

CS 302
QUIZ 1

13 February, 2020

Duration : 15 minutes

Do not forget to write your name on your paper !

QUESTION

(a) (5 pts) For the event set $\Sigma = \{0,1\}$ draw three graphs of any **DFA**, **NFA** and **epsilon-NFA**, each with 3 states.

(b) (5 pts) If Σ denotes an alphabet that includes the capital letters of the Turkish alphabet, describe a finite state machine that accepts all the strings that have at least one **substring** '**BABA**' in it. Is your finite state machine a **DFA** or an **NFA**? Explain.