Question Paper Code: R18A11CS01

R18

ANURAG Engineering College

(An Autonomous Institution)

I B.Tech I Semester Supplementary Examinations, June/July – 2024

PROGRAMMING FOR PROBLEM SOLVING – I

(COMMON TO ALL BRANCHES)

Time: 3 Hours **Max. Marks: 75**

Section – A (Short Answer type questions) (25 Marks)

Answer All Questions		Course Outcome	B.T Level	Marks
1.	Define a flow chart. list the most common symbols used in drawing flowchart.	CO1	L1	2M
2.	Outline the structure of C Program..	CO1	L2	3M
3.	Define operator precedence in C with suitable example.	CO2	L1	2M
4.	List the Logical operators in C language.	CO2	L2	3M
5.	Define nested if statement with syntax.	CO3	L1	2M
6.	Define switch statement with syntax.	CO3	L2	3M
7.	List the benefits of the functions.	CO4	L1	2M
8.	Define Recursion in C.	CO4	L2	3M
9.	Define an array with example.	CO5	L1	2M
10.	Define a string with an example.	CO5	L1	3M

Section B (Essay Questions)

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

11. A)	Explain briefly about the variables and constants in C with example.	CO1	L2	10M
	OR			
B)	Develop an algorithm and construct the flowchart to find the roots of the quadratic equation $ax^2+bx+c=0$. [$x=-b\pm(\sqrt{b2-4ac})/2a$].	CO1	L3	10M
12. A)	Explain briefly the increment and decrement operators in C with example.	CO2	L2	10M
	OR			
B)	Explain briefly about the type conversion in C with example.	CO2	L2	10M
13. A)	Explain for loop and demonstrate with a C program to print the natural numbers in reverse order from N to 1.	CO3	L3	10M
	OR			
B)	Explain the difference between while loop and do while loop with an example to print natural numbers from 1 to 10.	CO3	L3	10M
14. A)	Explain parameter passing mechanisms in C with examples.	CO4	L2	10M
	OR			
B)	Explain briefly the different storage classes in C with examples.	CO4	L2	10M
15. A)	Explain two-dimensional array with an example to add two matrices of n x n and print it.	CO5	L3	10M
	OR			
B)	Explain strcpy() and strrev() with suitable examples.	CO5	L3	10M