CS 302
QUIZ 5 (REMOTE)

26 March, 2020

ANSWER*(10 pts)*

The pushdown automaton is $P = (Q , \Sigma , \Gamma , \delta , q_0 , Z_0 , F)$

where the transition function δ *is composed of the following transitions :*

$(q_0 , e , Z_0) \rightarrow (f , Z_0)$ *(may accept* e *by* $L(P)$*)*

$(q_0 , e , Z_0) \rightarrow (q_0 , e)$ *; (may accept* e *by* $N(P)$*)*

$(q_0 , a , Z_0) \rightarrow (q_0 , aZ_0)$; $a \in \Sigma$

$(q_0 , b , a) \rightarrow (q_0 , ba)$; $a,b \in \Sigma$

$(q_0 , b , a) \rightarrow (q , a)$; $a,b \in \Sigma$

$(q_0 , e , a) \rightarrow (q , a)$; $a \in \Sigma$

$(q , a , a) \rightarrow (q , e)$

$(q , e , Z_0) \rightarrow (f , Z_0)$ *acceptance by* $L(P)$ *; OR*

$(q , e , Z_0) \rightarrow (q , e)$ *acceptance by* $N(P)$