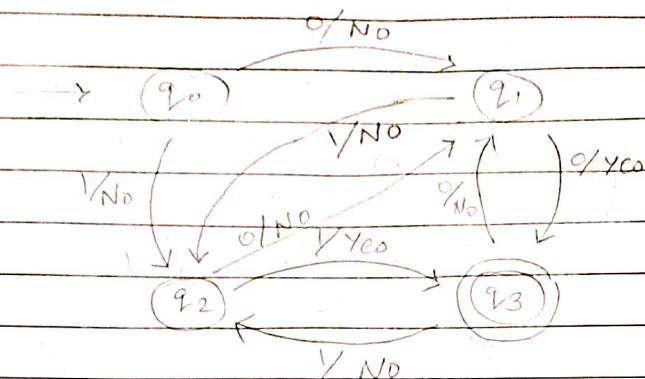


Q.1)



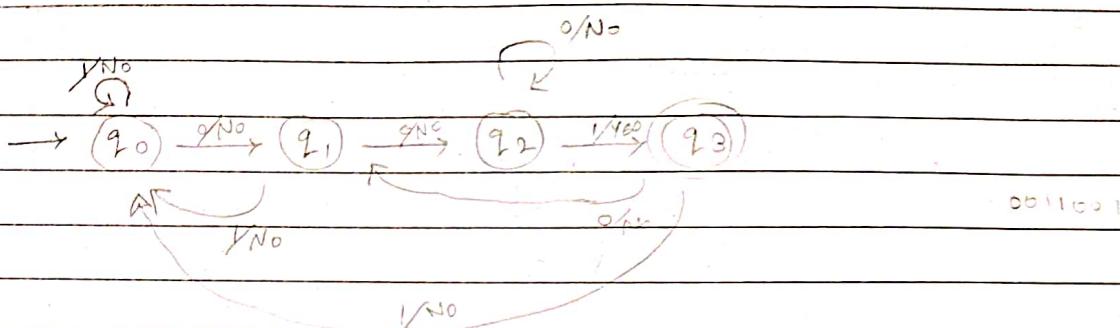
ST Table:

Q\S	0	1
Q0	q1	q2
Q1	q3	q2
Q2	q1	q3
Q3	q1	q2

MF Table:

Q\S	0	1
Q0	No	No
Q1	Yes	No
Q2	No	Yes
Q3	No	No

Q.2)

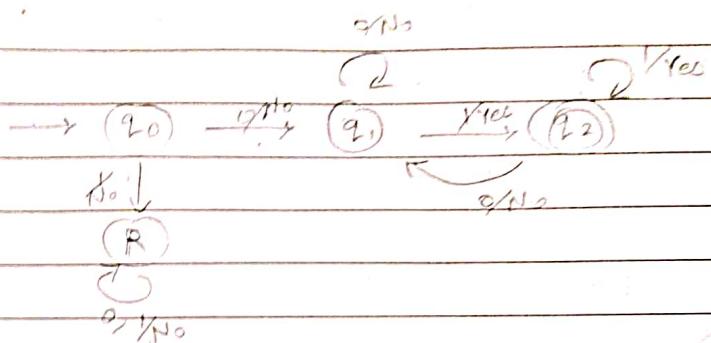


ST Table:

$Q \setminus \Sigma$	0	1
q_0	q_1	q_0
q_1	q_2	q_0
q_2	q_2	q_3
q_3	q_1	q_0

MF Table:

$Q \setminus \Sigma$	0	1
q_0	No	No
q_1	No	No
q_2	No	Yes
q_3	No	No

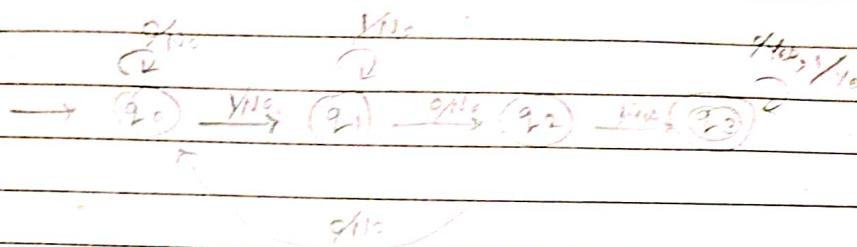
Q. 3)ST Table :

