Roll No.:....

## B022313(022)

## B.Tech. (Third Semester) Examination Nov.-Dec. 2021

(AICTE Scheme)

(Computer Science & Engg. Branch)

## PRINCIPLES of PROGRAMMING LANGUAGES

Time Allowed: Three hours

Maximum Marks: 100

Minimum Pass Marks: 35

Note: Attempt all questions. Part (a) of each question is compulsory. Attempt any two parts from (b), (c) and (d). Part (a) carry 4 marks, part (b), (c) and (d) carry 8 marks.

- 1. (a) What are the modules and modularization criteria for programming language?
  - (b) Explain stepwise refinement design technique.

4

8

[2]

[3]

	(c)	Explain Pseudo code and flow chart with example.	8	4.	(a)	Explain following:	4
	(d)	Define different levels of abstraction of programming language.	8			<ul><li>(i) Abstraction</li><li>(ii) Polymorphism</li></ul>	
2.	(a)	Write down the important characteristics of programming language.	4		, ,	What is static member? Explain with example.  Explain this pointer with the help of example.	8
	(b)	Explain structure and operations of translators in programming language.	8		(d)	Write the differences between new and delete operators.	8
	(c)	Write down the factors influencing the evolution of programming lanugage.	8	5.	, ,	Explain constructor and destructor in C++.	4
3.	(d)	Explain Early binding and late binding in language.	8		(b)	Explain following:  (i) Friend function	8
	(a)	What is meant by symbolic expression in LISP?	4			(ii) Abstract class	
	(b)	Explain the programming structure for LISP.	8		(c)	Explain virtual function with example.	8
	(c)	Explain following:  (i) Imperative Programming  (ii) Functional Programming	8		(d)	Explain Exception Handling for a class with an example.	8
	(d)	Explain different datatypes available in PROLOG programming language.	8				