

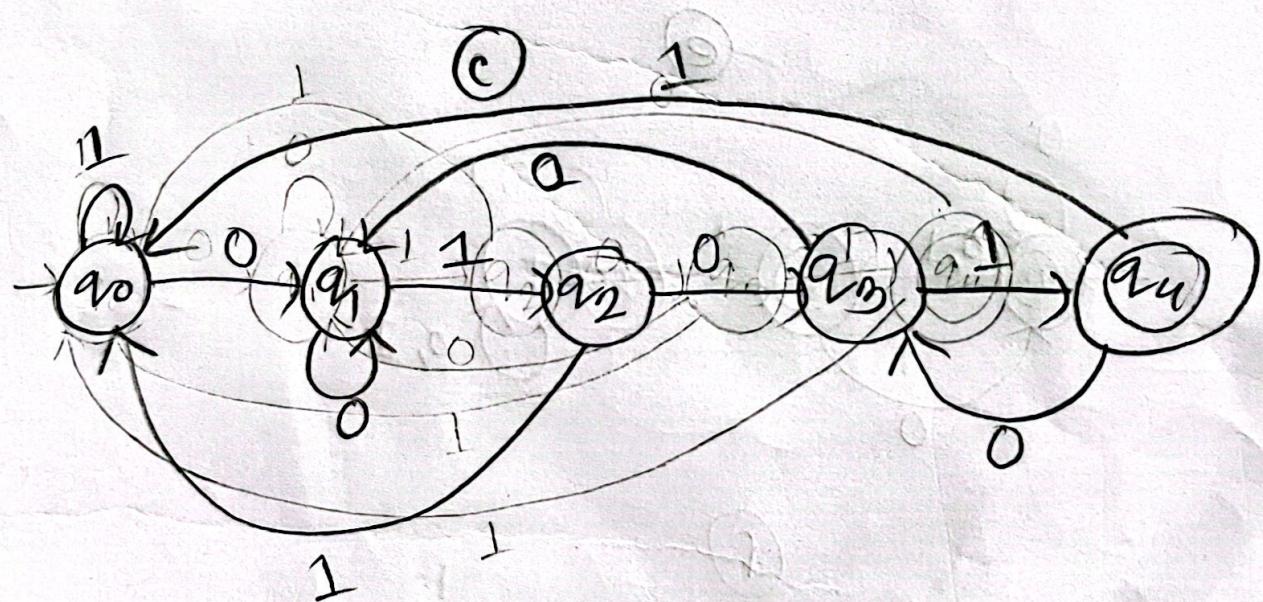
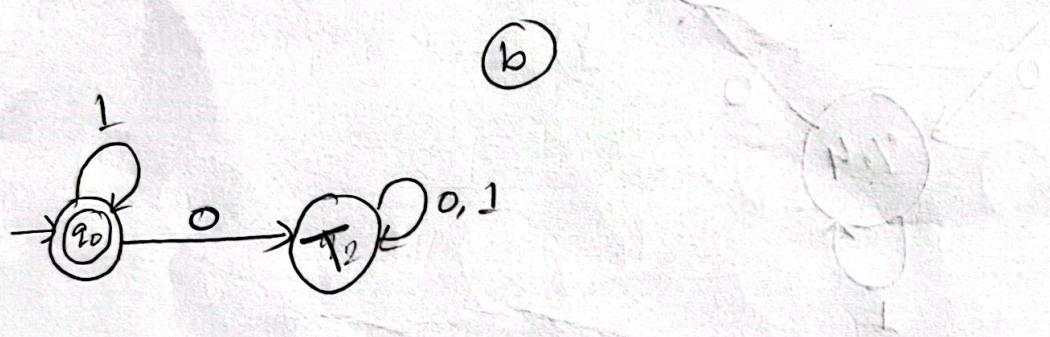
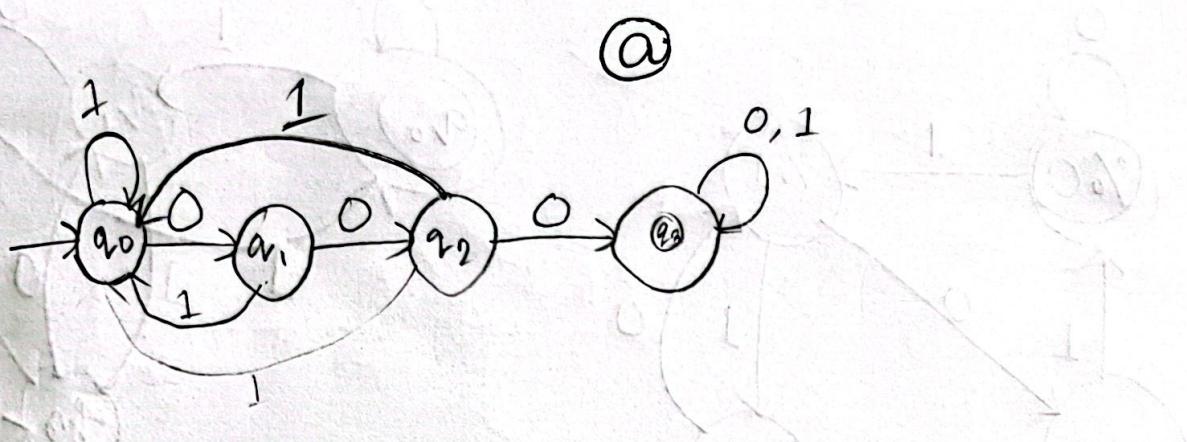
CSE 331

