There were total 52 Questions

40 MCQs of 1 Mark

4 were of 2 Marks

4 were of 3 Marks

4 were of 5 Marks

Some the MCQs were as under: -

1. In compilers, linear analysis is also called _____
    a. Lexical Analysis
    b. Scanning
    c. Lexical Analysis and Scanning
    d. None of the given

2. The test of string is described by a rule called a _____, associated with token.
    a. Character
    b. Loader
    c. Pattern
    d. None of the given

3. The regular expression _____ denotes, the set of all strings of a's and b's of length two.

    a. a*
    b. (a*|b*)*
    c. (a*b*)*
    d. (a|b)(a|b)

4. _____ (Lexical Analyzer Generator), is written in Java.

    a. Flex
    b. Jlex
    c. Complex
    d. None of the given

5. Bottom up parsing is also called _____.
    a. LR Parsing
    b. LT Parsing
    c. LS Parsing
    d. None of the given

6. The shift action _____ a terminal on the stack

    a. Pushes
    b. Pops
    c. Both pushes and pops
    d. None of the given

7. A DFA can be reconstructed from NFA using the subset construction, similar to one used for ___

    a. Lexical Analysis
    b. Physical Analysis
    c. Logical Analysis
    d. Parsing

8. The parser generator YACC can handle _____ grammar.

    a. LL(1)
    b. LT(1)
    c. LS(1)
    d. LF(1)

9. A linker combines multiple object files into a _____ executable object.

    a. Single
    b. Double
    c. Triple
    d. Quadruple

10. The notation _____ instructs YACC to push a computed attribute value on the stack.

    a. $$
    b. &&
    c. ##
    d. - -

11. Hybrid IRs combine elements of _____

    a. Graphical (Structural)
    b. Linear IRs
    c. Both
    d. Non-Linear IRs

12. A _____ parser creates the nodes in the AST in preorder.

    a. Top – Down
    b. Bottom – Up
    c. Middle – Ware
    d. Straight

13. A lexical analyzer generator automatically constructs a _____ that recognizes tokens.
    a. FA
    b. PDA
    c. DP
    d. Unidirectional Graph

14. The order in which DAG is traversed can lead to _____ code.

    a. Better
    b. Worse
    c. Large
    d. Garbage

15. Which of the following system software resides in the main memory always?

    a. Text editor
    b. Assembler
    c. Linker
    d. Loader

16. _____ plays an important role in code optimization.

    a. DAG
    b. Lexical Analyzer
    c. AGD
    d. Memory Management

Subjective Part

1. Translate the regular expression "r*" in simple words.   (2 Marks)
2. What are two properties of reduced flow graphs?   (2 Marks)
3. Which information we can get from the second section of YACC file?   (2 Marks)
4. In main memory, what type of information is stored in data segment?   (2 Marks)
5. Consider the following statement
   x: = a + (b*a)
   You are required to translate it into an AST.   (3 Marks)
6. How do we construct an LR parsing table for a grammar?   (3 Marks)
7. Develop an algorithm to generate LALR(1) DFA.   (5 Marks)