

**Code No: S9502****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year I Semester Examinations, November/December - 2017****PRINCIPLES OF PROGRAMMING LANGUAGES****(Electronics and Communication Engineering)****Time: 3 hours****Max. Marks: 75****Answer any five questions  
All questions carry equal marks**

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- 1.a) Explain in detail about language evaluation criteria.  
b) Differentiate between functional programming and logic programming with a neat sketch. [8+7]
- 2.a) Explain about lexical analysis.  
b) What are attribute grammars? Give an attribute grammar for simple assignment statements. [7+8]
- 3.a) Explain associative arrays with example.  
b) Discuss array types in detail. [7+8]
- 4.a) Explain about short circuit evaluation and mixed mode assignment statements.  
b) When is multiple selector statements used? Give a suitable example. [10+5]
- 5.a) Write short notes on Generic subprograms.  
b) What are the design issues for functions? [7+8]
- 6.a) What are the language design requirements for a language that support Abstract Data types (ADT).  
b) Write short notes on Java Threads. [7+8]
- 7.a) Explain Exception handling in java.  
b) Explain the applications of Logic programming. [8+7]
- 8.a) Explain applications of functional languages.  
b) Explain the principles of ML. [7+8]

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