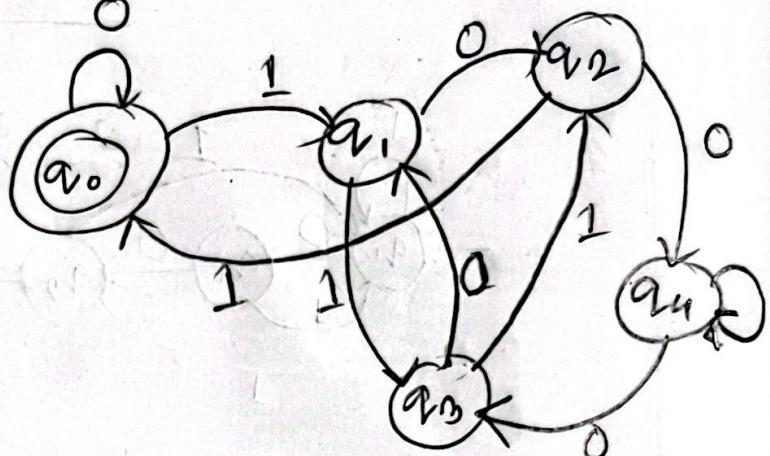
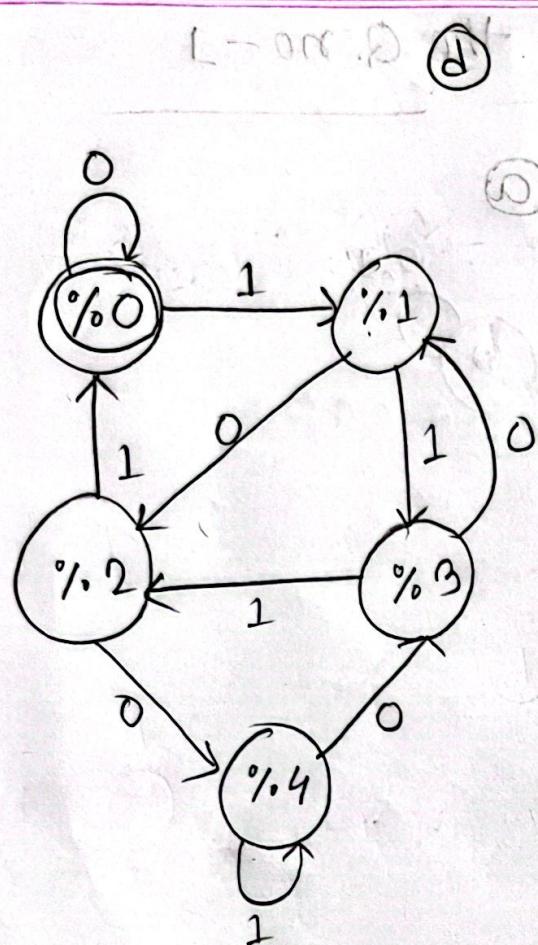
Name : Jannat Nur Hafsa

