Assignment 11

Automata & Theory of Computation

Student ID: **Name:**

1. Find an s-grammar for $L = (aaa^*bb^*a)$.

$S \to aA$
$A \to aB$
$B \to aB \mid bC$
$C \to bC \mid aD$
$D \to \lambda$

=

$S \to aA$
$A \to aB$
$B \to aB \mid bC$
$C \to bC \mid a$

2. Show that the following grammar is ambiguous:

$S \to A_1A_2,$
$A_1 \to aaA_1 \mid \lambda,$
$A_2 \to aaaaA_2 \mid \lambda.$

$(aa)^*(aaaa)^*$