EICO022 | TEORIA DA COMPUTAÇÃO | 2017/2018 - 1° SEMESTRE

Exercise 10 – Properties of Context-Free Languages

Consider the following context-free grammar (CFG) G:

$$\begin{split} S &\rightarrow AX \\ A &\rightarrow aAa \mid bAb \mid c \\ X &\rightarrow aX \mid Xc \mid A \mid \epsilon \end{split}$$

(a) Obtain the CNF (Chomsky Normal Form) equivalent of G. Show each step of the conversion process.