ID : 22299510

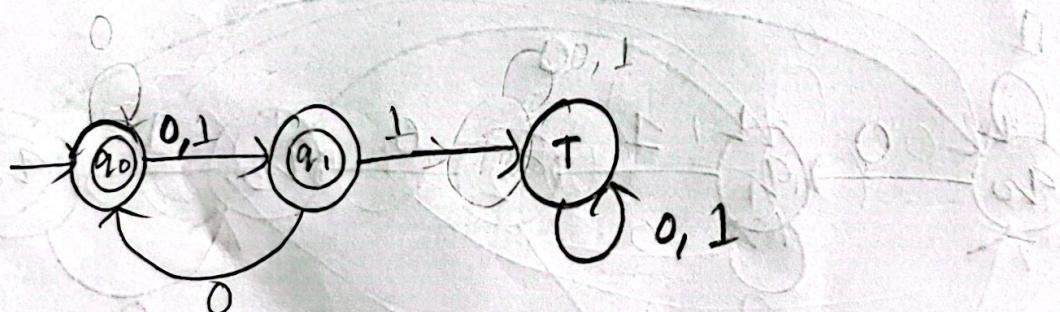
Sec : 13

Ans to the Q. no - 1

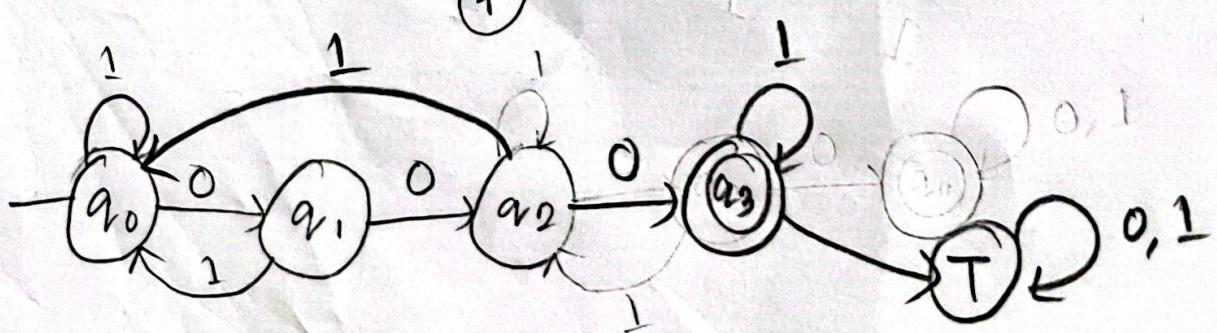


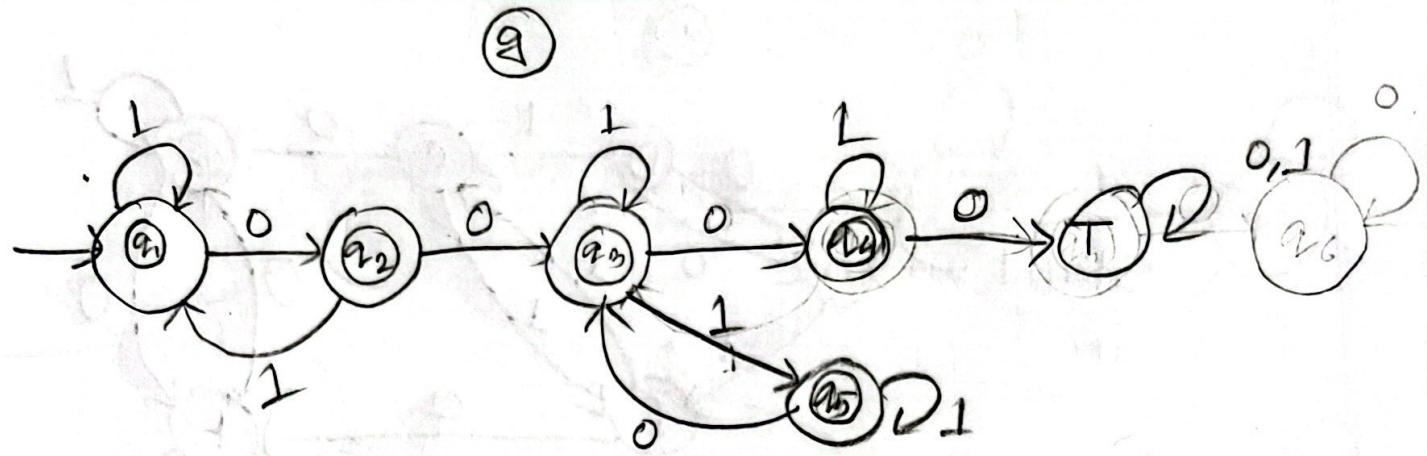


(e)

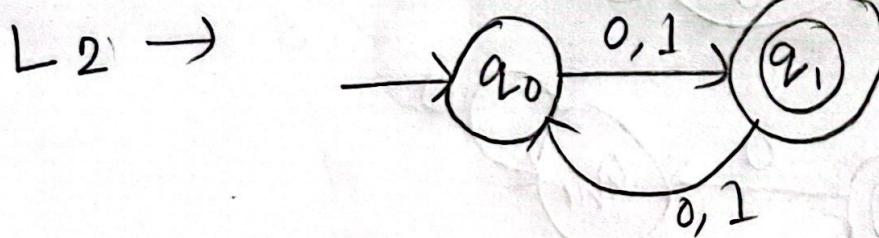
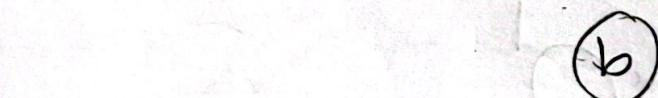
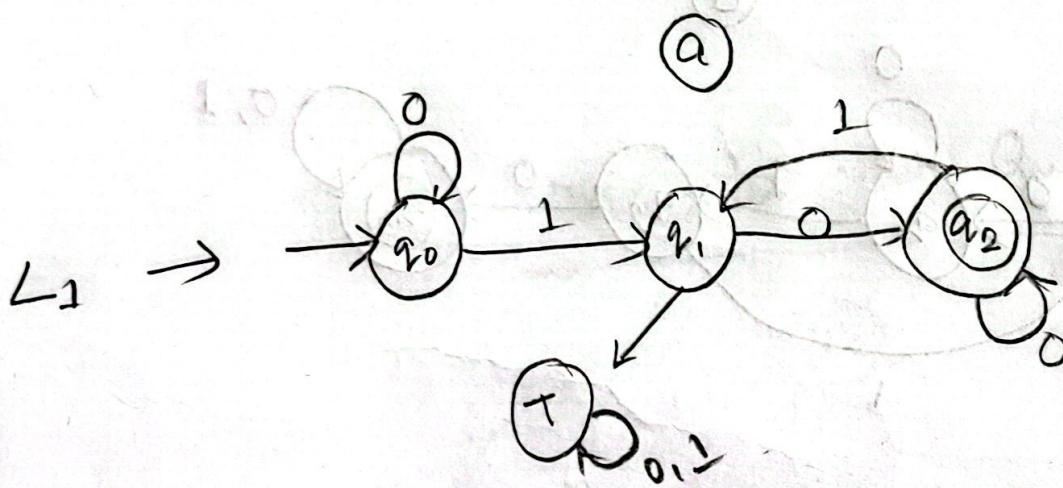