$Q \setminus \Sigma$	0	1
q_0	q_1	R
q_1	q_1	q_2
q_2	q_1	q_2
R	R	R

MF Table :

$Q \setminus \Sigma$	0	1
q_0	No	No
q_1	No	Yes
q_2	No	Yes
R	No	No

Q. 4)

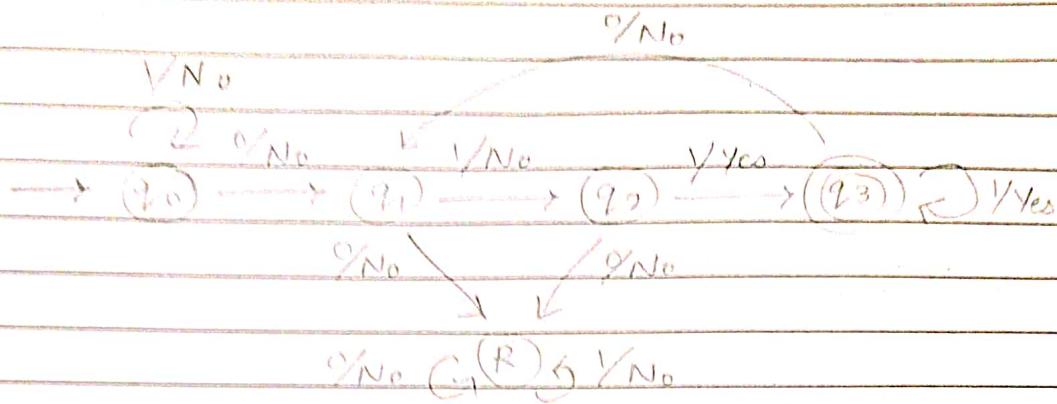


ST Table :

$Q \setminus \Sigma$	0	1
q_0	q_0	q_1
q_1	q_2	q_1
q_2	q_0	q_3
q_3	q_3	q_3

MF Table :

$Q \setminus \Sigma$	0	1
q_0	No	No
q_1	No	No
q_2	No	Yes
q_3	Yes	Yes

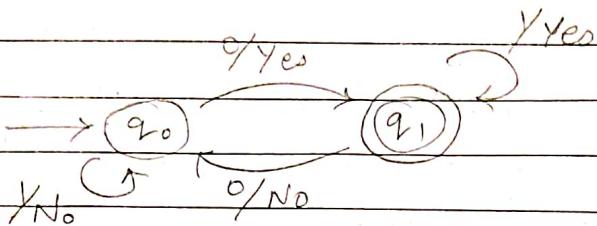
Q.5)

ST Table :

$Q \setminus \Sigma$	0	1
q_0	q_1	q_0
q_1	R	q_2
q_2	R	q_3
q_3	q_1	q_3
R	R	R

MF Table :

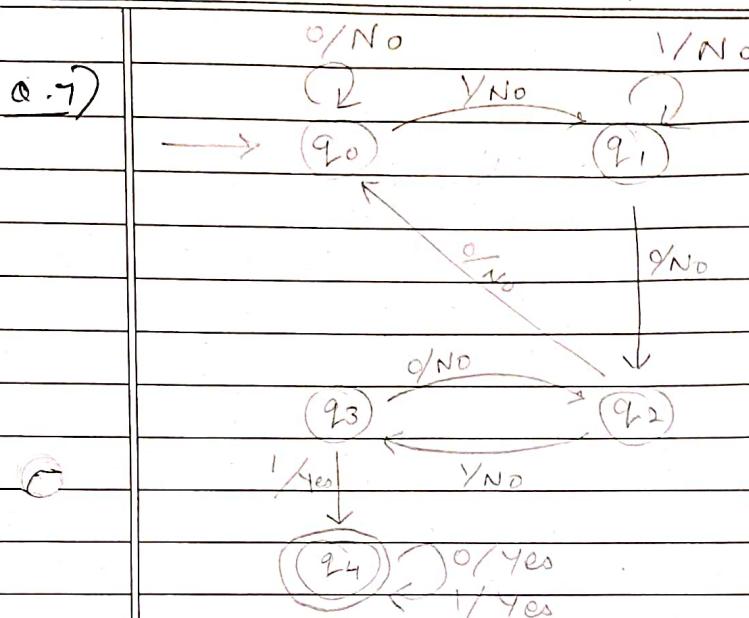
$Q \setminus \Sigma$	0	1
q_0	No	No
q_1	No	No
q_2	No	Yes
q_3	No	Yes
R	No	No

