ii) $10 \times 1 \mathrm{~K}$ decoder using $8 \times 256$ decoder and additional logics.
5. a) What is difference between flip-flop and latch? Explain different types of flip-flops.
b) Explain the construction and working of master- slave JK flipflop.

## OR

5. Determine the function performed by the circuit given in fig. Referring to circuit, write its out sequence if it is initialize at 0000 . Also draw the timing sequence.


Roll No. $\qquad$ Total Printed Pages

## 04BEE102

## B.TECH.ELECTRICAL \& ELECTRONICS ENGG.

## IV- SEM Examination, May/June - 2016

SUB :DIGITAL ELECTRONICS

Time : 3 Hours]
[Total Marks 60
Use of following supporting material is permitted during examination.

1. $\qquad$ Nil $\qquad$ 2. $\qquad$ Nil $\qquad$
Note: 1. Attempt all five questions.
2. Each question carry equal marks.
3. a) Subtract the following using 9's complement method.
i) 649-387
ii) -891-786
b) Drive the boolean expression for a 2 input Ex-OR logic gate to realize with two impact NAND gate without using complemented variable also, draw the circuit diagram.
