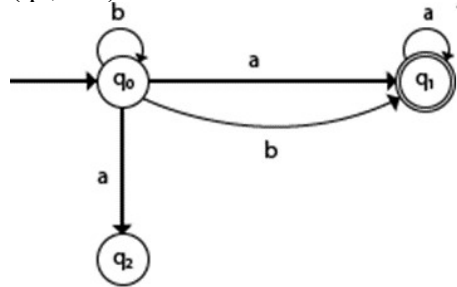


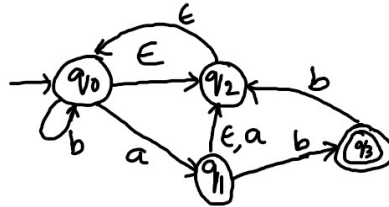
## TOC Question Bank-2

(a) Find  $\delta^*$  and multiple threads for transition of

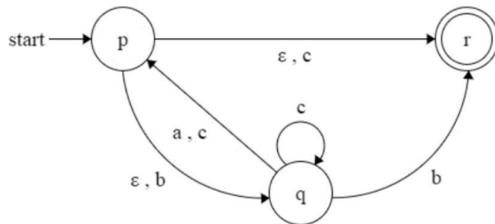
1.  $(q_0, baa)$



2.  $(q_2, aba)$  for

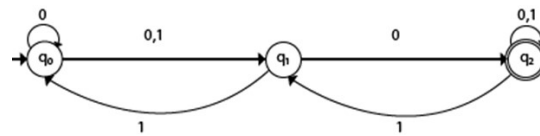


(b) Find  $\epsilon$ -closure of p, q, and r.

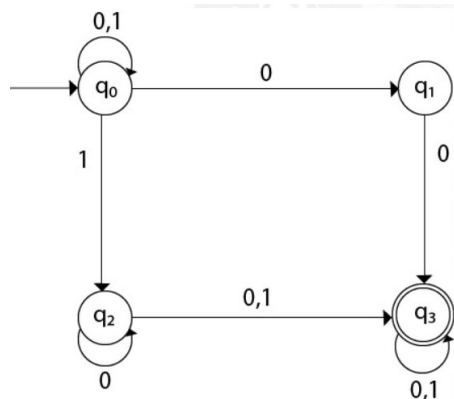


(c) Convert to DFA

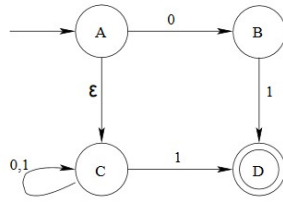
1.



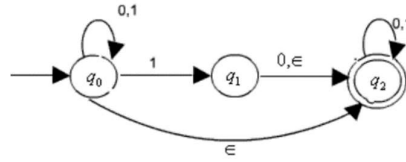
2.



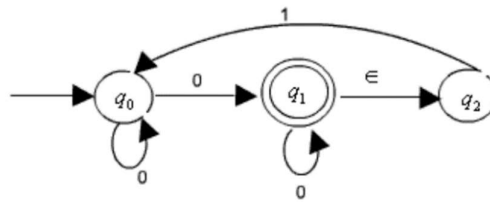
3.



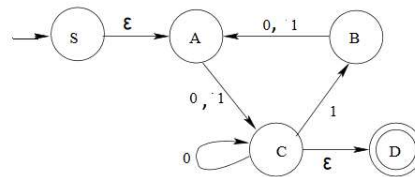
4.



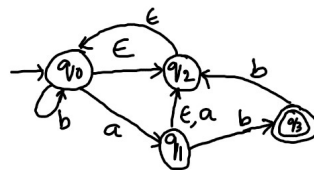
5.



5.



6.



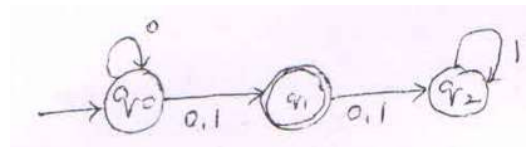
7.

$\delta_N$	$\epsilon$	a	b	c
$\rightarrow p$	$\{q, r\}$	$\{p\}$	$\{q\}$	$\{r\}$
q	$\emptyset$	$\{p\}$	$\{r\}$	$\{p, q\}$
$* r$	$\emptyset$	$\emptyset$	$\emptyset$	$\emptyset$

8.

$\delta_N$	0	1
$\rightarrow p$	$\{q, a\}$	$\{q\}$
$* q$	$\{r\}$	$\{q, r\}$
$\lambda$	$\{s\}$	$\{p\}$
$* s$	$\emptyset$	$\{p\}$

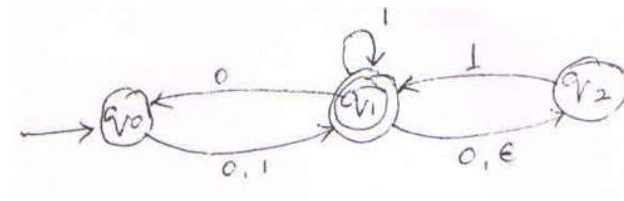
9.



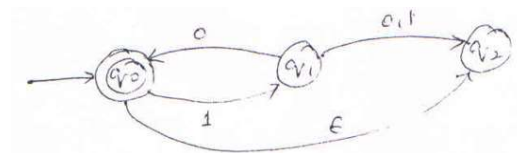
10.

$\delta_N$	$\epsilon$	a	b	c
$\rightarrow p$	$\{q, r\}$	$\emptyset$	$\{q\}$	$\{r\}$
$q$	$\emptyset$	$\{p\}$	$\{\lambda\}$	$\{p, q\}$
$* r$	$\emptyset$	$\emptyset$	$\emptyset$	$\emptyset$

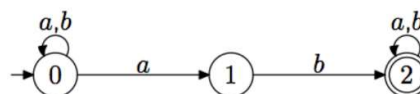
11.



12.



13.



14.