Q. 6ST Table :

$Q \setminus \Sigma$	0	1
q_0	q_1	q_0
q_1	q_0	q_1

MF Table :

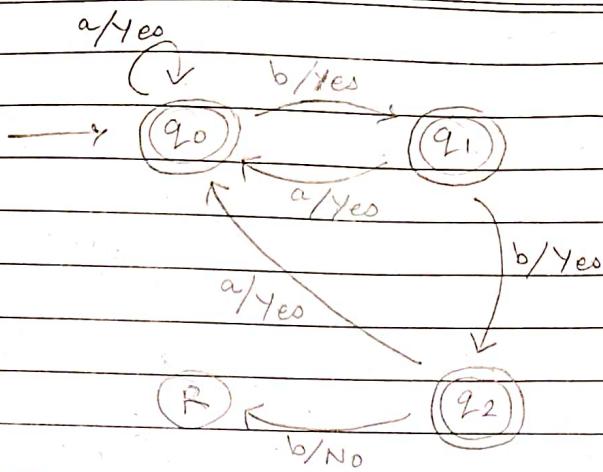
$Q \setminus \Sigma$	0	1
q_0	Yes	No
q_1	No	Yes

ST Table:

$Q \setminus \Sigma$	O	I
q ₀	q ₀	q ₁
q ₁	q ₂	q ₁
q ₂	q ₀	q ₃
q ₃	q ₂	q ₄
* q ₄	q ₄	q ₄

MF Table:

$Q \setminus \Sigma$	O	I
q ₀	No	No
q ₁	No	No
q ₂	No	No
q ₃	No	Yes
* q ₄	No	No

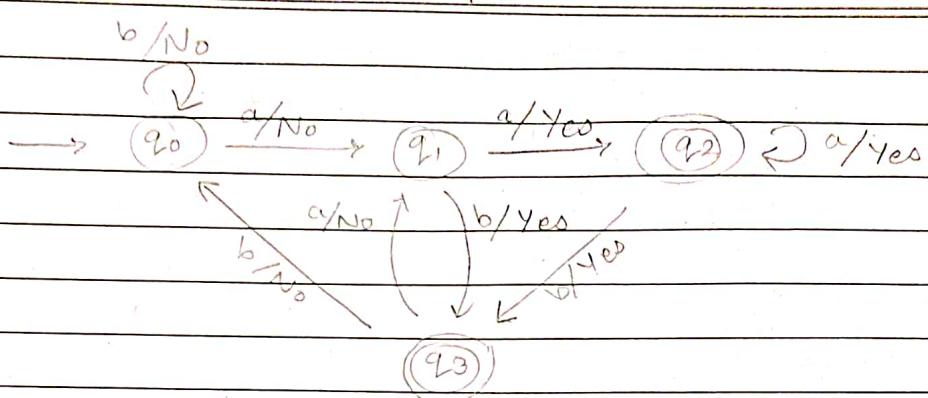
a-8)ST Table :

$Q \setminus \Sigma$	a	b
q_0	q_0	q_1
q_1	q_0	q_2
q_2	q_0	R
R	R	R

MF Table :

$Q \setminus \Sigma$	a	b
q_0	Yes	Yes
q_1	Yes	Yes
q_2	Yes	No
R	No	No

(Q. 9)

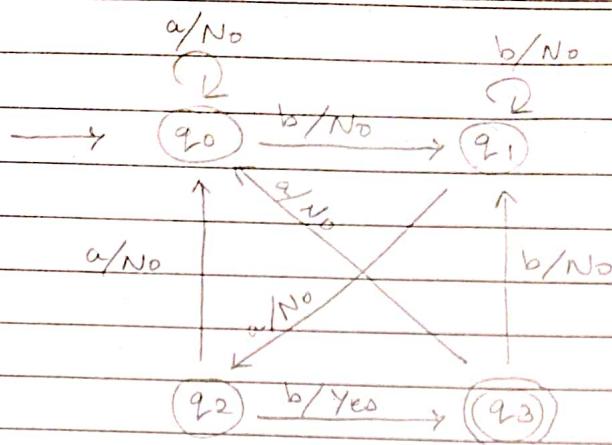


ST Table :

