Quiz for week 11

Choose exactly one correct option in the following questions

* This form will record your name, please fill your name.

1

The grammar A —> AA I (A) I ε is not suitable for top down predictive-parsing because the grammar is . . . (2 Points)

- ambiguous
- left-recursive ✓
- right-recursive
- non regular grammar

2

Given LL(1) grammar G. The alphabet of the stack of top down predictive parser of G contains the bottom symbol and (2 Points)

- Non terminal symbols
- Terminal symbols
- All symbols of G ✓
- All the options are incorrect

3

Which of the following does not belong to a configuration of predictive parsing algorithm? (2 Points)

- ◯ the current state ✓
- ◯ location of the input pointer
- ◯ content of the stack

4

Consider the grammar shown below

S → i E t S S' | a

S' → e S | ε

E → b

In the predictive parse table. M, of this grammar, the entries M[S', e] and M[S', $] respectively are (2 Points)

- ◯ {S' → e S} and {S' → ε} ✓
- ◯ {S' → e S} and error
- ◯ {S' → ε} and accept
- ◯ {S' → e S, S'→ ε} and {S' → ε}

5

For the grammar below, a partial LL(1) parsing table is also presented along with the grammar (some rows is absent). Entries that need to be filled are indicated as E1, E2, and E3. $ indicates end of input

S -> aAC | Bb
A -> eD
B -> f | g
C -> h | i
D -> bE | ε
E -> eD | dD

follow(D) = follow(A) v follow(E) = first(C)... = {h}

The appropriate entries for E1, E2 and E3 are (2 Points)

	$	d	e	b	i	h	g	f	a
S							S → B b	S → B b	S → a A C
A			A → e D						
B							E2	B → f	
C					C → i	C → h			
D				D → b E	D → ϵ	E1			E3
E		E → d D	E → e D						

- ◯ Error, B ->g, D ->ε
- ☑ D ->ε, B ->g, Error
- ◯ D ->ε, Error, D ->ε,
- ◯ D ->ε, Error, Error