Name KEY

ID#

CSE431 – Quiz 2
2/24/16

1. (25 points) Is the following grammar LL(1)? If it isn't LL(1), rewrite the grammar to make it LL(1). You may assume that the grammar is not ambiguous.

S → BA$
A → aA
  | aB
  | λ
B → BA
  | d

① S → BA$
② A → aW
③ | λ
④ W → A
⑤ | B
⑥ B → XY
⑦ X → d
⑧ Y → AY
⑨ | λ

2. (75 points) Construct the Derives-λ, FIRST, FOLLOW, and PREDICT sets for your answer to question 1.

	λ	FIRST	FOLLOW
S	F	d	–
A	T	a	$, a,
W	T	a, d	$, a
B	F	d	a, $
X	F	d	a, $
Y	T	a,	a, $

	PREDICT
1	d
2	a
3	a, $
4	a, $
5	d
6	d
7	d
8	a, $
9	a, $