$Q \setminus \Sigma$	a	b
q_0	q_1	q_0
q_1	q_2	q_3
q_2	q_2	q_3
*	q_3	q_1

MF Table :

$Q \setminus \Sigma$	a	b
q_0	No	No
q_1	Yes	Yes
q_2	Yes	Yes
*	No	No

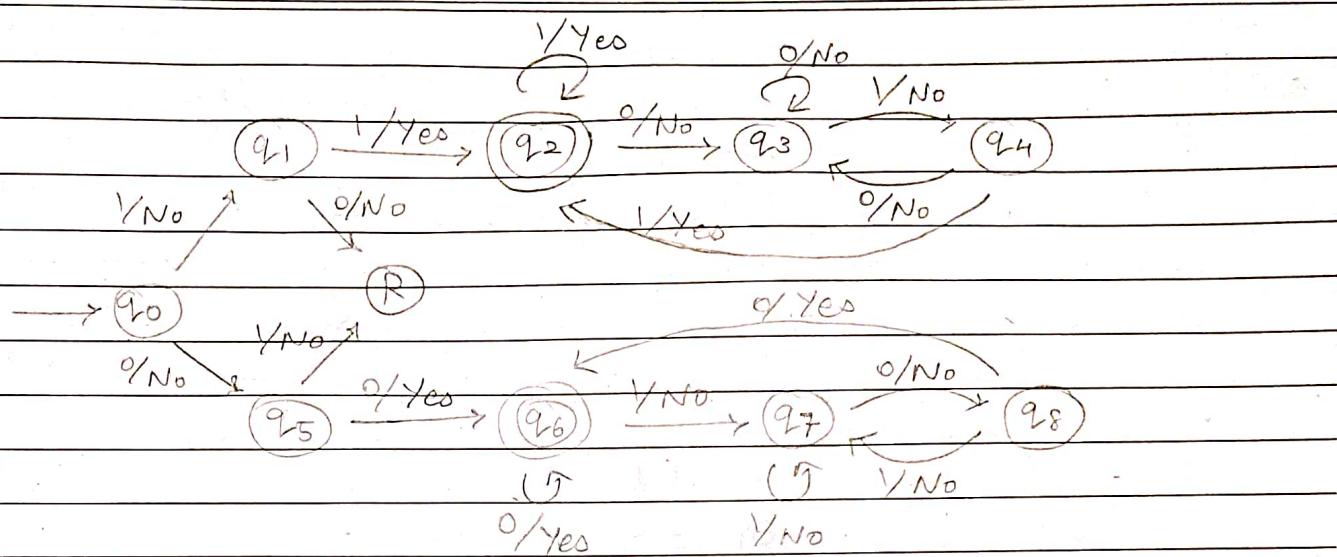
Q.10)

ST Table :

$Q \setminus \Sigma$	a	b
q_0	q_0	q_1
q_1	q_2	q_1
q_2	q_0	q_3
*	q_0	q_1

MF Table :

