R22 Regulation *Subject code: 4B1AM*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech I Semester Supplementary Examinations, June 2024

PROBLEM SOLVING USING C PROGRAMMING

(Information Technology)

Maximum Marks: 60 Date:03.07.2024 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)			CO No.	Bloom Tx
1.	a	Write the significance of the program development cycle.	1	1
	b	Differentiate between formatted and unformatted input/output operations in C.	1	1
	c	Define the array.	2	1
	d	Write about the Jump statements in C programming.	2	1
	e	What is recursion in the context of C functions?	3	1
	f	Define the functions in C.	3	1
	g	How do you declare and initialize an array of structures in C?	4	1
	h	Define the pointers in C programming.	4	1
	i	What role do command line arguments play in C programs?	5	1
	j	Write the purpose of graphics functions in C programming?	5	1

Part-B

Answer All the following questions. (5X10M=50Marks)				
2		Explain Algorithm and flowchart. Represent Algorithm and flowchart to print a number is even or odd. 10M	1	2
		OR		
3		Explain operator precedence and associativity with example. 10M	1	2
4		A. Write a c program to perform matrix multiplication? 7M B. Explain about two dimensional arrays. 3M	2	3
		OR		
5		Discuss about goto , break , continue with one example each. 10M	2	3
6		What are the advantages of functions in C. What is the difference between int main() and void main(). 10M	3	2
		OR		

7	Explain various types of parameters passing mechanisms in C with an example. 10M	3	2
8	Explain about self-referential structures with an example. 10M	4	2
	OR		
9	Write about Nested structures with suitable C program. 10M	4	2
10	Write a short note on file operations with an example. 10M	5	2
	OR		
11	Explain about pre-processor directives with an example. 10M	5	2