Code No: RT31053 **R13** SET - 1

III B. Tech I Semester Supplementary Examinations, May - 2018

PRINCIPLES OF PROGRAMMING LANGUAGES

(Computer Science and Engineering)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answering the question in **Part-A** is compulsory
3. Answer any **THREE** Questions from **Part-B**

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PART –A

1	a)	What are general purpose languages? Give some examples.	[3M]
	b)	Write a brief note on aliases.	[4M]
	c)	Differentiate between procedures and functions.	[4M]
	d)	Explain about cooperation synchronization with monitors.	[4M]
	e)	Define domain set and range set w.r.to functional languages.	[3M]
	f)	Define declarative semantics.	[4M]

PART -B

2	a)	Explain different phases of compilation.	[8M]
	b)	Discuss about language recognizers and language generators.	[8M]
3	a)	Explain about evaluation of static scope and dynamic scope.	[8M]
	b)	Write notes on coercion expressions and short-circuit evaluation.	[8M]
4	a)	Discuss about pass-by-result and pass-by-value-result parameter passing methods, with a detailed programming example for each.	[8M]
	b)	Write about generic subprograms in Ada and C++.	[8M]
5	a)	Explain different design issues for object oriented languages.	[8M]
	b)	Write about event handling in Java.	[8M]
6	a)	Write about functional forms in LISP.	[8M]
	b)	What are the applications of functional languages? Give a comparison between functional and imperative languages.	[8M]
7	a)	Explain about first-order predicate calculus.	[8M]
	b)	Discuss about fact statements and rule statements in Prolog.	[8M]

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