

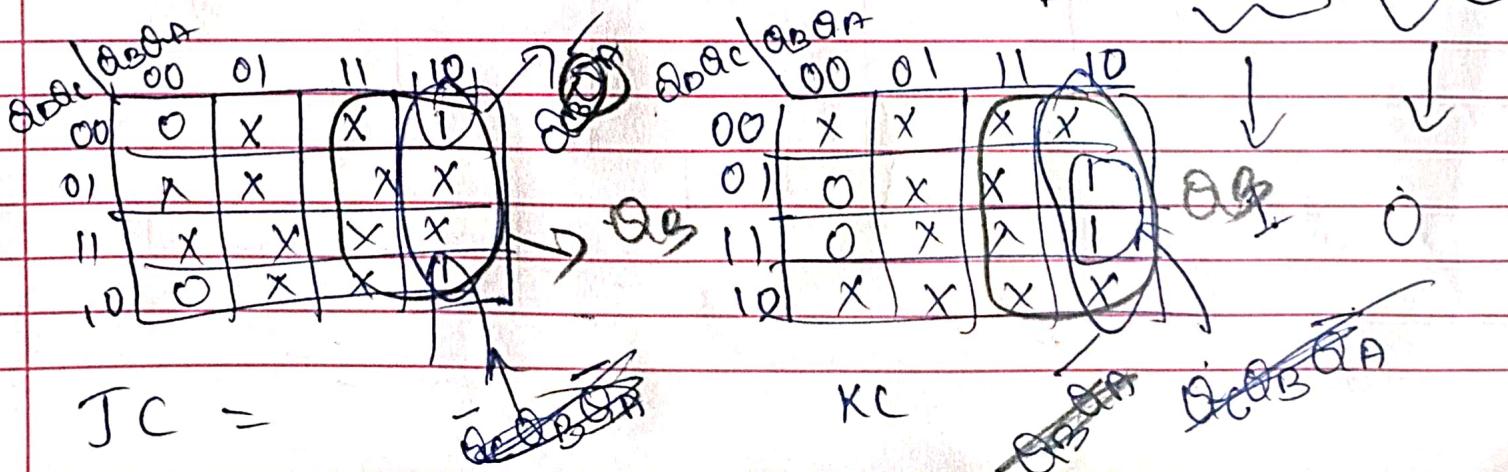
(R)

## Even counter

0 - 2 - 4 - 6 - 8 - 10 - 12 - 14. using JK  
P/f.

$2^7 \geq 14 \rightarrow 2^4 \geq 14 \rightarrow 16 \geq 14$ . Q<sub>3</sub> Q<sub>2</sub> Q<sub>1</sub> Q<sub>0</sub>  
No of P/f's 4 JK + P/f.

P. S	Q <sub>3</sub> Q <sub>2</sub> Q <sub>1</sub> Q <sub>0</sub>	J <sub>3</sub> K <sub>0</sub>	J <sub>3</sub> K <sub>1</sub>	J <sub>2</sub> K <sub>0</sub>	J <sub>2</sub> K <sub>1</sub>	J <sub>1</sub> K <sub>0</sub>			
0 0 0 0	0 0 1 0	0 0 1 0	0 0 1 0	0 X	0 X	1 X	0 X		
0 0 0 1	X X X X	X X X X	X X X X	XX	XX	XX	XX	X X	X X
0 0 1 0	0 1 0 0	0 1 0 0	0 1 0 0	0 X	1 X	X 0	1 X	0 X	0 X
0 0 1 1	X X X X	X X X X	X X X X	XX	XX	XX	XX	X X	X X
0 1 0 0	0 1 1 0	0 1 1 0	0 1 1 0	0 X	0 X	1 X	0 X	1 X	0 X
0 1 0 1	X X X X	X X X X	X X X X	XX	XX	XX	XX	X X	X X
0 1 1 0	1 0 0 0	1 0 0 0	1 0 0 0	1 X	X 1	X 1	X 1	0 X	0 X
0 1 1 1	X X X X	X X X X	X X X X	XX	XX	XX	XX	X X	X X
1 0 0 0	1 0 1 0	1 0 1 0	1 0 1 0	X 0	0 X	0 X	0 X	0 X	0 X
1 0 0 1	X X X X	X X X X	X X X X	XX	XX	XX	XX	X X	X X
1 0 1 0	1 1 0 0	1 1 0 0	1 1 0 0	X 0	1 X	X 1	X 1	0 X	0 X
1 0 1 1	X X X X	X X X X	X X X X	XX	XX	XX	XX	X X	X X
1 1 0 0	1 1 1 0	1 1 1 0	1 1 1 0	X 0	X 0	1 X	0 X	0 X	0 X
1 1 0 1	X X X X	X X X X	X X X X	XX	XX	XX	XX	X X	X X
1 1 1 0	0 0 0 0	0 0 0 0	0 0 0 0	X 1	X 1	X 1	X 1	0 X	0 X
1 1 1 1	X X X X	X X X X	X X X X	XX	XX	XX	XX	X X	X X



Q <sub>A</sub> Q <sub>B</sub>		Q <sub>A</sub> Q <sub>B</sub>		Q <sub>A</sub> Q <sub>B</sub>	
Q <sub>A</sub> Q <sub>B</sub>		Q <sub>A</sub> Q <sub>B</sub>		Q <sub>A</sub> Q <sub>B</sub>	
Q <sub>A</sub>	Q <sub>B</sub>	Q <sub>A</sub>	Q <sub>B</sub>	Q <sub>A</sub>	Q <sub>B</sub>
00	0	x	x	0	
01	0	x	x	1	
11	x	x	x	x	
10	x	x	x	x	

Q <sub>A</sub> Q <sub>B</sub> Q <sub>A</sub>		Q <sub>A</sub> Q <sub>B</sub>		Q <sub>A</sub> Q <sub>B</sub>	
Q <sub>A</sub> Q <sub>B</sub> Q <sub>A</sub>		Q <sub>A</sub> Q <sub>B</sub>		Q <sub>A</sub> Q <sub>B</sub>	
Q <sub>A</sub>	Q <sub>B</sub>	Q <sub>A</sub>	Q <sub>B</sub>	Q <sub>A</sub>	Q <sub>B</sub>
00	x	x	x	x	x
01	x	x	x	x	x
11	0	x	x	1	0
10	0	x	x	x	0

H.W

2 - 5 - 3 - 1, using SR.

2 - 1 - 0 - 4 - 5 - 6, using D.