

**R07**

Code No: 07A40501

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD**

**B.Tech II Year II Semester Examinations, November / December-2013**

**PRINCIPLES OF PROGRAMMING LANGUAGES**

**(COMPUTER SCIENCE AND ENGINEERING)**

**Time: 3 hours**

**Max. Marks: 80**

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

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- 1.a) Draw and explain the flow chart for compilation process.
- b) Describe the important factors influencing the writability of a language. [16]
- 2.a) Describe about the static and dynamic semantics.
- b) Explain about the attribute grammar with an example. [16]
- 3.a) Distinguish between pascal union types and Ada union types with an example.
- b) Describe about the static and dynamic scope of variables with an example. [16]
- 4.a) Explain about the compound assignment and unary assignment operations with an example
- b) Explain about the DO statement of FORTRAN 77 and FORTRAN 90. [16]
- 5.a) Distinguish between procedures and functions with an example.
- b) Explain about the coroutines.
- c) Explain about the user defined overloaded operators. [16]
- 6.a) Explain about Java threads.
- b) Explain the design issues for object oriented languages. [16]
- 7.a) Discuss how exceptions are handled in C++.
- b) Explain the relationship between resolution and unification in prolog.
- c) What are the three forms of prolog term? [16]
- 8.a) Explain about the fundamentals of functional programming languages.
- b) Distinguish between functional and imperative languages. [16]

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