PROBLEM 1

Complete the enclosed schedule, from the circuit of the figure 1.
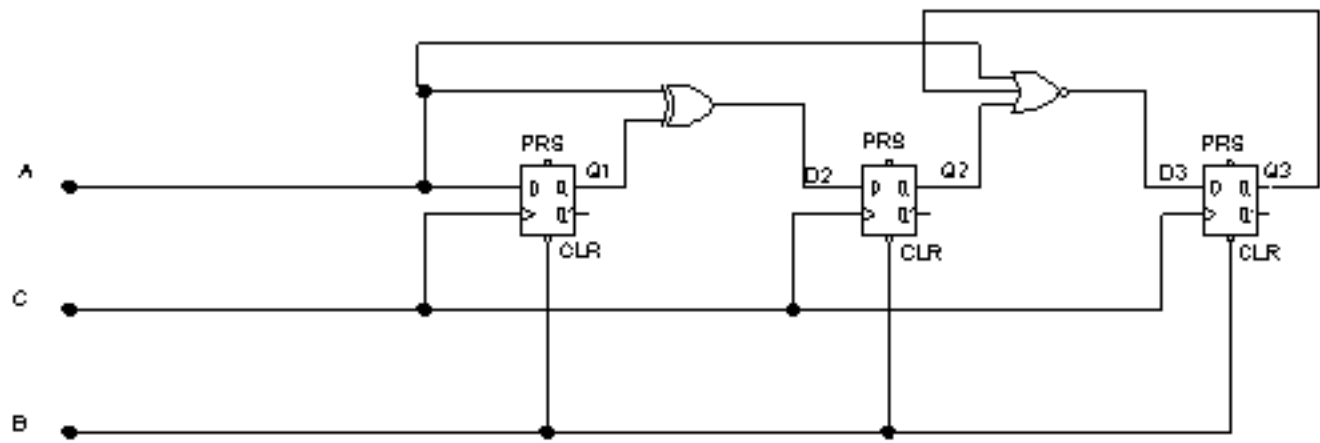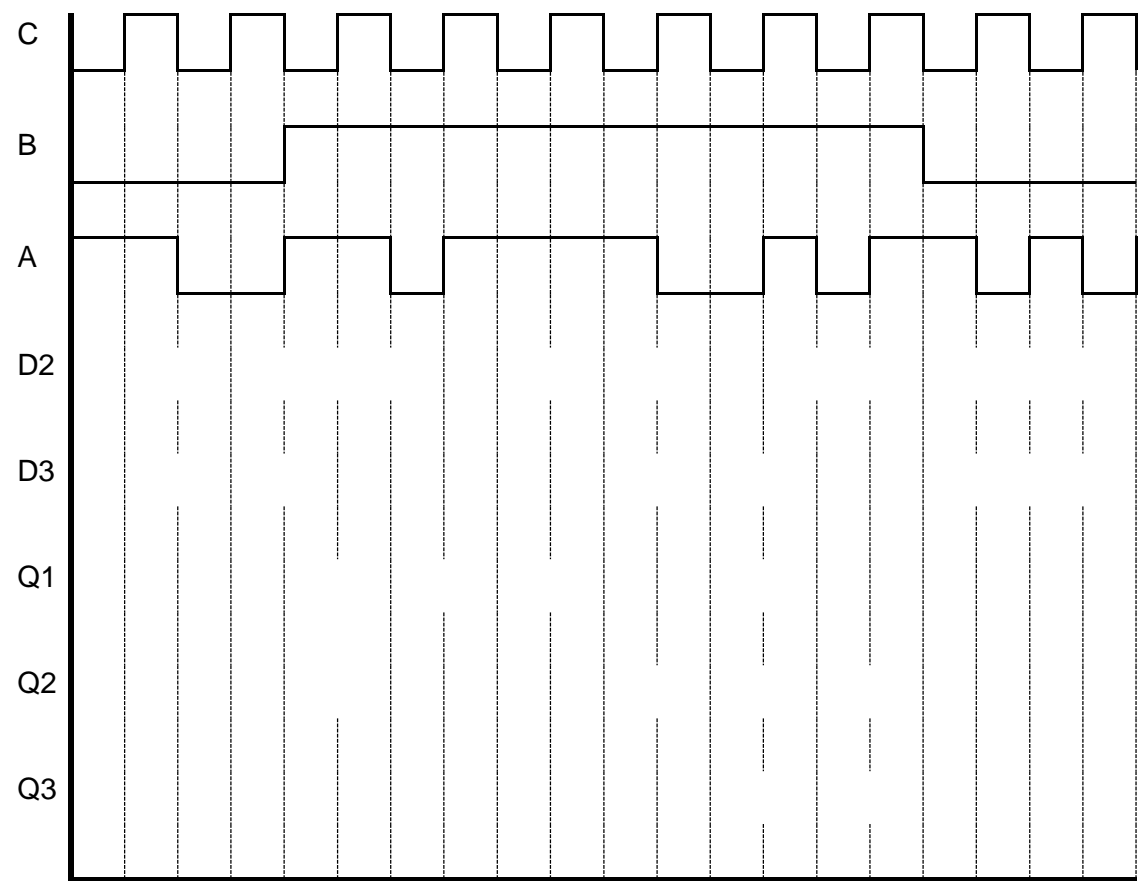

Figure 1

PROBLEM 2

Consider the circuit of the **Figure 2.1** Where Clear and A are the input signals and S is the output signal. B, Q_0 and Q_1 Are the signs at the points indicated.
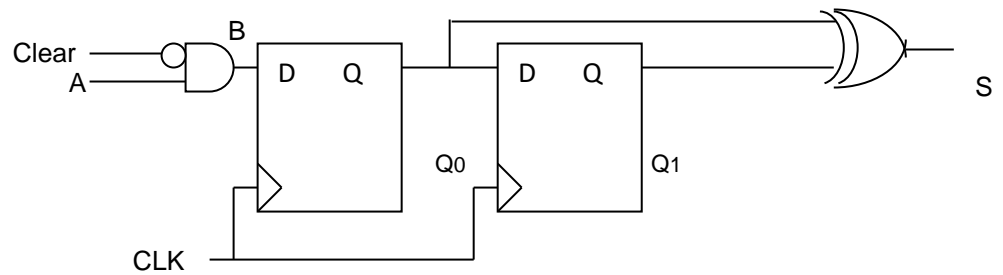

Figura 2.1

Complete the schedule of the **Figure 2.2**, knowing that the initial state of the flip-flop is 0.
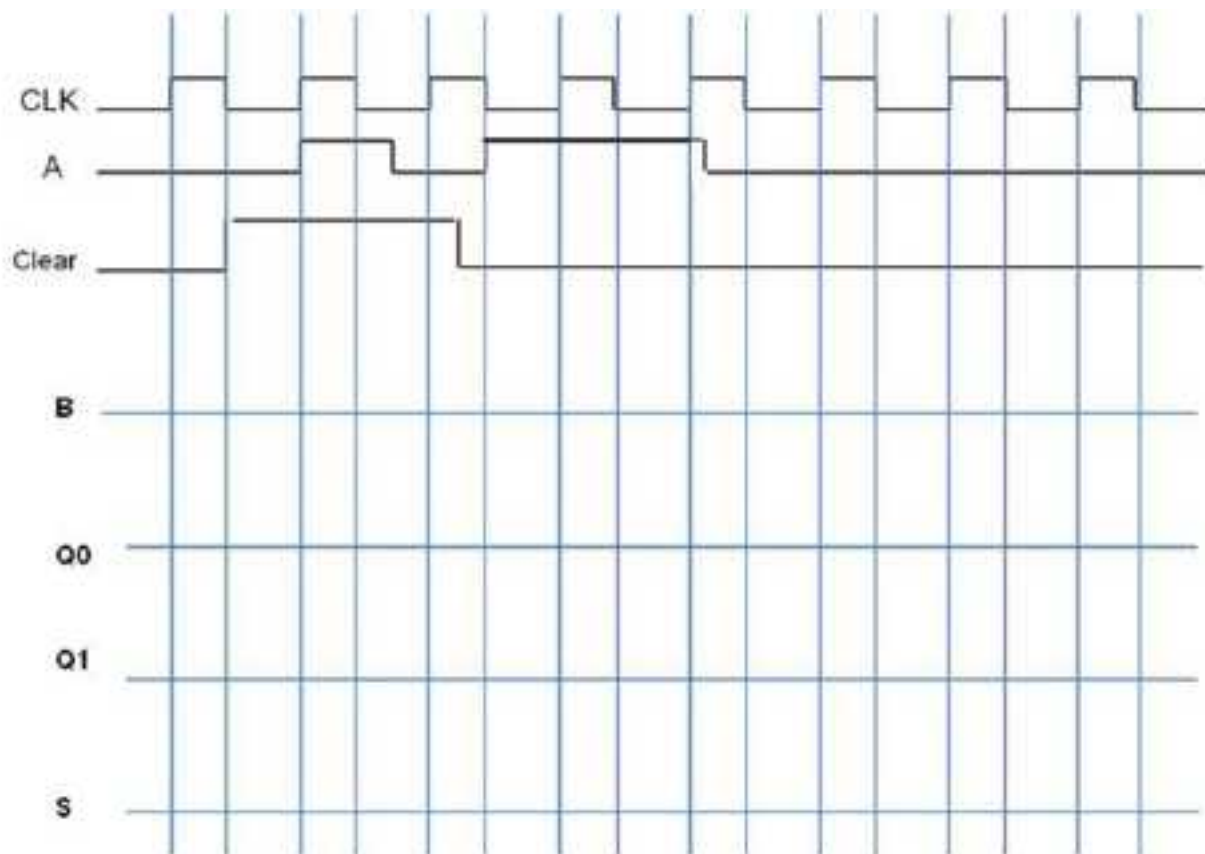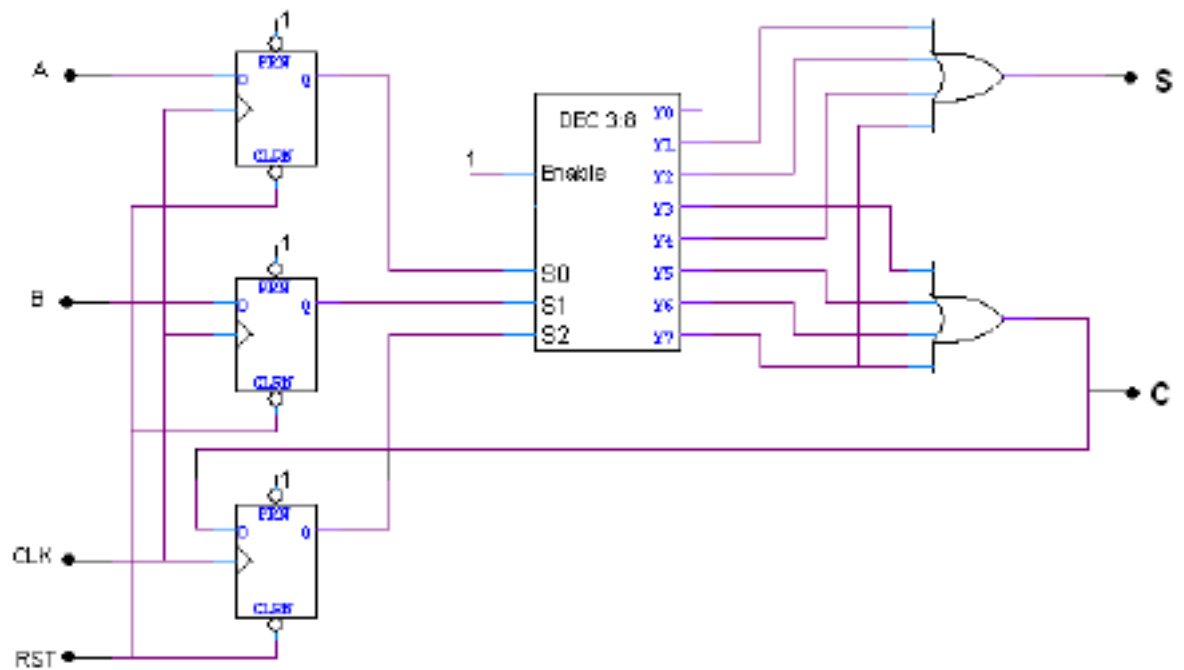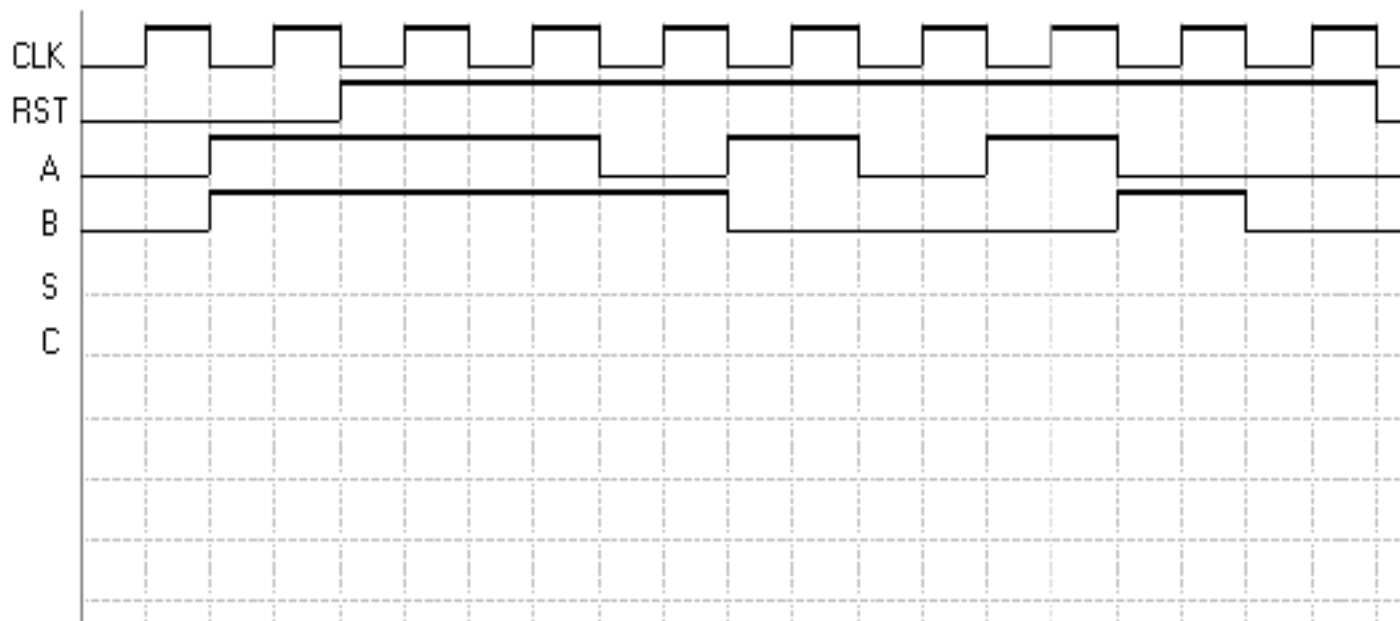