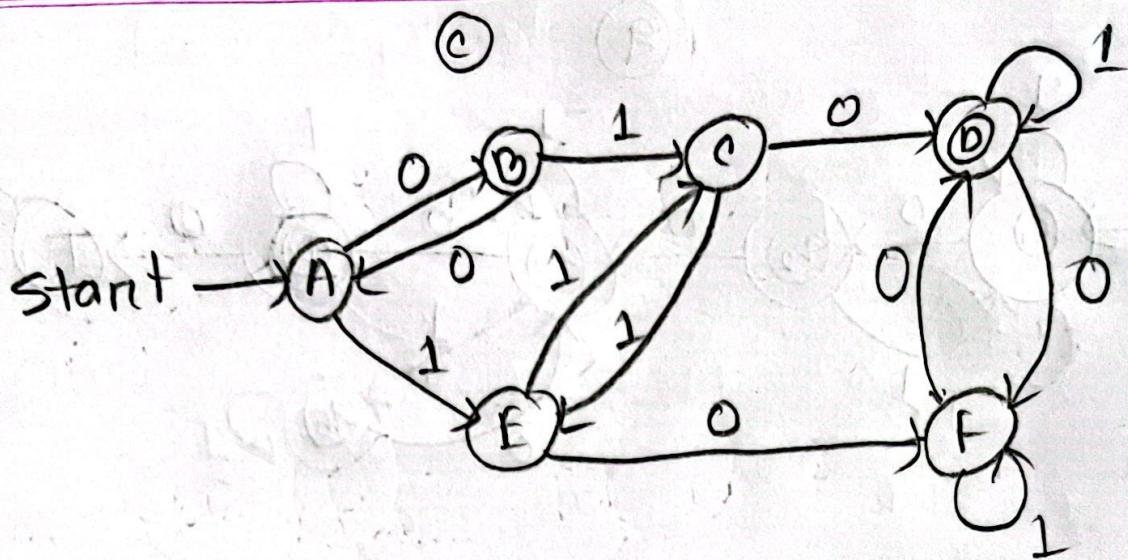
(f)



