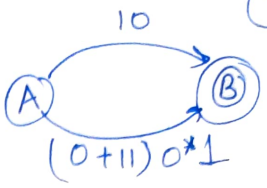
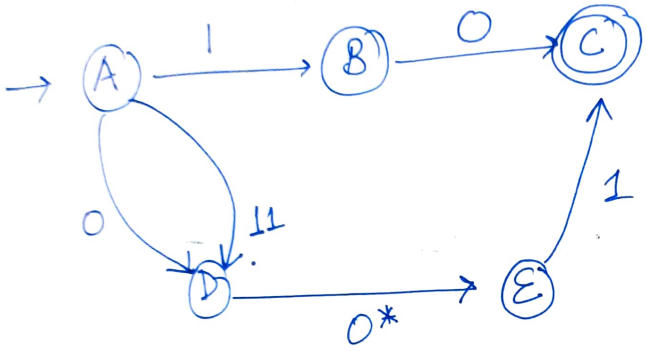
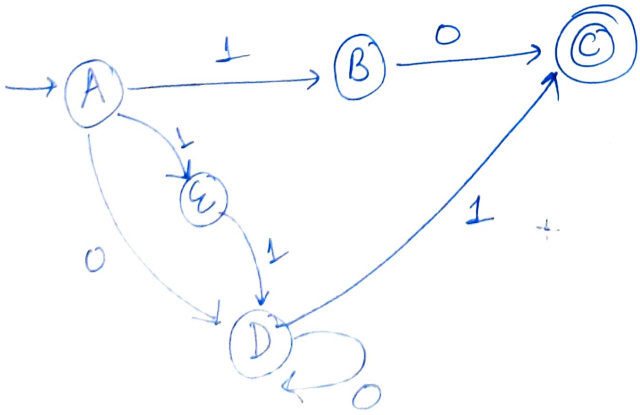
F-A (99)

4

4) $10 + (0+11)0^*1 \Rightarrow$







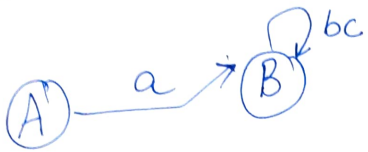
$\Leftarrow$ NFA

(1)

(3)

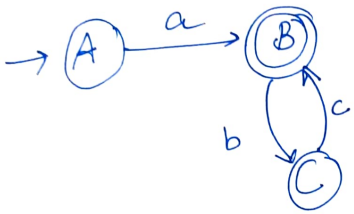
Pr

3) $a.(bc)^*$



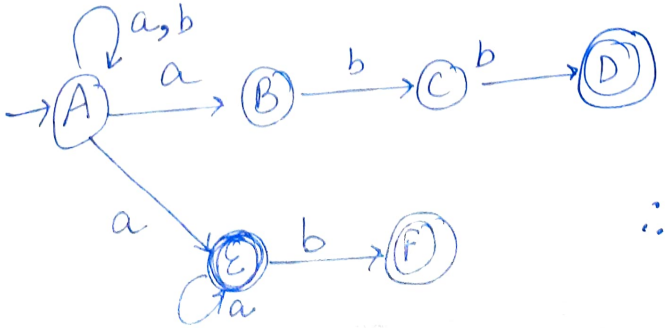
X

→ a , abc , abcbc , abcbcbc . . . .



(4) $(a|b)^*\ (abb|a^*b)$

$(a+b)^*\ (abb + a^*b) = abb + b$



NFA

∴ Convert to DFA.

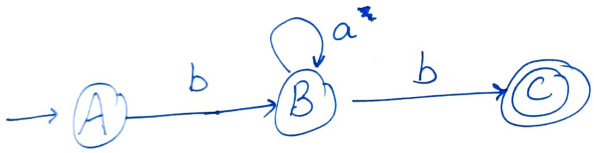
FA

Ques: Convert the following RE to their equivalent FA:

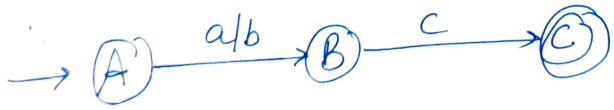
→ closure (self loop)

i) ba^*b

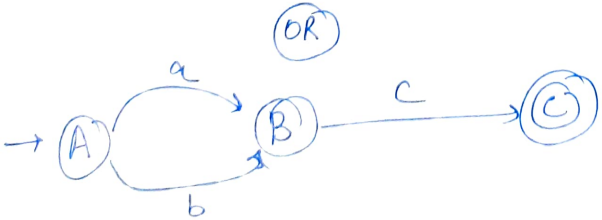
Ans 1) bb, bab, baab, baaab, ba...b,



2) $(a+b).c$



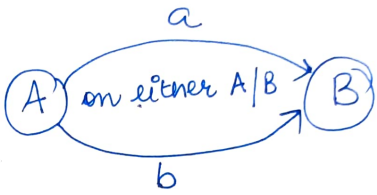
OR



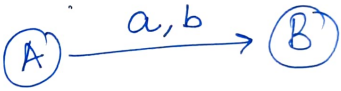
RE ⟹ DFA :-

- RULES :

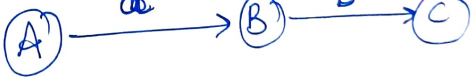
1) a + b : (2 states)



OR



2) a . b (3 states) :



3) a* :