Code No: 137GA

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, March - 2021
PRINCIPLES OF PROGRAMMING LANGUAGES
(Computer Science and Engineering)

Time: 3 Hours

Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks

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1.a) What are the main features of the programming paradigm with examples?
  b) Explain the process of compilation in each phase of a compiler. [7+8]

2.a) Describe scope and lifetime of variables with suitable examples.
  b) Explain the conditional statements and its implementation with suitable examples. [7+8]

3.a) Define Coercion, Typeerror, Typechecking and Strong Typing.
  b) Explain structure of an associative array with example. [7+8]

4.a) Explain two methods for implementing blocks.
  b) Explain about Co-Routines with an example. [8+7]

5.a) Discuss about pass-by-result and pass-by-value-result parameter passing methods, with a detailed programming example for each.
  b) Discuss the design issues of subprogram and its operations performed on them. [8+7]

6.a) Explain how message passing helps in concurrency control? Explain with an example.
  b) What is event? Write about event handling in C# with example. [7+8]

7.a) Explain about LISP functional programming language.
  b) Explain different types of propositions present in logic programming. [7+8]

8.a) Compare functional and imperative languages.
  b) Explain Fact and Rule Statements in Prolog with suitable examples. [7+8]

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