

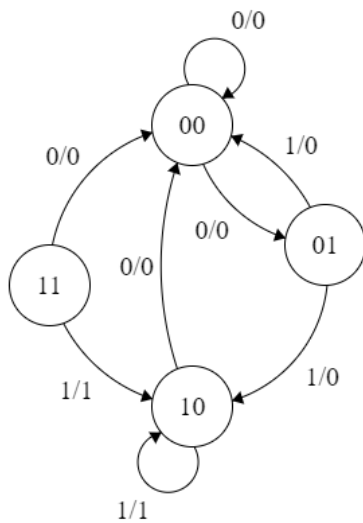
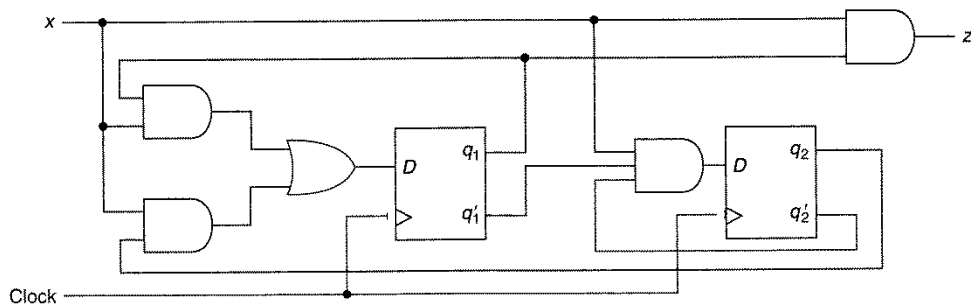
Jubail University College
Department of Computer Science & Engineering
SEMESTER 401
CS 206 DIGITAL LOGIC DESIGN
LAB 9

Name :

ID:

Q1.

- Implement the sequential circuit in the figure.
- Build its state table.
- Build its state diagram.



$$Z = Xq_1$$

$$q_1 = Xq_1 + Xq_2$$

$$q_2 = Xq_1'q_2'$$

Present State		Input	Next State		Output
q1	q2	X	q1	q2	Z
0	0	0	0	0	0
0	0	1	0	1	0
0	1	0	0	0	0
0	1	1	1	0	0
1	0	0	0	0	0
1	0	1	1	0	1
1	1	0	0	0	0
1	1	1	1	0	1

