

Digital Logic Design

Assignment 7
Sir. Muhammad Amin



HASSAN MEHDI

15453
Csc-201

Q 1

A register is an electronic device consists of a series of flip-flops to store data bits and moving the data bits.

The length of the stored binary word depends on the number of flip-flops that make up the register.

Q 2

The storage capacity of a register that can retain one byte of data is 8 bits.

This particular register will contain be an 8 stage shift register.

Q 3

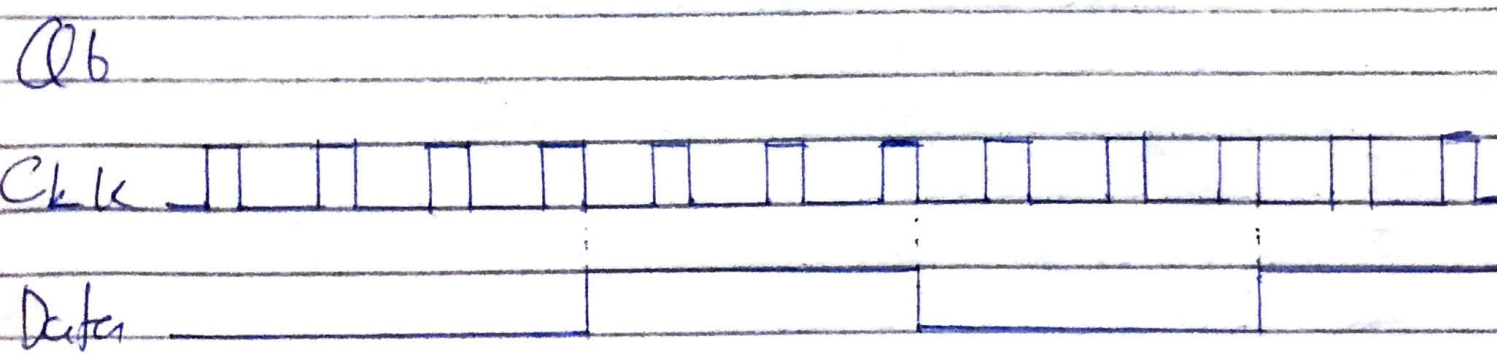
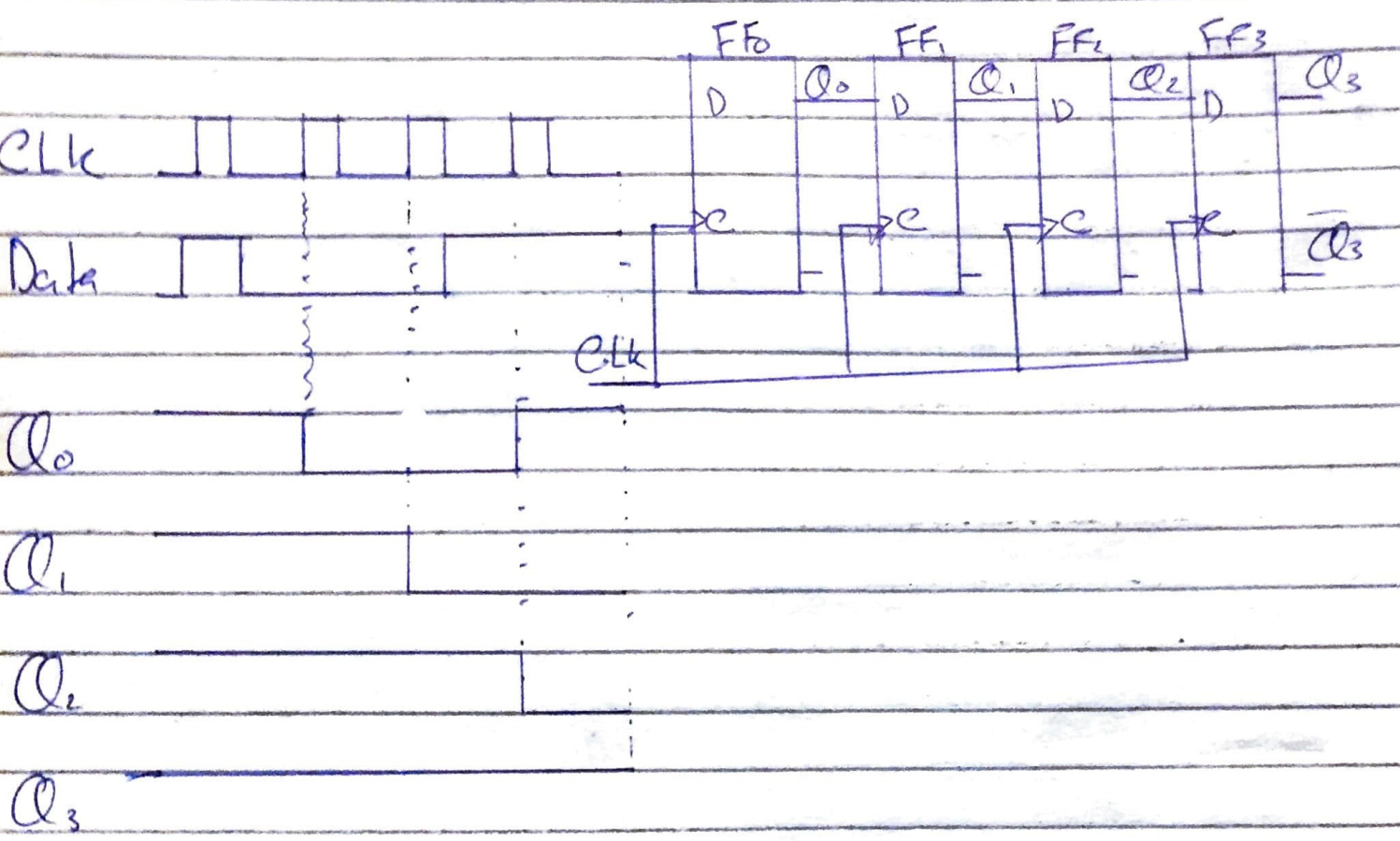
The shift capacity of a register permits to store and move data from one stage to another within, into, or out of register.

