



Ma2201/CS2022
Quiz 1101

Foundations of C.S.

Spring, 2021
Online Quiz

1. (5 pts) Let $L = \{a^{3i+3j}b^ic^j \in \{a,b,c\}^* \mid i,j \in \mathbb{N}\}$. Design a push down automaton, standard and not extended, for this language. Describe briefly how it works.

2. (5 pts) Let $M = \{a^{3i+3j}b^ic^i \in \{a,b,c\}^* \mid i,j \in \mathbb{N}\}$. Use the pumping lemma for context free languages to show that L is not context free.