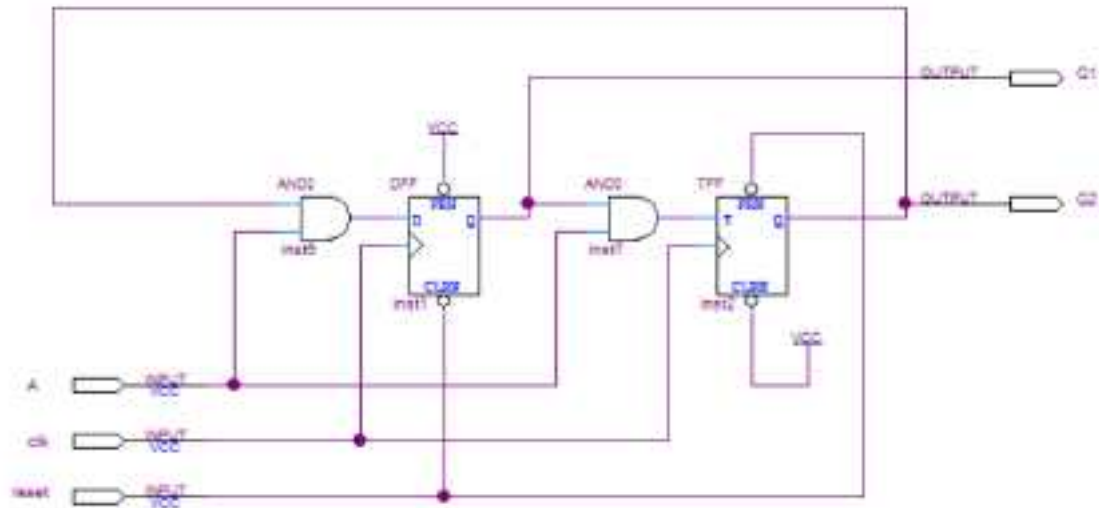


## Bistables T

### Problem 1 (from Second Term exam, 2015)

Given the following circuit:



- Get the expressions of the state functions D and T.
- Get the transition table of the circuit (use Q1 as MSB and Q2 as LSB).
- Complete the following chronogram (the state value is represented as unsigned integer, with Q1 as the MSB and Q2 as the LSB).

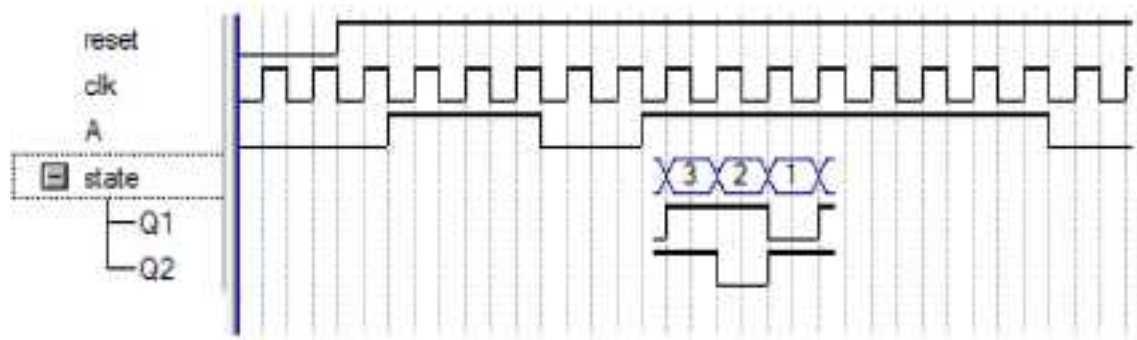


Fig. 1.1

**Problem 2:**

Complete the following chronogram. Indicate the situations in which the output signals are undefined:

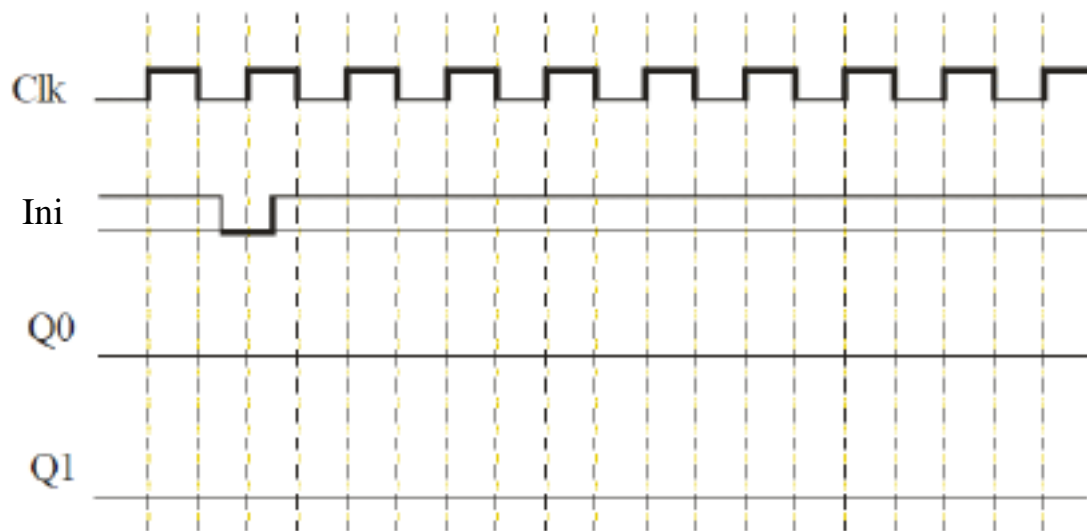
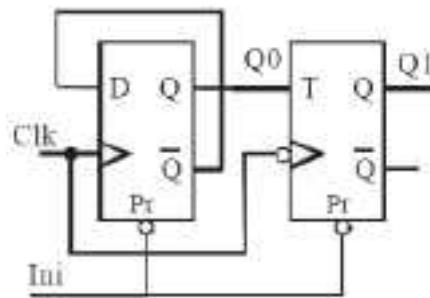


Fig 1.2

**Problem 3:**

Complete the following chronogram. Indicate the situations in which the output signals are undefined.

