R19

SET - 1

III B. Tech I Semester Supplementary Examinations, June/July-2022
PRINCIPLES OF PROGRAMMING LANGUAGES
(**Computer Science and Engineering**)

Time: 3 hours   Max. Marks: 75

Answer any **FIVE** Questions **ONE** Question from **Each unit**
All Questions Carry Equal Marks
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UNIT-I

1. a) Explain how is the order of evaluation of attributes determined for the tree of a given grammar. [8M]
    b) Give a comparison between Fortran, COBOL and Lisp. [7M]

(OR)

2. a) Describe the concept of de-notational semantics. [8M]
    b) Discuss about language recognizers and language generators. [7M]

UNIT-II

3. a) What is a variable? What are the attributes of a variable? Elaborate on address of a variable. [8M]
    b) Explain the conditional statements and its implementation with examples. [7M]

(OR)

4. a) What are the different categories of arrays? Explain. [7M]
    b) Define unconditional branching. What are the problems with unconditional branching? [8M]

UNIT-III

5. a) Explain in detail the Deep access way of implementing dynamic scoping. [8M]
    b) Explain how subprogram is overloaded? Give examples. [7M]

(OR)

6. a) Discuss how generic methods are implemented with suitable examples. [8M]
    b) Define sub program. What are the distinct categories of Subprograms? [7M]

UNIT-IV

7. a) Compare and contrast the cooperation synchronization and competition synchronization in message passing. [8M]
    b) What is an event? How the events are handled in various OOP languages. [7M]

(OR)

8. a) Discuss about exception handling in C++. [8M]
    b) Define a Thread. How are threads different from processes? Explain java threads with examples. [7M]

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UNIT-V

9. a) Explain about scheme functional programming language.   [8M]
    b) Write all the principles of ML.   [7M]

(OR)

10. a) Discuss about Logic programming.   [8M]
    b) Describe about the basic elements of prolog.   [7M]

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