Q 4:

Since the shift register is initially cleared.

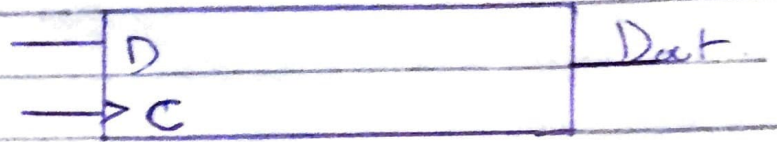
Initially	0 0 0 0
CLK1	1 0 0 0
CLK2	1 1 0 0
CLK3	0 1 1 0

Q5



Initially	110001110000	Data	D	SR612	
CLK1	011000111000				— Data
CLK2	001100011100	CLK	→ C		
CLK3	000110001110				
CLK4	000011000111	CLK7	011100001100		
CLK5	100001100011	CLK8	001110000110		
CLK6	110000110001	CLK9	000111000011		
		CLK10	100011100001		
		CLK11	110001110000		
		CLK12	011000111000		

Q 7:



Data in



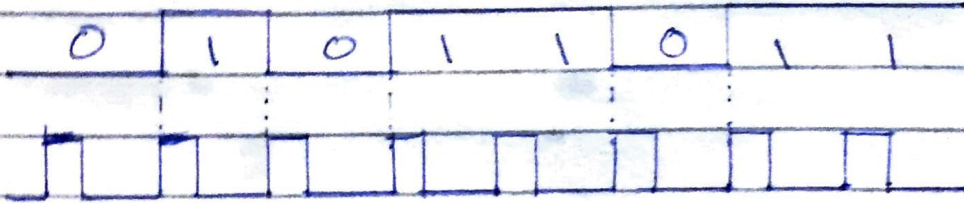
lk



Data out



Q 8



The Data bits stored are

11011010 (2)

Q9:

