Question Paper Code: R22A31CS06

R22

ANURAG Engineering College

(An Autonomous Institution)

III B.Tech I Semester Regular Examinations, December – 2024

PRINCIPLES OF PROGRAMMING LANGUAGES

(COMPUTER SCIENCE AND ENGINEERING)

Time: 3 Hours **Max. Marks: 60**

Section – A (Short Answer type questions) (10 Marks)

Answer All Questions		Course Outcome	B.T Level	Marks
1.	Discuss about Programming Environments.	CO1	L1	1M
2.	Define Grammar.	CO1	L1	1M
3.	What is scope and lifetime of a variable.	CO2	L1	1M
4.	Define Array and Associative Arrays.	CO2	L1	1M
5.	What is local referencing environments.	CO3	L1	1M
6.	Discuss Design issues for functions.	CO3	L1	1M
7.	Define Semaphore.	CO4	L1	1M
8.	Define Event Handling.	CO4	L1	1M
9.	Define LISP.	CO5	L1	1M
10.	Define prolog.	CO5	L1	1M

Section B (Essay Questions)

Answer all questions, each question carries equal marks. (5 X 10M = 50M)

11. A)	Explain about Language Categories and Language Design Trade-Offs	CO1	L2	10M
	OR			
B)	In what fundamental way do operational semantics and denotational semantics differ?	CO1	L2	10M
12. A)	Define an array? Explain how to initialize an array? Explain the different types of arrays.	CO2	L2	10M
	OR			
B)	Illustrate the advantages and disadvantages of mixed mode arithmetic expressions	CO2	L3	10M
13. A)	Explain about co-routines and implement simple subprogram	CO3	L3	10M
	OR			
B)	Explain how subprogram is overloaded? Give examples.	CO3	L2	10M
14. A)	What is a semaphore? What are the operations on semaphores?	CO4	L2	10M
	OR			
B)	Discuss about Event Handling with Java and C#.	CO4	L2	10M
15. A)	Explain the comparison of functional and imperative languages	CO5	L2	10M
	OR			
B)	Discuss the key concepts of scripting languages.	CO5	L2	10M