

Step	Parser Action	Remaining Input	Parse Stack
(1)	Predict 22	begin A:=BB-314+A; end\$	< system goal>
(2)	Predict 1	begin A:=BB-314+A; end\$	<program>\$
(3)	Match	begin A:=BB-314+A; end\$	begin <statement list> end\$
(4)	Predict 2	A:=BB-314+A; end\$	<statement list> end\$
(5)	Predict 5	A:=BB-314+A; end\$	<statement> <statement tail> end\$
(6)	Match	A:=BB-314+A; end\$	ID:=<expression>; <statement tail> end\$
(7)	Match	:=BB-314+A; end\$:=<expression>; <statement tail> end\$
(8)	Predict 14	BB-314+A; end\$	<expression>; <statement tail> end\$
(9)	Predict 18	BB-314+A; end\$	<primary> <primary tail>; <statement tail> end\$
(10)	Match	BB-314+A; end\$	ID <primary tail>; <statement tail> end\$
(11)	Predict 15	-314+A; end\$	<primary tail>; <statement tail> end\$
(12)	Predict 21	-314+A; end\$	<add op> <primary> <primary tail>; <statement tail> end\$
(13)	Match	-314+A; end\$	- <primary> <primary tail>; <statement tail> end\$
(14)	Predict 19	314+A; end\$	<primary> <primary tail>; <statement tail> end\$
(15)	Match	314+A; end\$	INTLIT <primary tail>; <statement tail> end\$
(16)	Predict 15	+A; end\$	<primary tail>; <statement tail> end\$
(17)	Predict 20	+A; end\$	<add op> <primary> <primary tail>; <statement tail> end\$
(18)	Match	+A; end\$	+<primary> <primary tail>; <statement tail> end\$
(19)	Predict 18	A; end\$	<primary> <primary tail>; <statement tail> end\$
(20)	Match	A; end\$	ID <primary tail>; <statement tail> end\$
(21)	Predict 16	; end\$	<primary tail>; <statement tail> end\$
(22)	Match	; end\$; <statement tail> end\$
(23)	Predict 4	end\$	<statement tail> end\$
(24)	Match	end\$	end\$
(25)	Match	\$	\$

figure 5-10

	ID	INTLIT	:=	,	;	+	-	()	begin	end	read	write	\$
<program>										1				
<statement list>	2											2	2	
<statement>	5											6	7	
<statement tail>	3										4	3	3	
<expression>	14	14						14						
<id list>	8													
<expr list>	11	11						11						
<id tail>				9					10					
<expr tail>				12					13					
<primary>	18	19						17						
<primary tail>				16	16	15	15		16					
<add op>						20	21							
<system goal>										22				

Figure 5.5 The LL(1) Table for Micro

1	<program>	→ begin <statement list> end
2	<statement list>	→ <statement> <statement tail>
3	<statement tail>	→ <statement> <statement tail>
4	<statement tail>	→ λ
5	<statement>	→ ID := <expression> ;
6	<statement>	→ read (<id list>) ;
7	<statement>	→ write (<expr list>) ;
8	<id list>	→ ID <id tail>
9	<id tail>	→ , ID <id tail>
10	<id tail>	→ λ
11	<expr list>	→ <expression> <expr tail>
12	<expr tail>	→ , <expression> <expr tail>
13	<expr tail>	→ λ
14	<expression>	→ <primary> <primary tail>
15	<primary tail>	→ <add op> <primary> <primary tail>
16	<primary tail>	→ λ
17	<primary>	→ (<expression>)
18	<primary>	→ ID
19	<primary>	→ INTLIT
20	<add op>	→ +
21	<add op>	→ -
22	<system goal>	→ <program> \$

Figure 5.1 A Micro Grammar in Standard Form