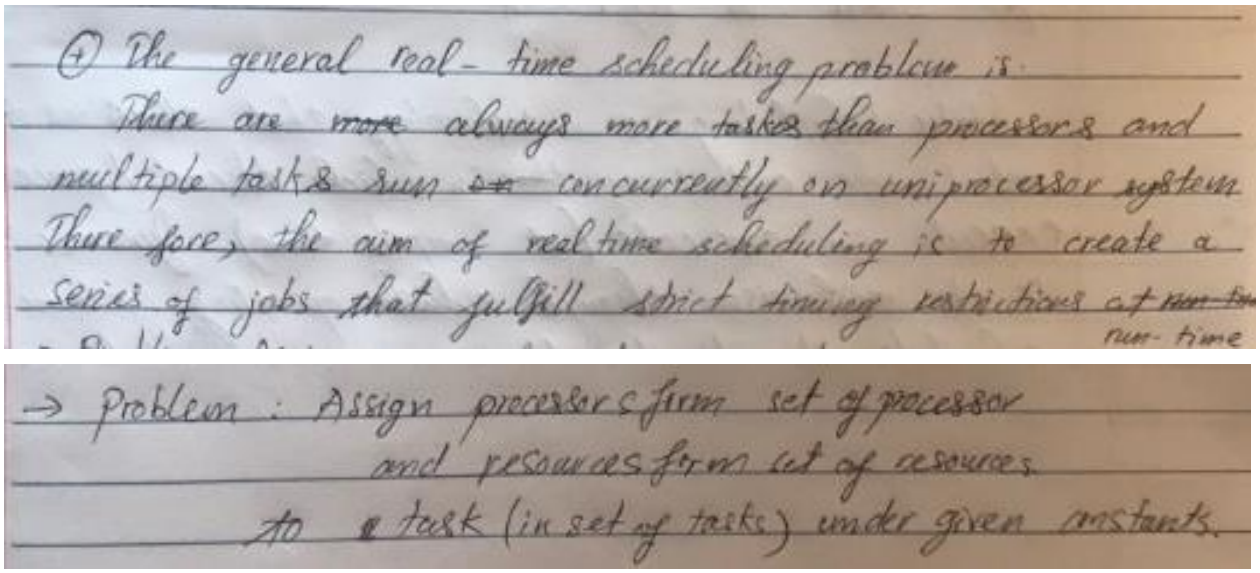
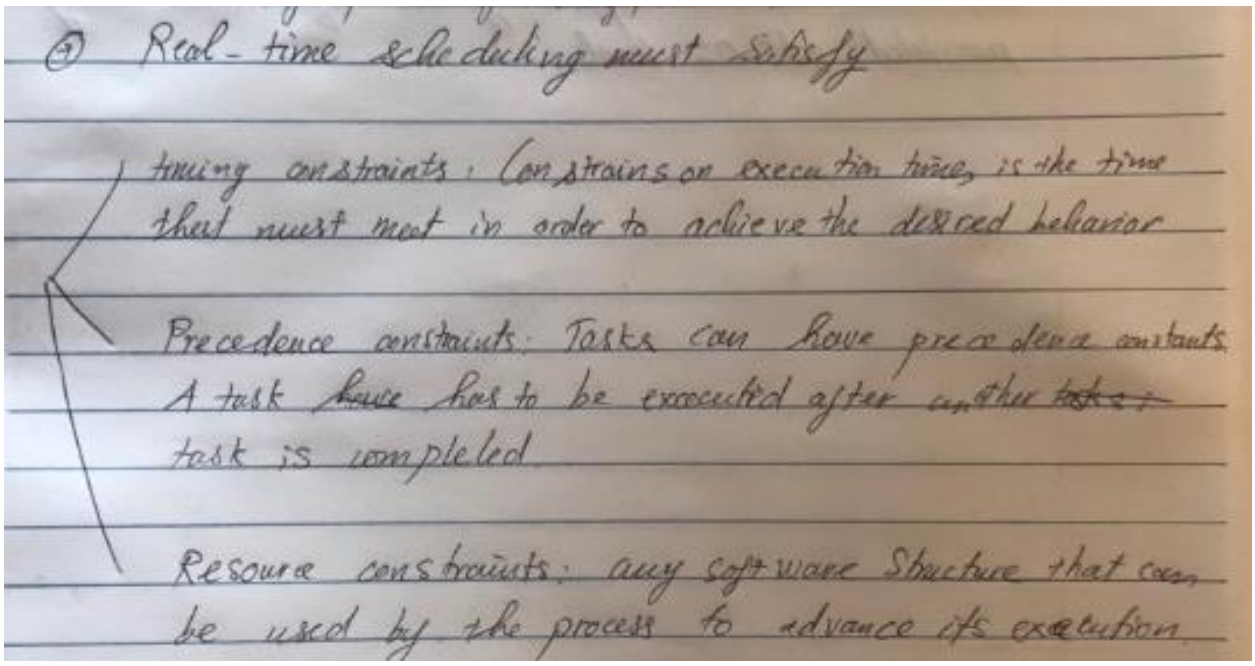
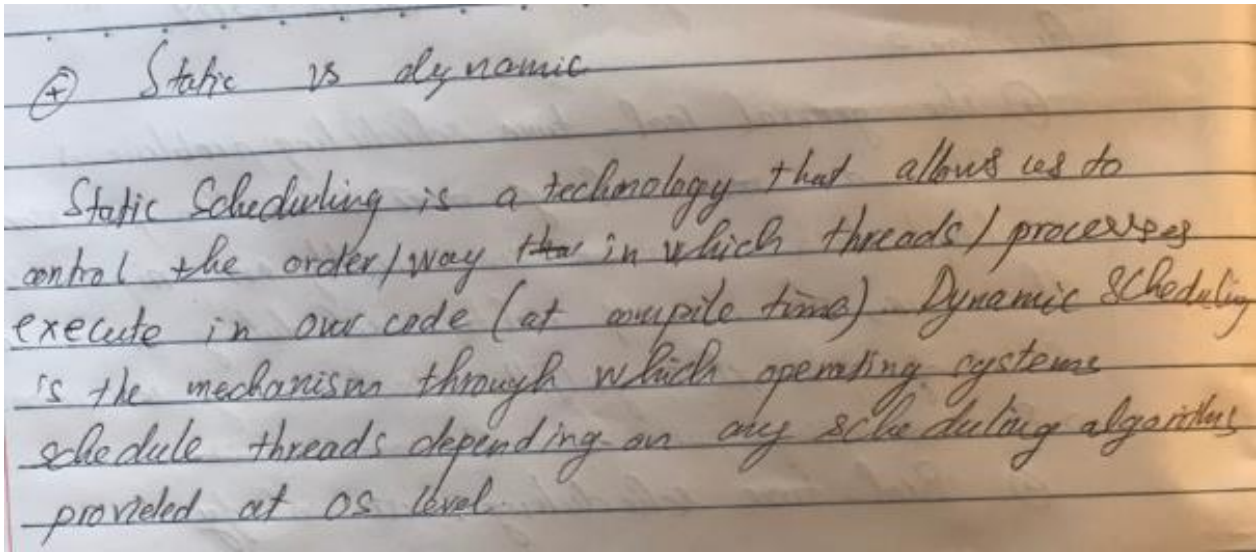
Question 4:



