Total No. of Questions : 8]   [Total No. of Printed Pages : 2

Roll No ....

CS-6002 (CBGS)

B.E. VI Semester

Examination, May 2019

Choice Based Grading System (CBGS)

Principles of Programming Languages

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Discuss the various stages involved in analysis of source program and synthesis of object program. Give one example in support of your answer.   7

   b) Explain the different attributes of a good language. Differentiate between syntax and semantics by an example.   7

2. a) Write down a BNF grammar for the language composed of all binary numbers that contain at least three consecutive 1s.(eg.011101011).   7

   b) Discuss the activities involved in problem solving.   7

3. a) Define a pointer. Explain various design issues of pointers in C/C++.   7

   b) What is type checking? Explain advantages and disadvantages of static and dynamic type checking.   7

4. a) For an elementary data type in a language, explain the difference between data objects of that type and the values that those data objects may contain.   7

   b) What is sequence control? Explain various categories of sequence control.   7

5. a) Explain stack dynamic local variables and static local variables with their advantages and disadvantages.   7

   b) Write a short note on: http://www.rgpvonline.com   7

   i) Coroutines.

   ii) Generic sub programs.

6. a) What is monitor? What are advantages and disadvantages over semaphores.   7

   b) Explain different elements which require storage during program execution.   7

7. a) What is exception handling? How can we handle exception in C++? Give example.   7

   b) Write down the basic elements of prolog. Also give the applications of logic programming.   7

8. Write short notes: 14

   i) Functional programming

   ii) Resolution Vs Unification

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