2017

MCA

Paper : 4.5

PROGRAMMING LANGUAGE (ELECTIVE - I)

Full Marks: 75

Time: 3 hours

The figures in the margin indicate full marks for the questions

I. **Choose the correct answer from the following** 1 x 5 =5

(i) The first Programming language that introduced the subprogram concepts and variable declaration is

(a) Modular Programming

(b) Structured Programming

(c) System Programming

(d) Object Oriented programming

(ii) The structures of Structured Programming are Sequence, Selection, Iteration and

(a) Case structure

(b) Interactive

(c) Looping

(d) Ordering

(iii) The aim of using an Object Oriented Programming Language is to handle _____ design projects in a very easy, simple and efficient manner.

(a) Simple Software
(b) Complex Software
(c) Easy software
(d) Efficient Software

(iv) _____systems are computer systems which support both Visual Programming and Visualization.

(a) Object Oriented Programming
(b) Visual Programming
(c) Logical Programming
(d) Modular Programming

(v) Subprograms are _____ structure in Programming language.

(a) Simple
(b) Logical
(c) Complex
(d) Single

II. **Answer the following questions** 2x6=12

(1) What is Function Overloading?
(2) What are the different languages design issues?
(3) Write some desirable features of Programming language.
(4) What are the different Programming paradigms?

(5) Explain the concept of Subprogram.
(6) What are the different Data types of programming language?

III. **Answer the following questions** 3x6=18

(1) What is Imperative Programming language?
(2) Explain Modular Programming Language.
(3) Differentiate between Business Oriented PL and Mathematical Oriented PL.
(4) Describe System programming language.
(5) In structured Programming, what are the structures that are normally used for performing any tasks?
(6) Explain the concept of Visual Programming briefly.

IV. **Answer the following questions. (Any 8)** 5x8=40

(1) What is Scope Rules for name? Explain.
(2) Differentiate between Constructor and Destructor.
(3) What are the different categories of PL? Explain with example.
(4) Why we study PL? Explain it in your own words.
(5) Simplify (*1(*a(+ 0 b 0))) into (*a b)
(6) Explain Binding and Binding Time.
(7) Explain FORTRAN Programming with example.
(8) What is Parameter Passing Methods? Explain.
(9) Differentiate between Single and Multiple Inheritances.
(10) What is OOP paradigm? Mention some of its features and benefits.

****