**CS 302 QUIZ 5** 

18 November, 2020

Duration: 15 minutes

Do not forget to write your name on your paper!

## **ANSWERS**

(a) 
$$(3 pts) G = (\{S\}, \{a,b\}, P, S)$$

$$P: S \rightarrow aSa \mid bSb \mid e$$

(b) (3 pts) 
$$G = (\{S\}, \{a,b\}, P', S)$$

$$P': S \rightarrow aSa \mid bSb \mid a \mid b \mid e$$

(b) 
$$(4 pts) G = (\{S\}, \{a,b,c\}, P", S)$$

$$P": S \rightarrow aSa \mid bSb \mid c$$