

**R09**

Code No: 55025

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech III Year I Semester Examinations, March - 2017**

**PRINCIPLES OF PROGRAMMING LANGUAGES**

(Computer Science and Engineering)

**Time: 3 hours**

**Max. Marks: 75**

**Answer any five questions  
All questions carry equal marks**

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- 1.a) What are the reasons for studying programming languages?  
b) Write about logic programming. [7+8]
2. Explain about denotational and axiomatic semantics. [15]
- 3.a) Explain arrays and record datatypes.  
b) What are named constants? [8+7]
- 4.a) What are guarded commands?  
b) Explain various control structures. [7+8]
- 5.a) What is scope and life time of variable?  
b) Explain about co-routines. [7+8]
6. Explain about following:  
a) C++ parameterized ADT.  
b) Semaphores. [7+8]
- 7.a) Explain about exception handling in Ada.  
b) What are the applications of logic programming? [8+7]
- 8.a) Write about LISP.  
b) Explain about binding and scope of variables in python. [7+8]

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