

2018
COMPUTER SCIENCE AND TECHNOLOGY
CSIT : 3.4
PROGRAMMING LANGUAGE

Full Marks: 80

Time: 3 Hours

The figures in the margin indicates full marks for the questions :

1. (a) What is OOP paradigm? Mention some of its features. Also mention some of its benefits and application. 3+3+3+1=10
- (b) What are the different categories of PL? Explain with example. 10
Or
Explain Encapsulation, Polymorphism, and Inheritance.
2. (a) Explain Pascal and Fortran language with example. 5+5=10
Or
Differentiate between procedural language and OOP language.
- (b) Mention some attributes of good programming language. 6
- (c) Explain the concept of inheritance. 4
3. (a) Differentiate between constructor and destructor. 3+3=6
- (b) What are the different statements of imperative programming language? Explain with example briefly. 10
Or
Explain parameter passing methods.
- (c) Explain Binding and Binding Times. 4

4. (a) Why we study PL? 6
- (b) Simplify: $(*1 (*a (+ 0 b 0)))$ into $(* a b)$ 5
- (c) Represent the below list in a tree representation 3+3+3=9
- (a) (It seems (that) you (like apple)
 - (b) ((It seems that) you (like) orange)
 - (c) (It (seems) that (you like) mango)
