MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

MLRS

I B.TECH II Sem Supplementary Examination, May 2022
PROGRAMMING FOR PROBLEM SOLVING
(EEE, CSE, IT)

Time: 3 Hours.   **Max. Marks: 70**

Note: 1. Question paper consists: Part-A and Part-B.
      2. In Part – A, answer all questions which carries 20 marks.
      3. In Part – B, answer any one question from each unit.
         Each question carries 10 marks and may have a, b as sub questions.

PART- A
(10*2 Marks = 20 Marks)

1.	a)	What is an algorithm and state its characteristics.	2M	CO1	BL1
	b)	What is conditional operator? Explain it usage	2M	CO1	BL2
	c)	Define array.	2M	CO2	BL1
	d)	Give an example for self referential structure.	2M	CO2	BL1
	e)	What is pre processor command and give examples.	2M	CO3	BL1
	f)	List random access file functions.	2M	CO3	BL1
	g)	What is meant by return statement and give its syntax.	2M	CO4	BL1
	h)	Identify the advantages and disadvantages of recursion.	2M	CO4	BL1
	i)	Compare between binary and text file	2M	CO5	BL2
	j)	What is searching techniques and name some searching techniques.	2M	CO5	BL1

PART- B
(10*5 Marks = 50 Marks)

2	a)	What is flow chart? Explain its symbols and purpose	5M	CO1	BL4
	b)	Identify steps to solve a particular problem	5M	CO1	BL1
		OR			
3		Compare while and do while statement and illustrate with an example.	10M	CO1	BL2
4	a)	Give the syntax for declaring and initializing two dimensional array and print it in matrix format.	5M	CO2	BL1
	b)	Compare structure and Union.	5M	CO2	BL2
		OR			
5		Implement single dimensional arrays using pointer.	10M	CO2	BL6

6	a)	Explain different function to create and read text files.	5M	CO3	BL4
	b)	Give a note on fseek, ftell and rewind functions.	5M	CO3	BL1

OR

7	Write a C program to copy one file to another file.	10M	CO3	BL3

8	a)	Explain function and its syntax with an example.	5M	CO4	BL4
	b)	Give the recursive function to find factorial of a number.	5M	CO4	BL1

OR

9	Elaborate dynamic memory allocation functions and illustrate with examples	10M	CO4	BL5

10	a)	Write steps to search an element in an array using linear search.	5M	CO5	BL1
	b)	State an algorithm to check a give number is prime or not.	5M	CO5	BL3

OR

11	Write a C program to implement bubble sort.	10M	CO5	BL3

---oo0oo---