CMPE 222
Spring 2018
Popup Quiz #3

NAME:

ID:

GRADE:

L is the following language :

$L = \{\omega \mid \omega = \text{(01)}^a 1^{2a} 0^b,\ a \geq 1 \text{ and } b \geq 0\}$ and $\Sigma = \{0,1\}$

1. **(20 pts)** Write 5 strings in L and 5 strings __not__ in L (all strings you write should be from the alphabet Σ)

2. **(40 pts)** Design a PDA (push-down automaton) that recognizes L.

3. **(40 pts)** Write a context-free grammar that describes strings in L.