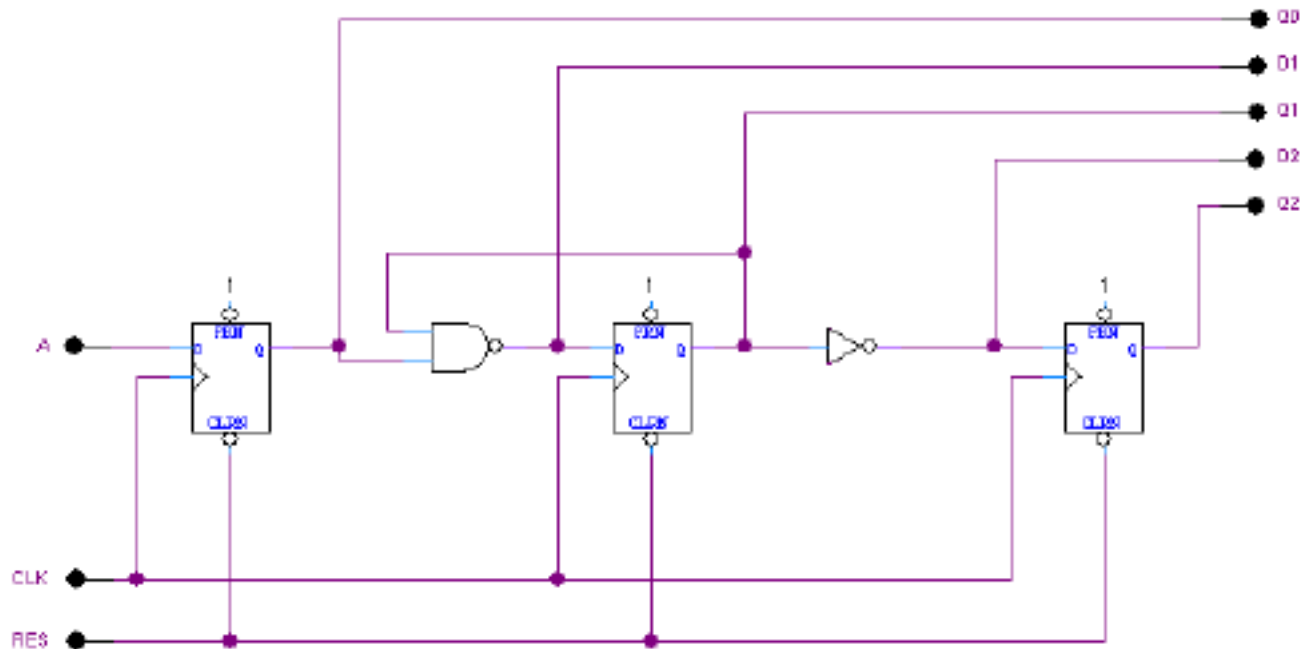**Figure 2.2**

PROBLEM 3

Figure 3

Taking the circuit of the figure 3:

a) Get the simplified S (S2, S1, S0) function.
b) Get the simplified function C (S2, S1, S0) in the form of a sum of products.
c) Complete the following schedule. Use the necessary additional lines.
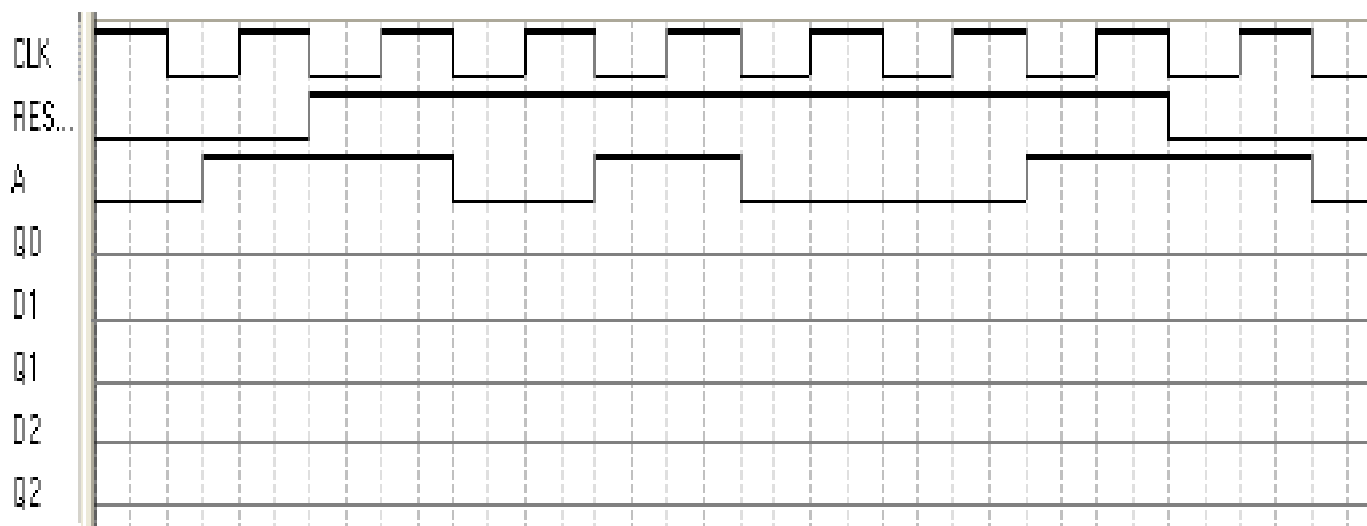
PROBLEM 4