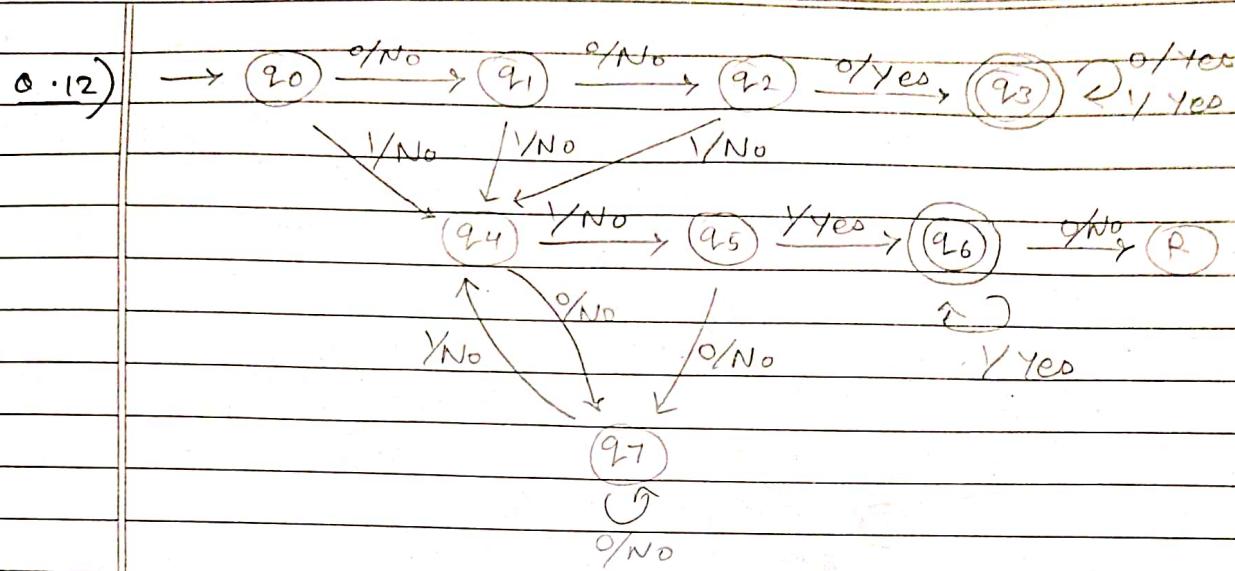
$Q \setminus \Sigma$	a	b
q_0	No	No
q_1	No	No
q_2	No	Yes
*	No	No



ST Table:

MF Table:

Q\S	0	1	Q\S	0	-1
q ₀	q ₅	q ₁	q ₀	No	No
q ₁	R	q ₂	q ₁	No	Yes
* q ₂	q ₃	q ₂	* q ₂	No	Yes
q ₃	q ₃	q ₄	q ₃	No	No
q ₄	q ₃	q ₂	q ₄	No	Yes
q ₅	q ₆	R	q ₅	Yes	No
* q ₆	q ₆	q ₇	* q ₆	Yes	No
q ₇	q ₈	q ₇	q ₇	No	No
q ₈	q ₆	q ₁	q ₈	Yes	No
R	R	R	R	No	No

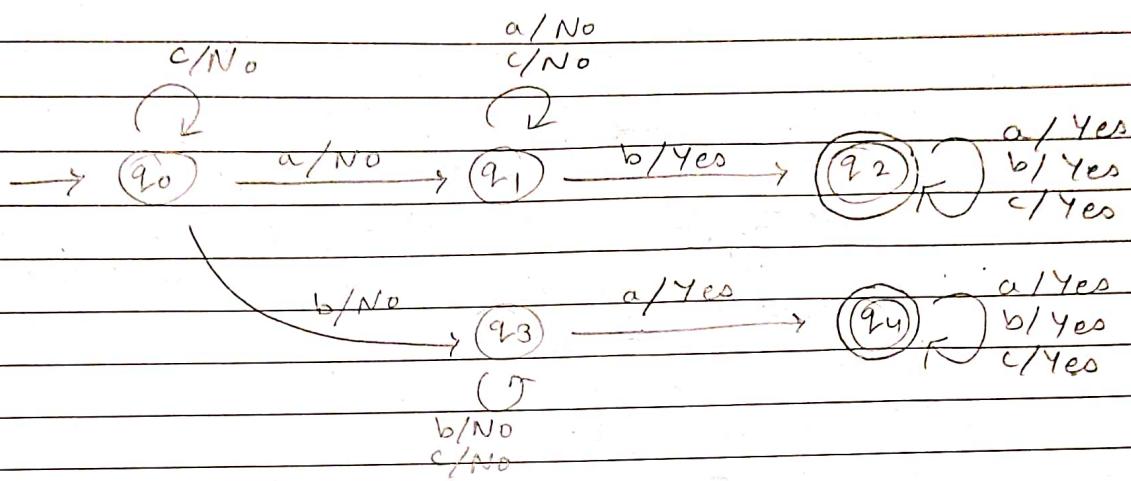


ST Table :

