

Predicted Question Paper

Subject: Compiler Design

Semester: 5

College: bit

1. Find the minimum state DFA for the regular expression $ab(a/b)^*abb$.

Repeated: 2 times

Modules: Unit-I

Marks: 8

2. Write short notes on i. Compiler writing tools ii. Role of Lexical Analyzer

Repeated: 2 times

Modules: Unit-I

Marks: 8

3. Construct minimum state DFA for regular expression $(0 + 1)^*00 + 01$.

Repeated: 2 times

Modules: Unit-I

Marks: 8

4. Differentiate between top down parsing and bottom up parsing?

Repeated: 2 times

Modules: Unit-II

Marks: 4

5. Write the Translation scheme to produce three- address code for assignment statements

Repeated: 2 times

Modules: Unit-III

Marks: 4, 8

**6. Using the given grammar, write the syntax directed definitions to evaluate an expression.
Construct the annotated parse tree for the sentence $2+3*7$. $E \rightarrow E+T \mid T \mid T \rightarrow T*F \mid F \mid F \rightarrow (E) \mid \text{num}$**

Repeated: 2 times

Modules: Unit-III

Marks: 8

7. What is activation record? Explain different fields in the activation record.

Repeated: 3 times

Modules: Unit-IV

Marks: 8

8. Explain Stack, Static and Heap allocation strategies.

Repeated: 2 times

Modules: Unit-IV

Marks: 8, 4

9. What is the use of symbol table? Explain different ways to implement symbol table and explain various fields of symbol table.

Repeated: 3 times

Modules: Unit-IV

Marks: 8

10. Define the term loop optimization.

Repeated: 2 times

Modules: Unit-V

Marks: 4

11. Explain in brief issues in the design the code generator.

Repeated: 2 times

Modules: Unit-V

Marks: 8

12. Discuss the major issues of code generation.

Repeated: 2 times

Modules: Unit-V

Marks: 8
