

COLLEGE OF ENGINEERING, PUNE

Computer Engineering and IT Department

Class- S.Y.B.Tech.

Exam: End-Sem

Year – 2011-12

Time: 3 hrs.

Subject: CT 214: Programming Methodology

Marks: 50

Instructions :-

- 1. Draw neat figures wherever necessary**
 - 2. Assume suitable data wherever necessary**
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- Q.1 A What are the attributes of the good programming language? What are the major application areas and corresponding programming languages? 05
- B What are the basic building blocks of a language? Explain structured and non structures data types. 05
- Q.2 A Compare the advantages and disadvantages of two approaches to type checking from the point of view of the language designer, the language implementer, and the programmer. 05
- OR
- B What are the major advantages of type checking and type conversion? 05
- C Compare the scalar data type and composite data types. Explain what is binding and binding times. 05
- Q.3 A What is difference between recursive call and ordinary call of a program? How recursive subprogram call acts as an important sequence control structure in programming? 05
- B With proper example explain and compare statement-oriented and block-oriented structure programming. 05
- OR
- C What is an activation record? What are its contents? Write an activation tree for any one program. 05
- Q.4 A With suitable explanation write following. (Any Three) 06
- a) Storage management b) Virtual function c) Static and Dynamic scope
- d) Procedural Programming e) Objects and Classes
- B What is a class ? How are public members of a class different from private members of a class? Write a class specifier that creates a class called student with one private data member called rn, of type int, and two public member function : putdata () and getdata (). 04

OR

P.T.O.

- C Explain constructors and destructors. What are the restrictions apply to constructors and destructors? Explain the order in which constructors are called when an object of a derived class is created. 04
- Q.5 A What is mean by inheritance? Explain the different types of inheritance with proper example. 05
- B Write a benefit of functional programming. Explain function declaration by cases in functional programming. 05
- OR
- C What is mean by Concurrent and Logical Programming? Explain with proper example. 05