

B.Tech. Degree III Semester Examination, November 2008

CS 305 PRINCIPLES OF PROGRAMMING LANGUAGES

(2006 Scheme)

Time: 3 Hours

Maximum Marks: 100

PART A

(Answer **ALL** Questions)

(All questions carry **FIVE** Marks)

(8 x 5 = 40)

- I
- a) Write a note on ambiguous grammar?
 - b) Describe the concept of denotational Semantics?
 - c) Write a note on Named Constants?
 - d) What is meant by Referencing environment?
 - e) Write general characteristics of small talk?
 - f) Write the use of 'Finally' clause in Java exception handling
 - g) Draw the internal representation of a LISP LIST

$(A(BC)D(E(FG)))$

- h) Write a note on clausal form?

PART B

- II Write short note on (5 x 3 = 15)
- (i) Object oriented program
 - (ii) Logical program
 - (iii) Functional program
- OR**
- III Write short note on (5 x 3 = 15)
- (i) Attribute grammar
 - (ii) Context Free grammar
 - (iii) Operational Semantics
- IV Categorise and explain the storage bindings of variables according to their Lifetime? (15)
- OR**
- V Explain different parameter passing mechanisms with examples? (15)
- VI Explain various design issues for object Oriented Languages? (15)
- OR**
- VII Write a note on following terms (5 x 3 = 15)
- (i) Inheritance
 - (ii) Dynamic binding
 - (iii) Encapsulation
- VIII a) Describe the features of Logic programming? (8)
- b) Write a note on Resolution principle? (7)
- OR**
- IX a) Describe the inferencing process of prolog? (7)
- b) Describe the applications of Logic programming? (8)