For the following circuit:

Complete the following timeline:

PROBLEM 5

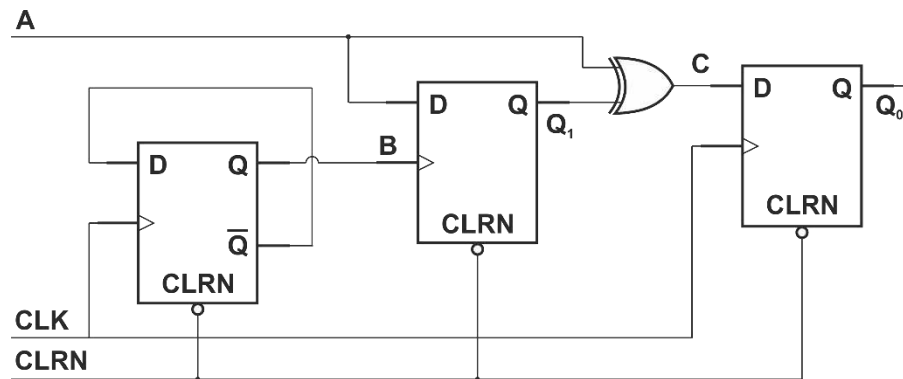In the circuit of the figure 5 It shows a sequential system based on bistables and logic doors.

Figura 5

a) Describe the table of truth for the bistable D of the circuit of the **Figure 5.1**. Use as input signals: CLRN, CLK and D, and as outputs Q_{t+1} and $\overline{Q}_{t+1}$.

b) eomplete the enclosed schedule corresponding to the circuit of the **Figure 5.2** and indicate what **Operation** He's doing the same. Suppose the initial state is Q = 0.
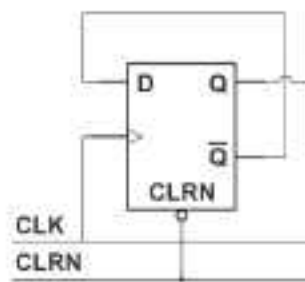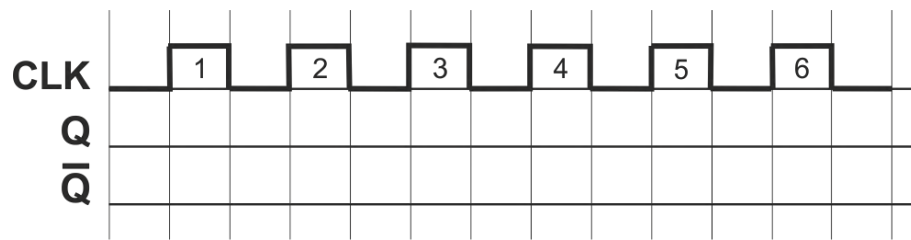

Figura 5.1

Figure 5.2. Timeline for the circuit

c) From the results of the preceding paragraphs, complete the enclosed timetable for the operation of the circuit of the **Figure 5.**