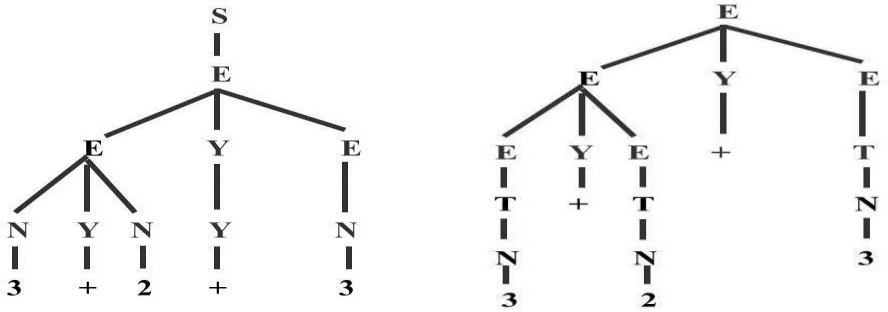
CSC 610 quiz4 2 points Student Name:

4.0 There is a CFG for every regular language. (True/False) **True**

4.1 Which of the parse trees is generated by the following CFG? Select the correct parse tree (by circling the tree or writing "answer" next to the tree).

S → E
E → T | E Y E
T → N | (T Y T)
Y → + | -
N → 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 . . .

Answer



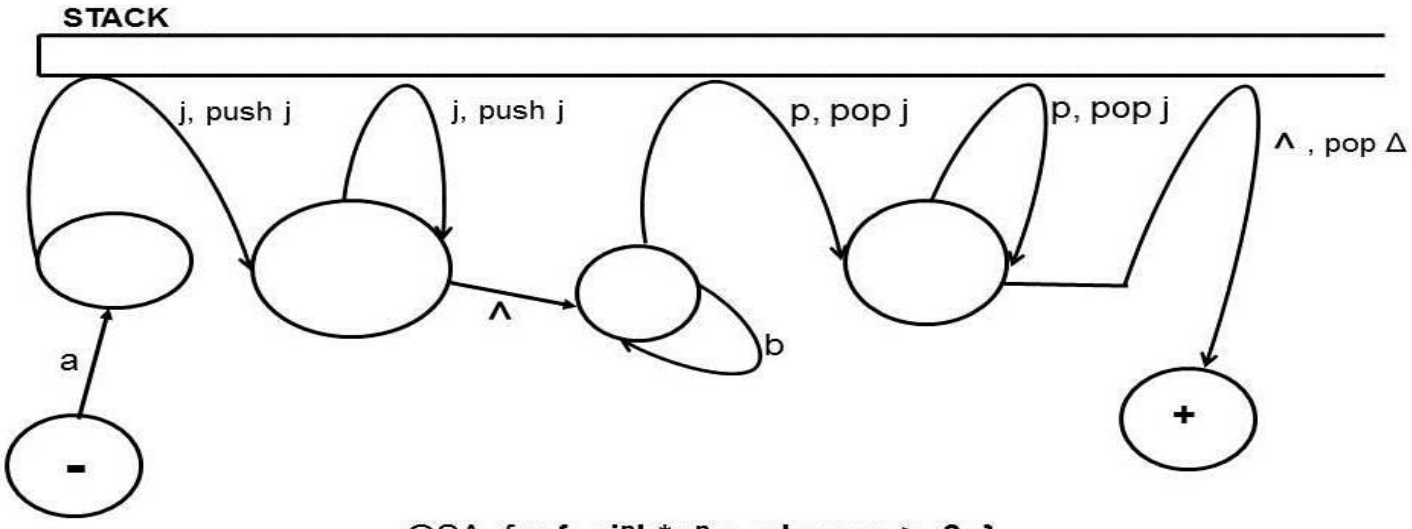
4.2 Write a CFG for L_2 = { aj^nb*p^na*: where n >= 0 }

S → aXA
X → jXp | B
B → bB | ^
A → aA | ^

4.3 Write a CFG for L_3 = { aj^nb*p^n : where n > 0 }

S → aX
X → jXp | jBp
B → bB | ^

4.4 Draw an One-Stack automaton or a PDA for L_3 = { aj^nb*p^n : where n > 0 }



OSA for { aj^nb*p^n : where n > 0 }