CMPE 222
Spring 2018
Popup Quiz #2 (Tuesday section)

Name Lastname:
ID:

Duration   : 35 mintes

SCORE Σ	: 1.a :	1.b.	1.c.	2.a	2.b.	2.c.

(50 pts)
1. Consider the following grammar G:

```
S → BAB
A → Aa | ε
B → bB | b
```

A. Write G as a four-tuple (V, Σ, S, R) where V is the set of variables, Σ is the set of terminals, S is the start variable and R is the set of rules.
B. Is G a regular grammar? (Why/why not?)
C. Describe the language that G generates as a regular expression.
D. Write a regular grammar equivalent to G.

(50 pts)
2. Consider the following regular expression:

01*(0 U 1*)

a) Write 5 strings that belong to the language described by this regular expression.
b) Write 5 strings that do NOT belong to the language described by this regular expression
c) Design an NFA that recognizes this language.
d) Write a regular grammar that describes this language.

ANSWERS: