

SECTION-A

Write briefly :

1.
 - a. Token
 - b. DFA
 - c. Augmented Grammar
 - d. Preprocessor
 - e. Loop Optimization
 - f. DAG
 - g. Parse tree
 - h. Parsing Table
 - i. Symbol Table
 - j. Heap

SECTION-B

2. Explain the role of lexical analyzer.
3. Perform predictive parsing on following grammar

$$E \rightarrow TE'$$

$$E' \rightarrow +TE' \mid \epsilon$$

$$T \rightarrow FT'$$

$$T' \rightarrow *FT' \mid \epsilon$$

$$F \rightarrow id \mid (E)$$

* ϵ denotes epsilon

4. Explain the role of basic blocks with the use of a suitable example.
5. Discuss issues of code generation in compiler design.
6. Write a note on Lex.

SECTION-C

7. Write a note on peephole optimization.
8. What is a directed acyclic graph? Discuss the procedure for construction of a directed acyclic graph with suitable example.
9. How three address code is implemented in compiler? Explain in detail.