

**Reg No:**

**CS62**

**SYED AMMAL ENGINEERING COLLEGE**

**Periodical Test II**

**10144CS602 – Principles of Compiler Design**

**(Common to III CSE A&B)**

**Date: 02.03.10**

**Max: 50 Marks**

**Answer All Questions**

**Part A (5\*2 = 10 )**

1. Define Syntax analyzer.
2. Define Context Free Grammar.
3. Define Handle Pruning.
4. Differentiate Top down and Bottom up parsing techniques.
5. Define type expression with an example

**Part B (2 ½ \* 16 = 40)**

6.a. Explain the error recovery strategy in syntax analyzer. (8)

(Or)

b. Write an algorithm to eliminate left recursion and left factoring from a grammar also explain with an example. (8)

7. a. Construct Predictive parsing table for the given grammar. And check whether the grammar is LL(1). (16)

$S \rightarrow L = R \mid R$

$L \rightarrow *R \mid id$

$R \rightarrow L$

(Or)

b. Construct Predictive parsing table for the given grammar. And check whether the grammar is LL(1). (16)

$E \rightarrow E + T \mid T$

$T \rightarrow T * F \mid F$

$F \rightarrow (E) \mid id$

And check the string  $(id * id) + id$ .

8.a. (i) Explain about specification of simple type checker (16)

(Or)

b. Explain about run time environments (16)

\*\*\*\*\*ALL THE BEST\*\*\*\*\*