

Code: CS412

II B.Tech - II Semester – Regular Examinations - JUNE 2015

**PRINCIPLES OF PROGRAMMING LANGUAGES
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

- 1 a) Explain the factors that influences the design of programming languages. 7 M
- b) Explain about the language evaluation criteria. 7 M
- 2 a) Explain the notation extended BNF with examples. 7 M
- b) Write about attribute grammar with examples. 7 M
- 3 a) Write about pointer and reference types. 7 M
- b) What is array type ? How it is different from record type and write about Implementation of arrays in detail. 7 M
- 4 a) Write about operator evaluation order in detail? 7 M
- b) Write about 2-way and n-way selection statements. 7 M

- 5 a) Write about implementation of parameter passing methods. 6 M
- b) Write about co-routines. 4 M
- c) Write about design issues for functions. 4 M
- 6 a) Define Data Abstraction? Write about abstraction data types in detail. 7 M
- b) Define thread ? explain about threads in java language. 7 M
- 7 a) Explain the principles of logical programming. 7 M
- b) Define exception and exception handling? How the exceptions are handled in C++ programming language with suitable example. 7 M
- 8 a) Write about list functions with examples. 6 M
- b) Write about ML functional programming language. 4 M
- c) Write about Haskel functional programming language. 4 M