UG–385 **BSCS–22**

B.Sc. DEGREE EXAMINATION – DECEMBER, 2019.

Third Year

Elective — Computer Science

COMPILER DESIGN

Time : 3 hours Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What is regular expression? Explain the rules of framing regular expressions.

2. Discuss briefly about the symbol table.

3. What is left recursion? Explain the algorithm for eliminating it with suitable grammars.

4. Write down the rules for computing FIRST and FOLLOW in Parsing.

5. What are types of intermediate code in intermediate code generation?

6. Explain about loop optimization.

7. Write short note on dead code elimination.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

8. Explain the phases of compiler with a neat diagram.

9. Discuss about conversion of regular expression to automata with suitable example.

10. Explain shift reduce parsing with neat example.

11. Explain the model of predictive parsing. Give neat algorithm for predictive parsing and constructing the parse table.

12. Discuss about the address code, quadruples and triples with suitable example.

13. Explain about DAG representation of basic block

14. Explain about principles source of optimization techniques.

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