

ANURAG Engineering College

(An Autonomous Institution)

I B.Tech I Semester Supplementary Examinations, June/July-2024**PROGRAMMING FOR PROBLEM SOLVING**

(COMMON TO CSE, IT & AIML)

Time: 3 Hours**Max. Marks: 60****Section – A (Short Answer type questions)****Answer All Questions****(10 Marks)**

	Course Outcome	B.T Level	Marks
1. Discuss the structure of a C program.	CO1	L2	1M
2. Define Algorithm and write its characteristics.	CO1	L1	1M
3. List types of arrays.	CO2	L1	1M
4. Compare structure and union?	CO2	L2	1M
5. Distinguish between the following modes	CO3	L2	1M
a. w and w+			
b. r and r+			
c. rb and rb+			
d. a and a+			
6. Define preprocessor? Explain about preprocessor commands?	CO3	L1	1M
7. Demonstrate some standard functions and libraries.	CO4	L2	1M
8. What is static memory allocation and dynamic memory allocation?	CO4	L1	1M
9. Write the complexity of the Linear & Binary search.	CO5	L2	1M
10. Give the merits and demerits of linear and binary search.	CO5	L1	1M

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

11. A) Draw the Flowchart to print biggest of three numbers?	CO1	L2	10M
OR			
B) What is compiler? Explain compiling and executing of a program in detail.	CO1	L2	10M
12. A) Define a structure. How to initialize a structure? Explain with an example?	CO2	L2	10M
OR			
B) Define array of strings and explain with a program.	CO2	L3	10M
13. A) How to create and store files using 'C' language?	CO3	L3	10M
OR			
B) Explain about file inclusion preprocessor directives?	CO3	L2	10M
14. A) Implement a recursive function to print the numbers in Fibonacci series?	CO4	L3	10M
OR			
B) Discuss the following with an example. i) malloc() ii) calloc() iii) realloc() iv) free()	CO4	L3	10M
15. A) Explain Binary search technique with example?	CO5	L2	10M
OR			
B) Use Bubble Sort Technique algorithm to sort the following numbers 34, 5, 67, 8, 435, 2,78,45,12.	CO5	L2	10M