Tutorial – 13 (Questions)

1. Convert T Flip Flop into D Flip Flop.

2. Explain the realization of T Flip Flop from JK Flip Flop.

3. Design and Implement a MOD-6 asynchronous counter using T Flip Flop.

4. A Binary Ripple Counter is required to count up to $(16383)_{10}$.

   1. How many Flip Flops are required?

   2. If the clock Frequency is 8.192 MHz, what is the frequency at the output of MSB?

5. Design a MOD-5 synchronous counter using JK flip-flop.

6. Design and Implement 4-bit Ring Counter using

   1. D Flip Flop

   2. JK Flip Flop

   Also, Draw the Timing Diagram and State Diagram.