

OCTOBER 2012

P/ID 17432/RTB

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Define Reserved word. Explain it with example.

Or

- (b) List out the translation rules for LEX programs.

2. (a) Explain context-free grammars.

Or

- (b) Write short notes non-context-free language constructs.

3. (a) Define quadruples. Describe it with example.

Or

- (b) Write short notes on Triples.

4. (a) Explain Global Data-flow analysis in code optimization.

Or

- (b) How do you solve Data flow equations in code optimization? Discuss.

5. (a) Write short notes on conditional statements in code generation.

Or

- (b) Explain the use of run time addresses for names in code generation.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Discuss on deterministic automata.
7. How will you construct SLR parsing table? Explain in detail.
8. Explain the REUSING Symbol-table space.

2 **P/ID 17432/RTB**

9. (a) Write short notes on Post fix notations.
(b) Construct an expression using shift reduce parser and following grammar with id+id*id as input.
- $E \rightarrow E + E$
 $E \rightarrow E * E$
 $E \rightarrow (E)$
 $E \rightarrow (id)$
10. Discuss on DAG Representation of Basic Blocks.
11. Explain Global data flow analysis in code optimization.
12. How will you generate codes from DAG's? Explain it.
13. What are the problems in code generation? Discuss.
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