

## III B. Tech I Semester Supplementary Examinations, May - 2016

**PRINCIPLES OF PROGRAMMING LANGUAGES**

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is compulsory  
3. Answer any **THREE** Questions from **Part-B**

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**PART -A**

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|---|--|------|
| 1 | a) Explain about parsing.  | [3M] |
|   | b) Write any two design issues for arithmetic expressions.                   | [3M] |
|   | c) Explain about generic methods.  | [4M] |
|   | d) Differentiate between procedural languages and object oriented languages. | [4M] |
|   | e) Write short notes on lambda calculus.                                     | [4M] |
|   | f) Explain about multi paradigm languages.                                   | [4M] |

**PART -B**

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|---|---|------|
| 2 | a) Explain in detail about language evaluation criteria.                | [4M] |
|   | b) Explain about lexical analysis.                                      | [8M] |
|   | c) Write short notes on context free grammar.                           | [4M] |
| 3 | a) Explain various primitive data types with suitable examples.         | [6M] |
|   | b) Discuss about type-checking.   | [6M] |
|   | c) Explain about control structures.                                    | [4M] |
| 4 | a) Explain how subprogram names are passed as parameters.               | [8M] |
|   | b) Define sub program. What are the distinct categories of Subprograms? | [8M] |
| 5 | a) Discuss the design issues of Exception Handling.                     | [8M] |
|   | b) Explain in detail abstract data types in java with examples.         | [8M] |
| 6 | a) Explain the principles of ML.  | [8M] |
|   | b) Explain about fundamentals of FPL.                                   | [8M] |
| 7 | a) Explain about Logic programming.                                     | [8M] |
|   | b) Explain the Basic elements of Prolog.                                | [8M] |

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