

II B.Tech II Semester Supplementary Examinations, April/May 2005
PRINCIPLES OF PROGRAMMING LANGUAGES
(Computer Science & Systems Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) What are the rules for translating a Syntax graph to parser.
(b) Express the syntax of declaration statement in PASCAL using BNF notation and Syntax Graphs.
2. Describe the various control statements in programming languages.
3. (a) Explain with examples the pointer data type what are the advantages of using pointers?
(b) Explain String processing in programming languages.
4. (a) Discuss activation records.
(b) Discuss implementing Run Time Environment using displays.
5. Explain the various parameter passing mechanisms in Pascal language with suitable examples.
6. (a) Discuss the data abstraction in MODULA.
(b) Describe abstract data types with suitable examples.
7. Discuss how producer-consumer problem is solved in:
(a) concurrent-Pascal
(b) ADA.
8. (a) Explain main features of imperative languages.
(b) Write a LISP function Fib(n) that computes nth Fibonacci number.