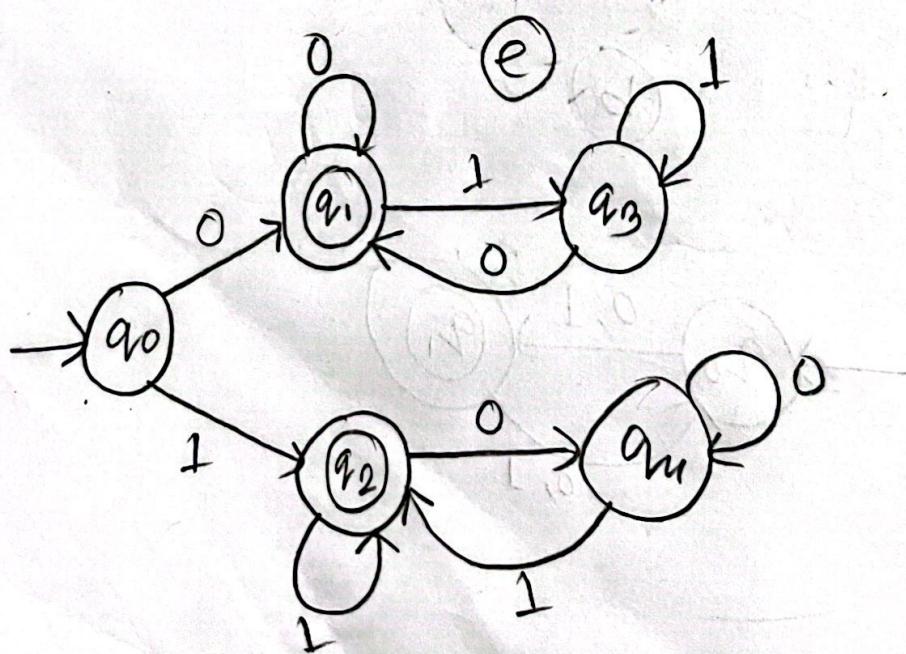
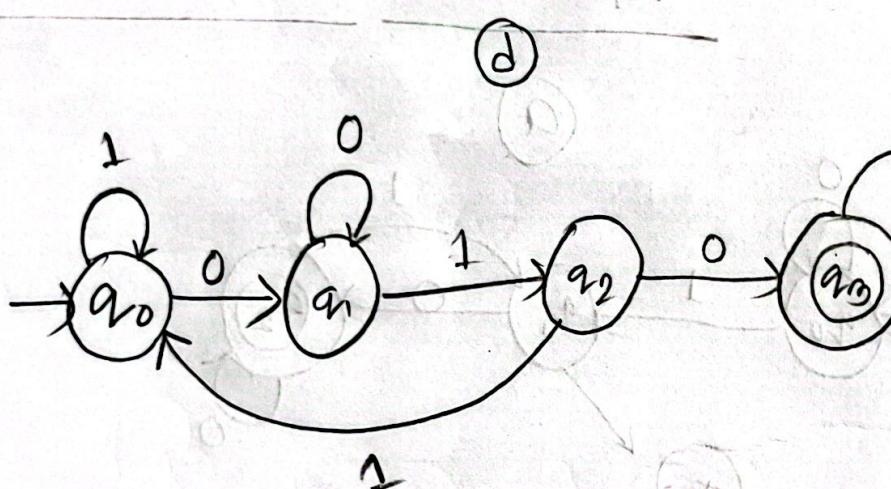


