2007 ANDHRA UNIVERSITY
III B.TECH II SEMESTER DEGREE EXAMINATION
B.TECH COMPUTER SCIENCE ENGINEERING
PRINCIPLES OF PROGRAMMING LANGUAGE

TIME : 3 HOUR
MARK : 70

FIRST QUESTION IS COMPULSORY

ANSWER ANY FOUR FROM THE REMAINING QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

ANSWER ALL PARTS OF ANY QUESTION AT ONE PLACE

1. Briefi explain the following

a. Binding times

b. BNF grammars

c. Type equivalence

d. Block structured languages

e. Coroutines

f. Variant records.

g. Unification.

2. Discuss briefly about language paradigms.

b. Briefly explain about recursive descent parsing.

3. a. Explain with suitable examples type checking and conversion rules

b. Discuss briefly about Abstract Data Types.

4. a. The Pascal if statement has the syntax
"if Boolean expression then statement else statement" where as the Ada if is
"if Boolean expression then statement else statement end if"
Comment on the relative merits of having an explicit termination to the statement, such as the
end if of Ada.

b. With suitable examples explain about polymorphism and its implementation aspects.

5. Discuss parameter transmission methods, semantics and implementation.

6. Discuss heap storage management.

7. Discuss the principles of parallel programming languages.

8. Discuss network programming languages.