

Code: 13A05405

B.Tech II Year II Semester (R13) Regular & Supplementary Examinations May/June 2016

PRINCIPLES OF PROGRAMMING LANGUAGES

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Define Scope of a variable.
 - (b) What do you mean by Syntax and Semantics?
 - (c) Give the details of Arithmetic and Boolean expressions.
 - (d) What do you mean by Associative Array?
 - (e) What is the purpose of Generic Methods in Java?
 - (f) Define Subprogram.
 - (g) Define Semaphore
 - (h) What is an Exception? List the Exceptions in Java.
 - (i) Explain Functional Language.
 - (j) What is Procedural Abstraction?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 What are the different Programming Language Categories? Also give the general methods of implementing it.

OR

- 3 Explain in detail meaning of Type Compatibility & Life Time of Variable with examples.

UNIT – II

- 4 What is an Array? Give the details of String and Multidimensional array.

OR

- 5 What are the different Data types in C++? Explain User Defined Data types.

UNIT – III

- 6 Which are the different Design issues of Subprograms?

OR

- 7 Give the Details of different Parameter Passing methods.

UNIT – IV

- 8 Describe the meaning of Predicate Calculus? Give the details of Proving Theorems.

OR

- 9 List the basic elements of Prolog also give deficiencies of Prolog.

UNIT – V

- 10 Give the fundamentals of Functional Programming Language. Give the fundamentals of LISP.

OR

- 11 What are the different primitive types in Python & give the details of Data Abstraction?
