

## Section - 5

Ques

Ans -

What changes must be made to a 3 bit counter to make it a 4 bit counter?

To make a synchronous 3 bit counter turn in to a 4 bit you have to add

another flip flop in you

would come the 3rd flip flop on to the 4th just as you wired the 2nd to the 3rd.

What is 3-bit synchronous counter.

The 3-bit synchronous binary up counter. Contains three J-K flip flop & one 2-input AND gate.

All these flip flop & one 2-input AND gate triggered and the output of flip flop



Affect synchronously. The T  
input of first and flip flop  
are 1, 0, 0, 0  
repeated

What is the 4 bit counter.

A 4 bit down counter is a digital  
counter circuit, which provides  
a binary 1111 to 0000.

This circuit uses four D-type  
flip-flops, which are positive edge  
triggered output.

At each stage, the flip-flop  
fields (Q) is inverted output  
data input into its own  
(D)

which is faster synchronous or asynchronous?

Synchronous counter is faster than asynchronous  
counter in operation.

Asynchronous counter is slower than  
synchronous counter.