

Q_1 : Fill in blanks

1- $f_{max} = 1/(N \times t_{pd})$.

2- $N = 2^n - 1$

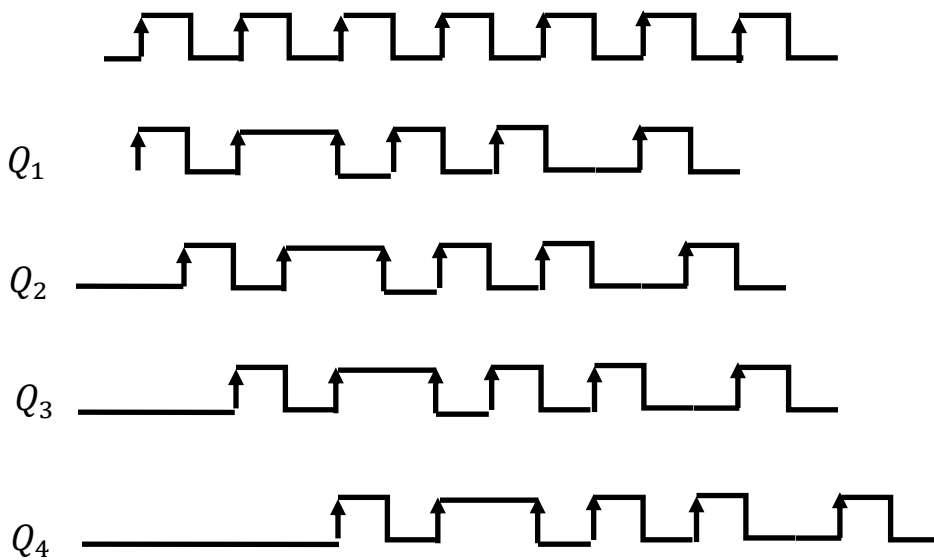
3- C.

4- 2 or twice.

5- 60536

Q_2 : design a register that transfers the data (10110101001) to the left using four (D) flip-flops, and draw the outputs of these flip-flops after seven pulses.

Sol:



Q_3 : Design (*3bits*) mod 3 up and down an asynchronous counter .