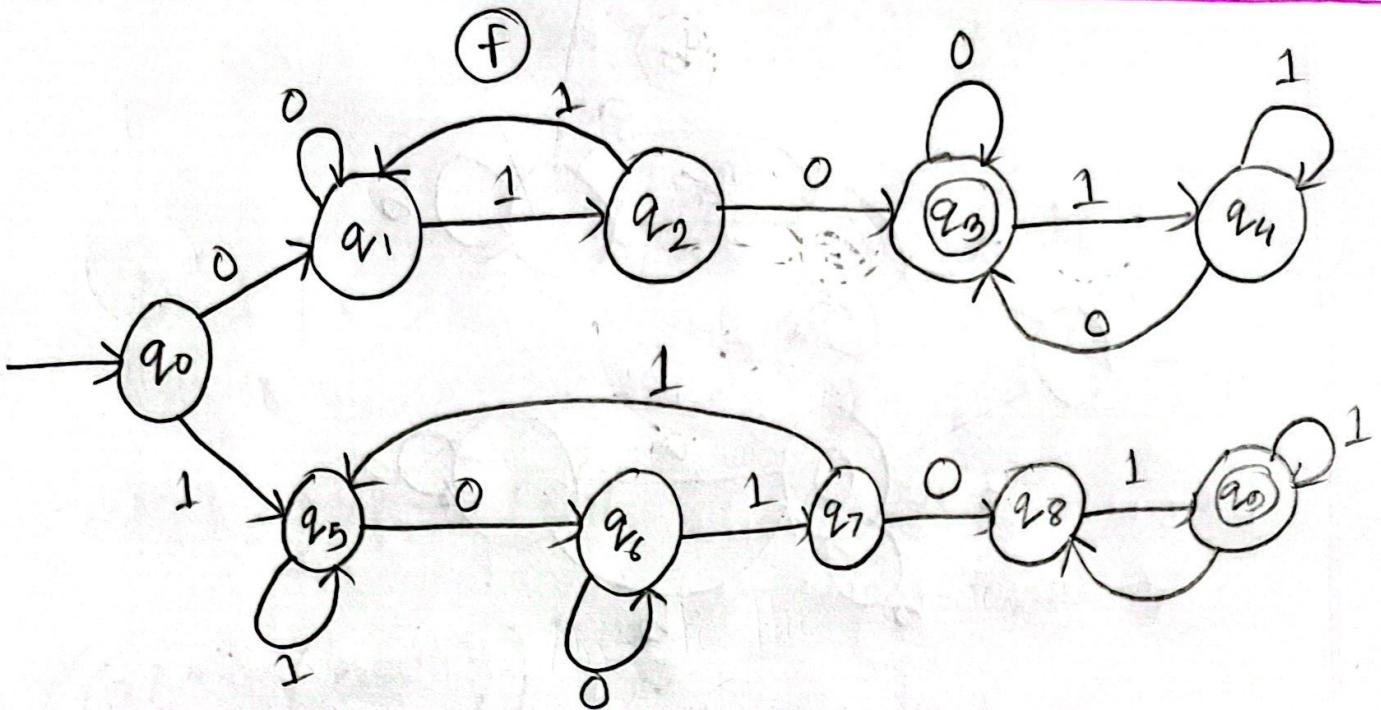
Ans to the Q.no-2



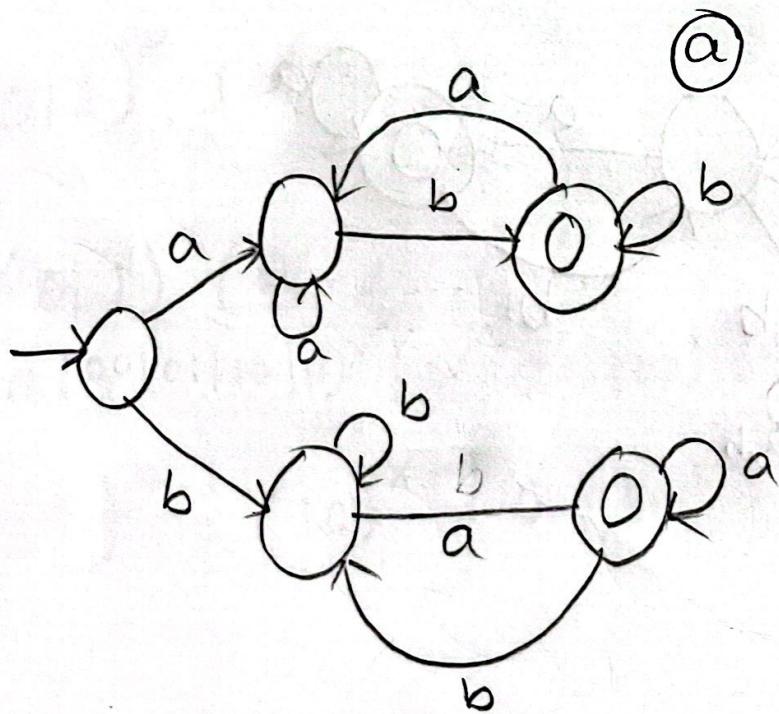


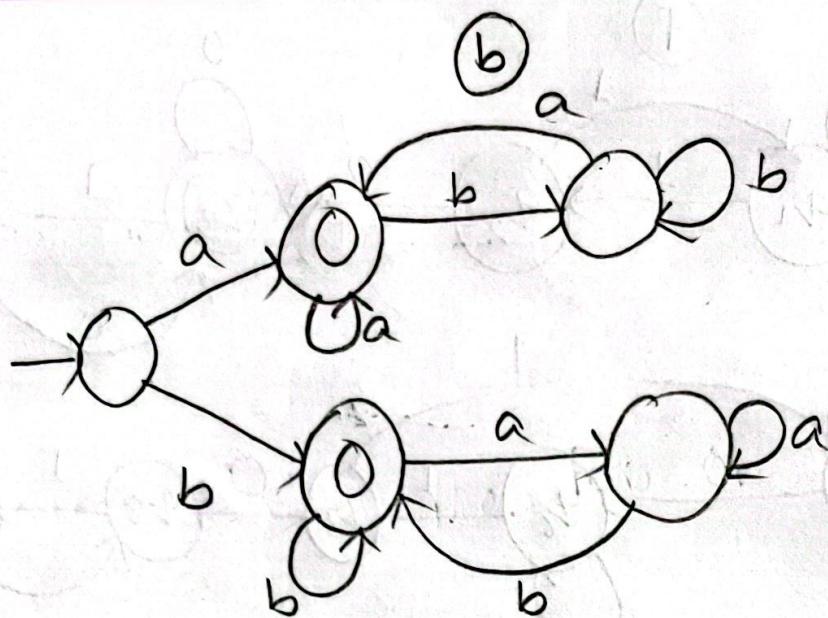
$S = 010, 0 \text{ left of } 2^m$



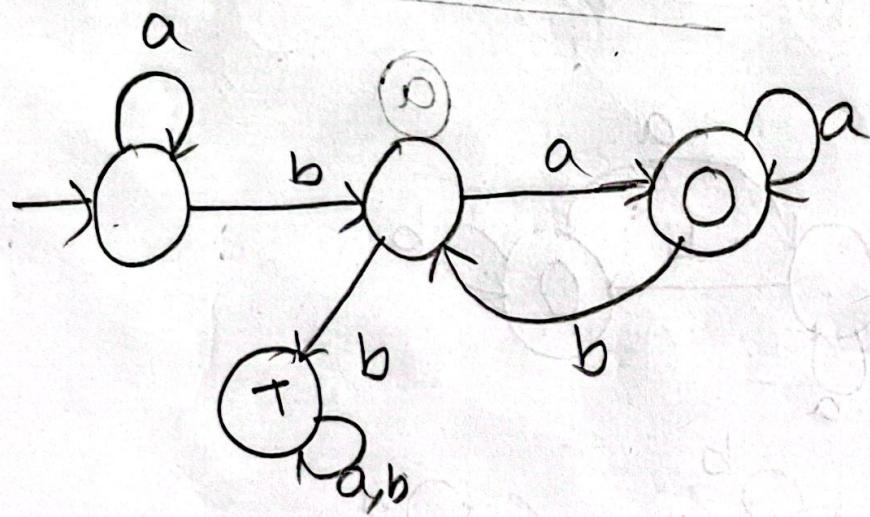


Ans to the Q. no 3





E or. D ext. C ext. enA



Ans to the Q. Ans-4

- ④ $(0^* 1 | \epsilon) (00(011)^*) (11(011)^*)$
- OP. $0^* 1 (00(011)^*) (11(011)^*)$
- ⑤ $(0111\epsilon) (10(00101)^*)^* (01\epsilon)$
- ⑥ $((ab^+) (ab^+))^* b^*$ on, $(b^* (ab)^+ b^*)^*$
- ⑦ $b^* | b^* a b^* | b^* a b^* a b^* a (a|b)^*$
on, $b^* (a+b^+|\epsilon)$ on, $b^* (ab^*|\epsilon)$
- ⑧ $(011)^* 1 (011)^* 1 (011)^*$
