

OCTOBER 2013

P/ID 17432/RTB

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Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL the questions.

1. (a) Discuss briefly about the translators.

Or

(b) Explain the minimization procedure of DFA.

2. (a) Explain the handles and handle pruning with example.

Or

(b) Discuss the procedure for eliminating left recursive productions in a grammar.

3. (a) Explain various kinds of Three address statements.

Or

(b) Discuss the content of a symbol table.

4. (a) Explain the principal sources of optimization.

Or

(b) Discuss the procedure for finding dominators.

5. (a) Explain the Peephole optimization.

Or

- (b) Discuss sources of errors.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Discuss the phases of compiler with a diagram.
7. Explain the construction operator precedence table for a grammar with an example.
8. Construct the SLR parsing table for the following grammar :  $S \rightarrow CC$  ;  $C \rightarrow cC / d$ .
9. Discuss the implementation of syntax directed translators with an example.
10. Explain various representations of intermediate code languages.
11. Discuss the loop optimization with example.
12. Explain the code hoisting in detail.
13. Explain the code generation algorithm with an example.