

**CS 302  
QUIZ 3****12 October, 2015****Duration : 15 minutes*****Do not forget to write your name on your paper !*****QUESTION**

**(a)** (5 pts) Write down a regular expression for the set of string of 0's and 1's with no pair of consecutive 1's

**(b)** (5 pts) Is the uni-symbol language  $L = (a^n ; n \text{ an even number})$  a regular language ? If so find an NFA that accepts it ; if not prove it by the pumping lemma.

**ANSWER****(a)** **$(e+1).(0.1.0^*)^*+0^*$** **(b)**