- ⑨ $0((011) (011))^* | 1 (011) ((011) (011))^*$
on, $0(001011|0111)^* | 1 (00111|0110)^*$
- ⑩ $(01)^* | (10)^* | 011 | \epsilon$ on, $(01110)^*$

Ans to the Q. no - 5

① $(1+\epsilon)(00^*1)^*0^*$

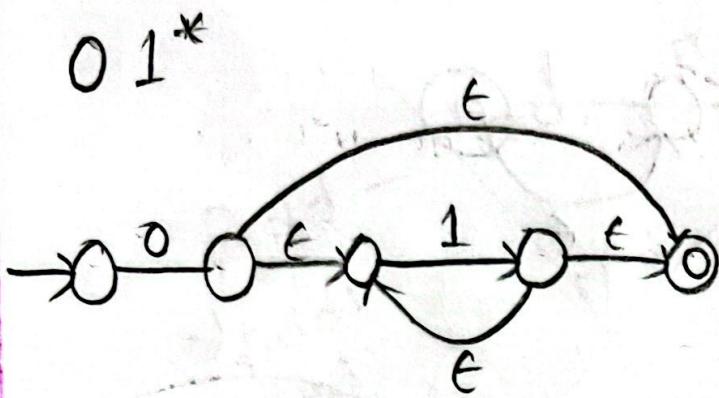
\Rightarrow The string can start either nothing or with 1. zero can be an sign before 1 or before any number of zeros, which might be repeated zero or more time time. At the end, any number of zeros can be appear.

② $(0+10)^*1^*$

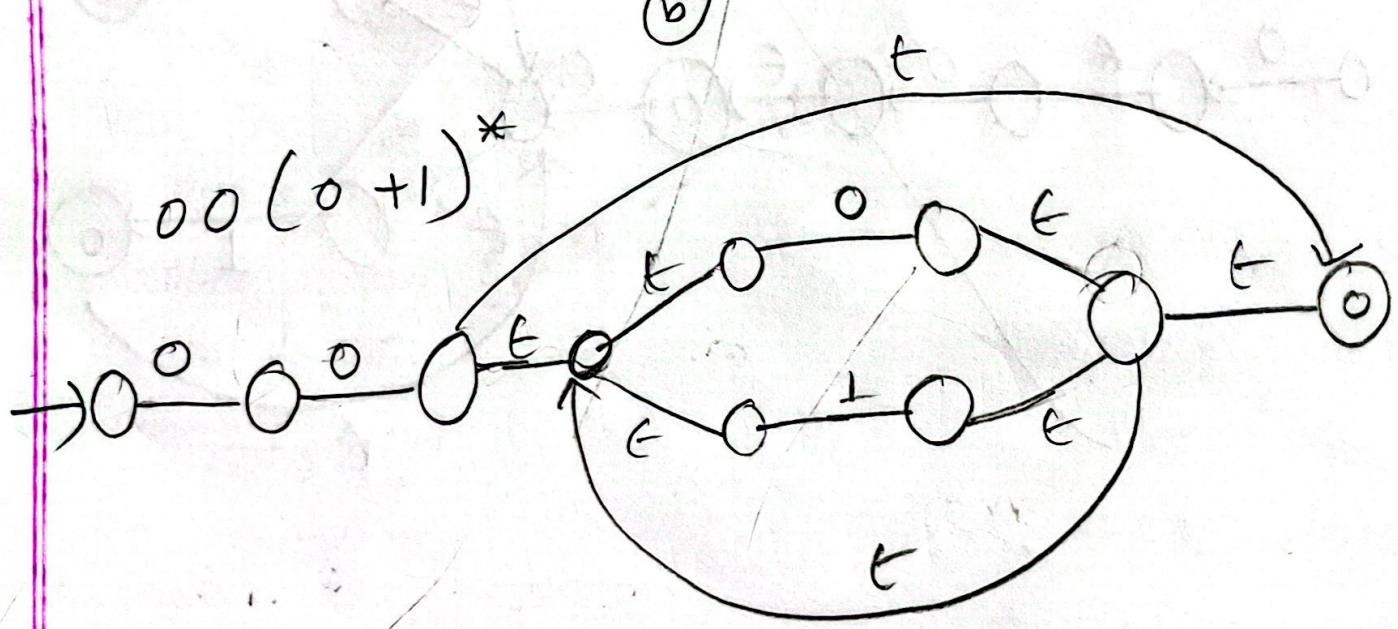
\Rightarrow A sequence of singk zero or '10' can be appear either zero or more timen before any number of 1's

Ans to the Q.no - 6

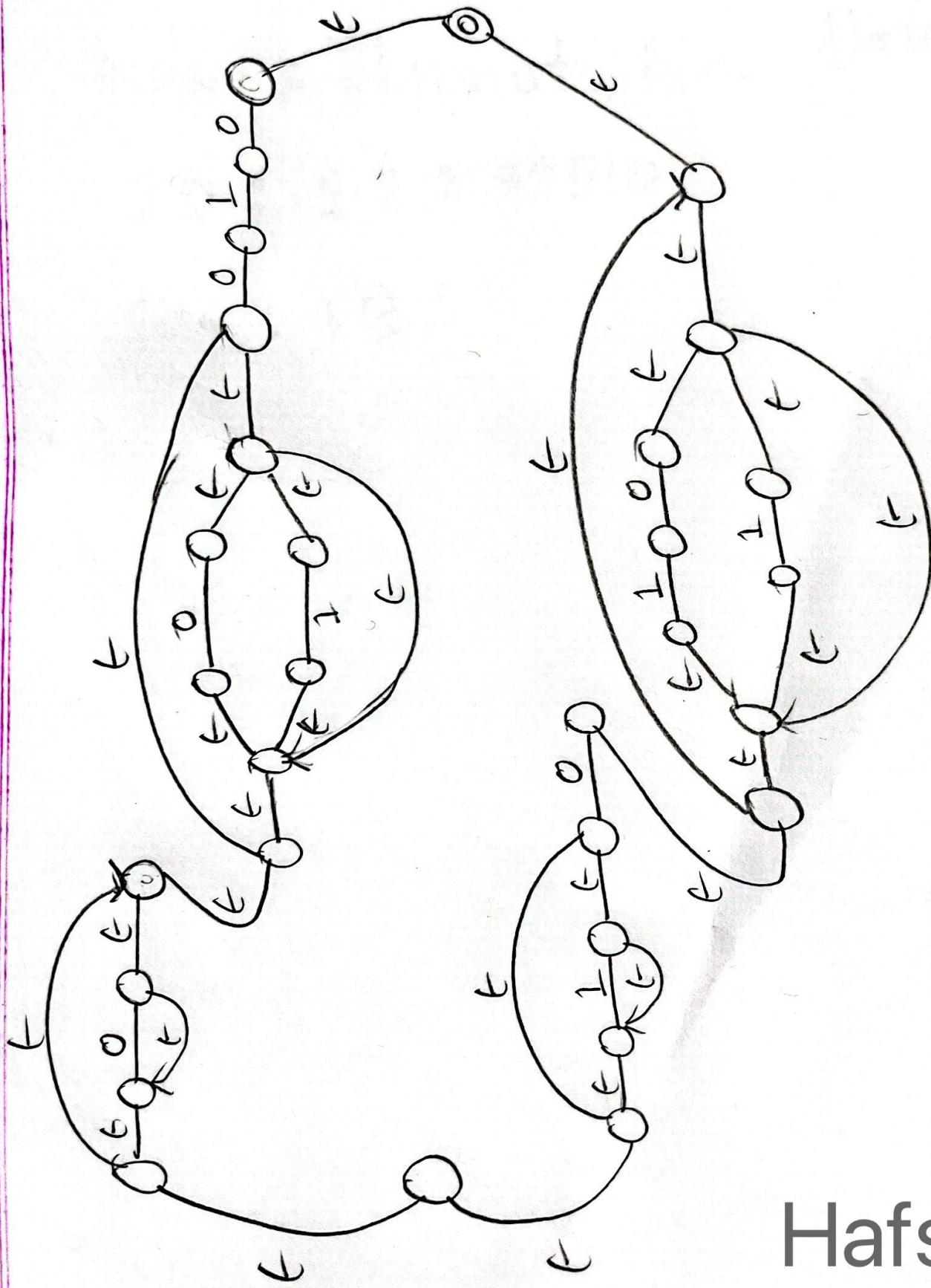
(a)



(b)



$$\textcircled{C} \quad 0^* (0+1)^* 010 + 1^* 0(10+1)^*$$



Hafsa