MF Table :

$Q \setminus \Sigma$	0	1	$Q \setminus \Sigma$	0	1
q0	q1	q4	q0	No	No
q1	q2	q4	q1	No	No
q2	q3	q4	q2	Yes	No
*	q3	q3	*	q3	Yes
q4	q7	q5	q4	No	No
q5	q7	q6	q5	No	Yes
*	q6	q6	*	q6	No
q7	q7	q4	q7	No	No
R	R	R	R	No	No

(Q.13)



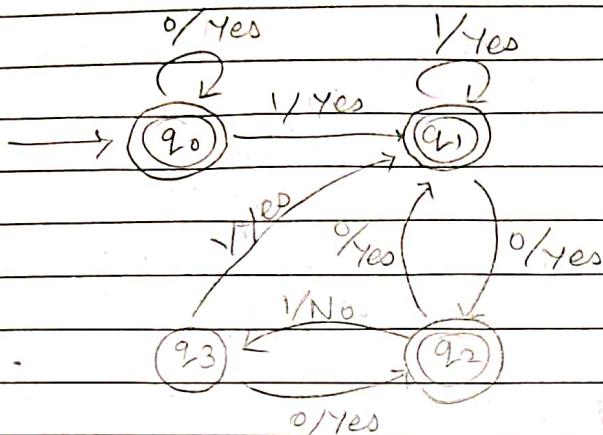
ST Table :

$Q \setminus \Sigma$	a	b	c
q_0	q_1	q_3	q_0
q_1	q_1	q_2	q_1
*	q_2	q_2	q_2
q_3	q_4	q_3	q_3
*	q_4	q_4	q_4

MF Table :

$Q \setminus \Sigma$	a	b	c
q_0	No	No	No
q_1	No	Yes	No
*	Yes	Yes	Yes
q_3	Yes	No	No
*	Yes	Yes	Yes

(Q.14)

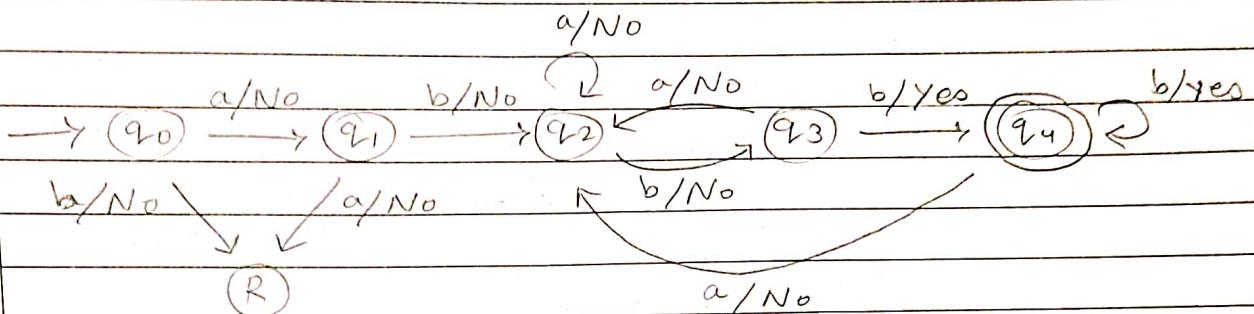
ST Table:

$\emptyset \setminus \Sigma$	0	1
$\times \quad q_0$	q_0	q_1
$\times \quad q_1$	q_2	q_1
$\times \quad q_2$	q_1	q_3
q_3	q_2	q_1

MF Table:

$\emptyset \setminus \Sigma$	0	1
$\times \quad q_0$	Yes	Yes
$\times \quad q_1$	Yes	Yes
$\times \quad q_2$	Yes	No
q_3	Yes	Yes

(Q. 15)



(Q. 16)

ST Table:

$Q \setminus \Sigma$	a	b
q_0	q_1	R
q_1	R	q_2
q_2	q_2	q_3
q_3	q_2	q_4
q_4	q_2	q_4
R	R	R

MF Table:

$Q \setminus \Sigma$	a	b
q_0	No	No
q_1	No	No
q_2	No	No
q_3	No	Yes
q_4	No	Yes
R	No	No