Question 2:




④ Real-time scheduling must satisfy
timing constraints: Constrains on execution time, is the time that must meet in order to achieve the desired behavior
Precedence constraints: Tasks can have precedence constants. A task has to be executed after another task is completed
Resource constraints: any software structure that can be used by the process to advance its execution


④ Static vs dynamic
Static Scheduling is a technology that allows us to control the order/way in which threads/processes execute in our code (at compile time). Dynamic Scheduling is the mechanism through which operating systems schedule threads depending on any scheduling algorithms provided at OS level.

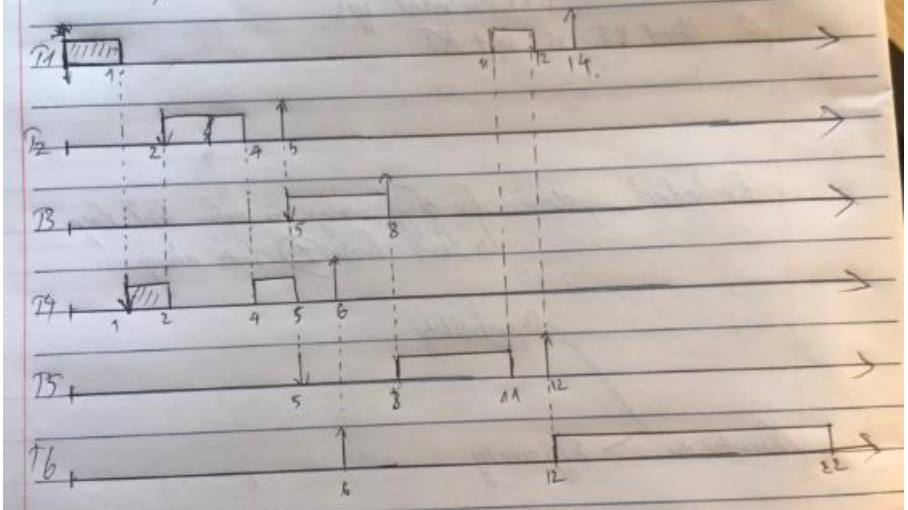
Question 3:

Question 3:

	T1	T2	T3	T4	T5	T6
q_i	0	2	3	1	5	6
C_i	2	2	3	2	3	10
D_i	14	5	8	6	12	20

① The algorithm help minimize L_{max} of this task set is the EDF algorithms.

② The schedule for this task set is:



⇒

We have:

$L_1 = 12 - 14 = -2$

$L_2 = 4 - 5 = -1$

$L_3 = 8 - 8 = 0$

$L_4 = 5 - 6 = -1$

$L_5 = 11 - 12 = -1$

$L_6 = 22 - 20 = 2$

⇒ $L_{max} = 2$.