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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(IT) / (CSE Engg.) / (E-Security) (Sem.-1)

ADVANCED PROGRAMMING LANGUAGE

Subject Code : CS-509

Paper ID : [E0689]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carry TWENTY marks.

1. What do you mean by programming paradigms? Explain different programming paradigm with help of examples.
2. Differentiate the following with the help of suitable examples :
 - a) Static vs. dynamic type checking
 - b) Type conversion vs. type coercion
 - c) Call by value and Call by reference
 - d) Compilation and Interpretation
3. Discuss how the following can be accomplished in a programming language like C.
 - a) Lexical Scope
 - b) Memory Layout
 - c) Procedure Call and Return
4.
 - a) List and briefly explain the actions that occurs when a procedure is called, using the activation record layout for C Language.
 - b) Differentiate between static and dynamic binding.
5. What are the different elements of a language? Write down different stages in translation. Explain in details.
6. Explain the difference between late and early binding. What are the advantages and disadvantages of each? Explain with small program in C++.
7.
 - a) What do you mean by Co-routine? Explain in detail.
 - b) Explain tail-recursion in detail.
8. Write short note on the following(s) :
 - a) Call by name
 - b) Dangling Reference