

Assignment 11

class-SETT

ROII NO-21430

Batch-F4

DOS-14/01/20201.

Title - Design and implement sequence generator (for prime Number / odd and even) using MS JK flipflop

Objective :

Design and implement the following sequence generator circuit using IC-741576 and verify its truth table.

sequence (2-3-5-7)

Apparatus - Digital board, GP-4 patch conds, tc-141576 TC-741532. TC-741504 / TC-741508 and required logic gates if any.

Theory -:

Sequence generator is sequential logic circuits which can be used to generate the pre-determined siq. Can be Generator is classified into two categories counter can be constructed using IC - 191576. In case of ring counter output of last flip-flop is connected to the input IA input of first flip-flop and complementary output of last flip-flop output of first flip-flop (and tax) is connected to the input of second flip-flop (IB4kB) and so-on. And connect set 4 reset pin to Vcc

* PIN DIAGRAM.

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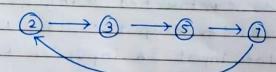
Procedure -:

. Make the connections as per the logic circuit of sequence generator circuit using tc-741576 and verify its truth table.

Sequence: 2-3-5-7

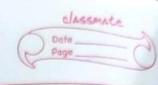
since highest state is 7 (111) we have to use & JKff

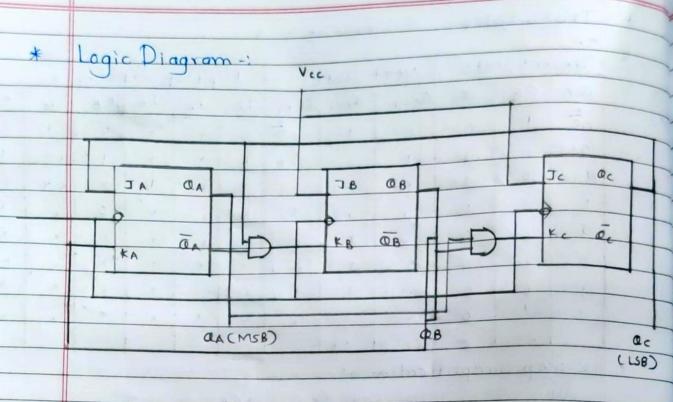
State Diagram - Prime no from 0 to 7.



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Logic gates/MST Device required for implementation.

Sequence Generator - IC 741576 3FFS 2ICS (2-3-5-7)

conclusion-1

successfully implemented Sequence Generator (2-3-5-7)

using to -741576 on an online digital trainer kit.

