

**PRINCIPLES OF PROGRAMMING LANGUAGE**

(Information Technology)

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

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

**PART – B**

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

**UNIT – I**

- 2 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**

- 5 Write a note on Boolean and relational expressions.

**UNIT – III**

- 6 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.

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