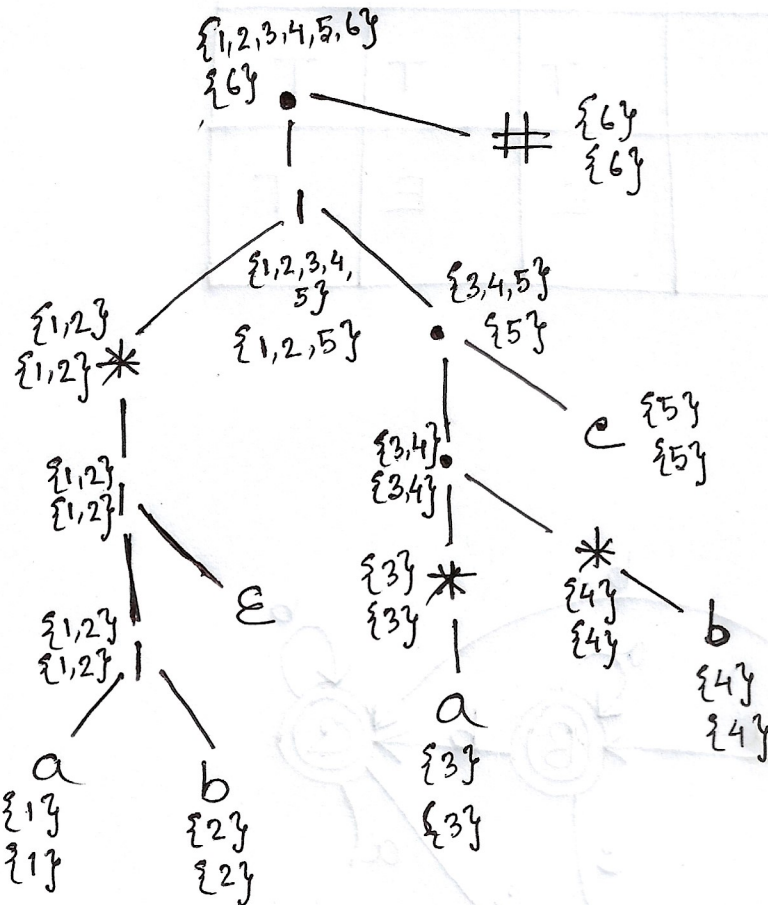## Ans. to Q No - 1

The augmented regen $\Rightarrow \left((a|b|\varepsilon)^* | (a^*b^*)c \right) \#$

The syntax tree with firstpos and lastpos:

symbol node	Node	followpos
a	1	$\{1, 2, 6\}$
b	2	$\{1, 2, 6\}$
a	3	$\{3, 4, 5\}$
b	4	$\{4, 5\}$
c	5	$\{6\}$
#	6	$\emptyset$

D-states	a	b	c
$\{1,2,3,4,5,6\} = A$	A	B	C
$\{1,2,4,5,6\} = B$	D	B	C
$\{6\} = C$	T	T	T
$\{1,2,6\} = D$	D	D	T

DFA