

CSE260: Digital Logic Design
 Summer 2025
 Quiz - 04
 Duration: 30 minutes

A

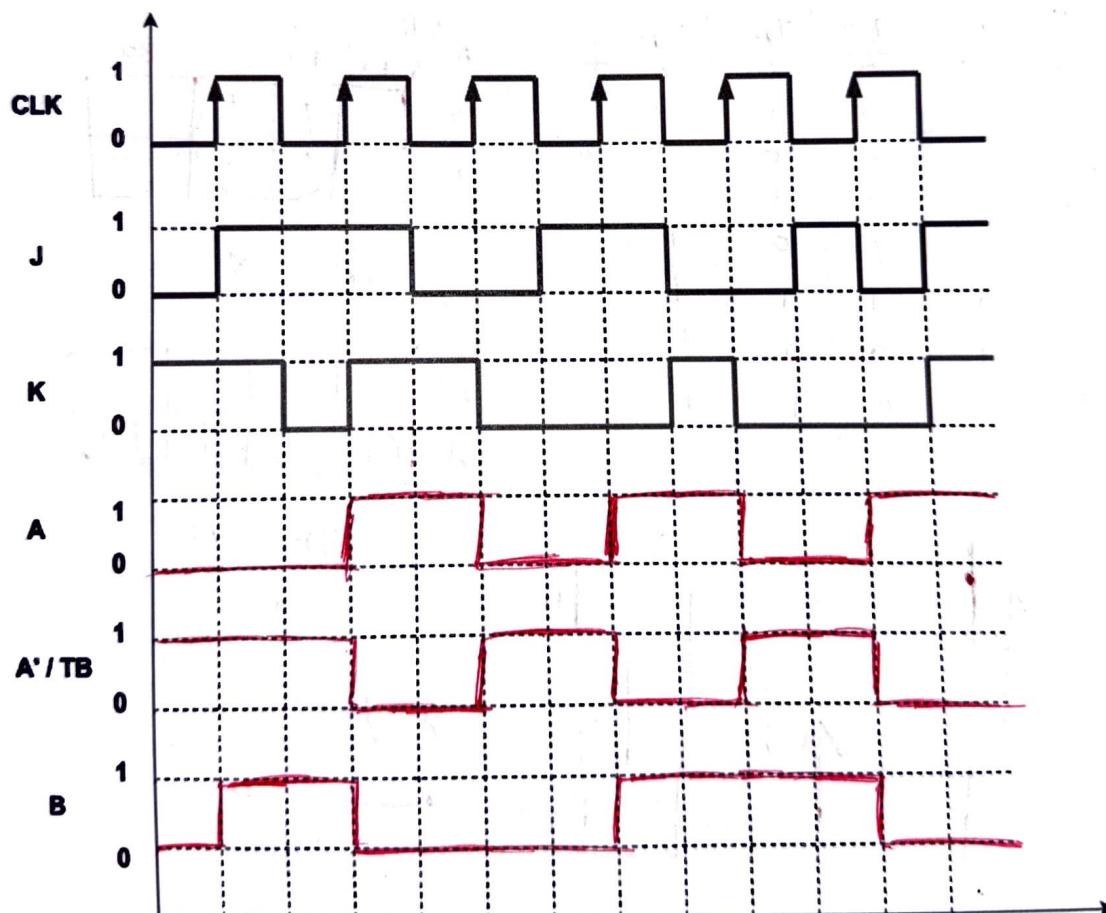
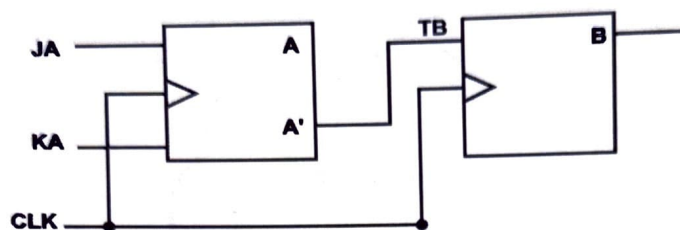


Name: *Solution*

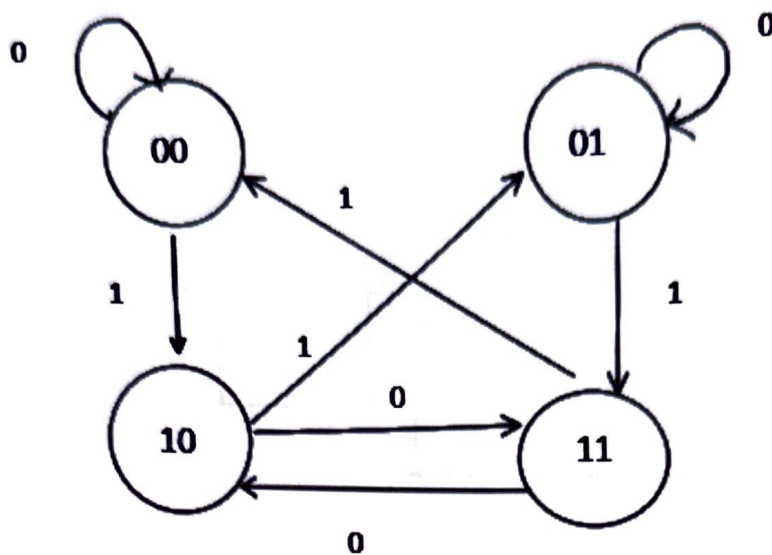
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Section:

- Complete the timing diagram for the following Flip-flop circuit diagram. The FF is positive-edge triggered.



2. Convert the State diagram to a Circuit diagram using T flip-flops



A	B	X	A ⁺	B ⁺	T _A	T _B
0	0	0	0	0	0	0
0	0	1	1	0	1	0
0	1	0	0	1	0	0
0	1	1	1	1	1	0
1	0	0	1	1	0	1
1	0	1	0	1	1	1
1	1	0	1	0	0	1
1	1	1	0	0	1	1

A	Bx	Bx'	Bx	Bx'
A'		1	1	
A		1	1	

$$T_A = X$$

A	Bx	Bx'	Bx	Bx'
A'				
A	1	1	1	1

$$T_B = A$$

