

Q1. Words of a language constitute

- (A) Set of terminals
- (B) Set of nonterminals
- (C) Set of both terminals and nonterminals
- (D) None of the other options

Ans: A

Q2. The grammar $\{E \rightarrow E + T \mid T, T \rightarrow T * F \mid F, F \rightarrow id\}$ is

- (A) Ambiguous
- (B) Unambiguous
- (C) Partially ambiguous
- (D) None of the other options

Ans: B

Q3. The grammar $\{E \rightarrow E + E \mid E * E \mid id\}$ is

- (A) Ambiguous
- (B) Unambiguous
- (C) Partially ambiguous
- (D) None of the other options

Ans: A

Q4. For a context-free grammar, left-hand side of production rules should contain

- (A) Single nonterminal
- (B) Atmost three grammar symbols
- (C) Atmost two grammar symbols
- (D) None of the other options

Ans: A

Q5. A grammar is ambiguous if

- (A) its left most and right most derivations are different
- (B) more than one left most derivations exist
- (C) there is no left most derivation
- (D) there is no rightmost derivation

Ans: B

Q6. A grammar with production rules $\{A \rightarrow Ba \mid Cb, B \rightarrow CA, C \rightarrow c \mid \epsilon\}$ contains

- (A) Left factor
- (B) Left recursion
- (C) Both left factor and left recursion
- (D) None of the other options

Ans: B

Q7. For top-down parsing left recursion removal is

- (A) Mandatory
- (B) Desirable
- (C) Too complex
- (D) Not needed

Ans: A

Q8. Derivation produced by a top-down parser is

- (A) Leftmost
- (B) Rightmost
- (C) Either leftmost or rightmost
- (D) None of the other options

Ans: A

Q9. A predictive parser

- (A) Needs backtracking
- (B) Does not need backtracking
- (C) May not terminate
- (D) None of the other options

Ans: B

Q10. For the grammar rules $\{S \rightarrow Aa \mid bB, A \rightarrow c \mid \varepsilon\}$, $\text{FIRST}(S)$ is

- (A) $\{b, c\}$
- (B) $\{a, b\}$
- (C) $\{a, b, c\}$
- (D) $\{a, b, c, \varepsilon\}$

Ans: C