Code: 15A12402

B.Tech II Year II Semester (R15) Regular Examinations May/June 2017

PRINCIPLES OF PROGRAMMING LANGUAGE

(Information Technology)

Time: 3 hours Max. Marks: 70

PART - A

(Compulsory Question)

- 1 Answer the following: $(10 \times 02 = 20 \text{ Marks})$
 - (a) List out the qualities of a language.
 - (b) Write short note on software environment.
 - (c) Define user defined data type.
 - (d) Write the design issues of character string type.
 - (e) Differentiate static and dynamic binding.
 - (f) Explain about generic sub programs.
 - (g) What is exception handling?
 - (h) Write about object oriented programming in small talk.
 - (i) Give an example for fact and rules in logic programming.
 - (i) Define functional language.

PART - B

(Answer all five units, $5 \times 10 = 50 \text{ Marks}$)

UNIT – I

What are the elements of software development process? And characteristics.

OR

3 What is the difference between syntax and semantics of programming languages?

UNIT – II

4 Discuss structural and name equivalence for types? Give an example of a language used for each approach.

OR

Write a note on Boolean and relational expressions.

UNIT – III

Define subprograms. What are the advantages of subprograms? Explain different methods of parameter passing mechanisms to subprograms.

OR

7 Discuss about procedures and functions in subprograms with example.

UNIT – IV

8 Discuss object oriented programming in SMALL TALK with an example.

OR

9 Explain the design issues of exception handling.

UNIT – V

10 Explain the functional programming language and its applications.

OR

11 Describe about programming language PROLOG and also write the deficiencies of PROLOG.
