



VIT[®]

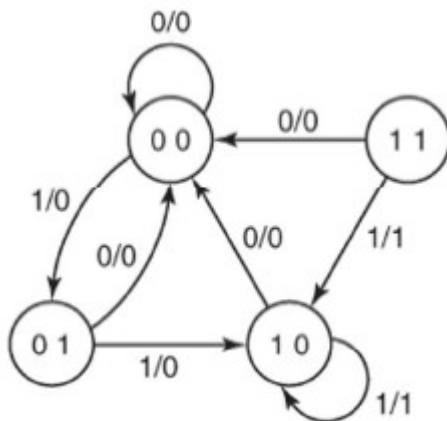
Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

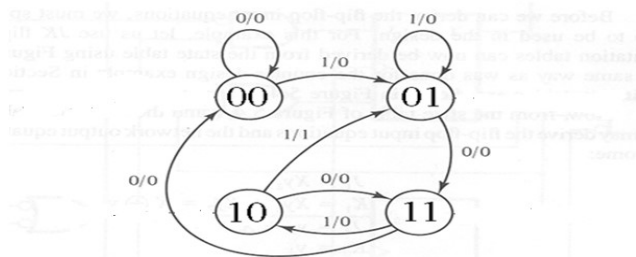
Digital Assignment – II

Sequential Logic Circuits

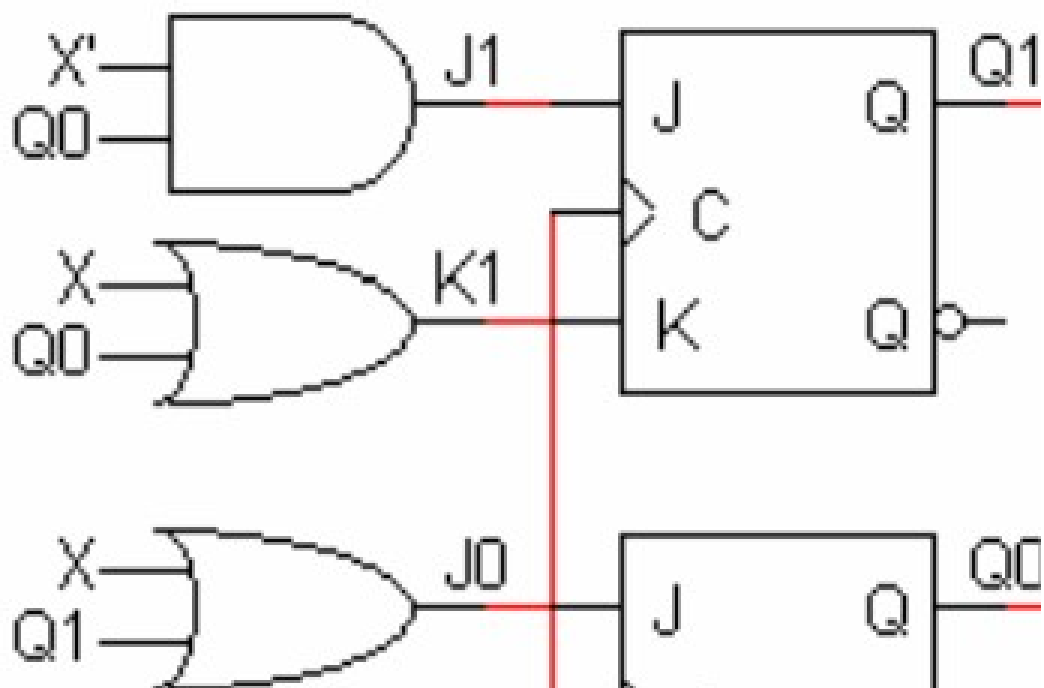
- 1) Verify the characteristic tables of SR, T, D and JK flip flop.
- 2) Design T flip flop using JK flip flop.
- 3) Find the state table and design a synchronous sequential circuit using JK flip flop for the following state diagram shown below.



- 4) Design a sequential logic circuit for the following state diagram.



5) Analyze the following circuit and derive the state diagram.



6) Design Mod8 Asynchronous counter using JK flip flop

7) Design a Synchronous counter that has the following repeated binary sequence 1,2,5,7,1,2.... using T Flip flop

8) Verify the shift registers SISO, PISO, SIPO, PIPO for the following sequence 1010.