



R22 Regulation

Subject code:4E2AB

**TKR COLLEGE OF ENGINEERING AND TECHNOLOGY**

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

**B.Tech II Semester Supplementary Examinations, January 2026**

**C PROGRAMMING FOR PROBLEM SOLVING**

(CE)

Maximum Marks: 60

Date: 20.01.2026

Duration: 3 hours

- Note: 1.This question paper contains two parts A and B.  
 2. Part A is compulsory which carries 20 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)		Marks	CO	BTL
1.a	Define Algorithm.	1M	CO1	L1
b	List operators.	1M	CO1	L1
c	Define array.	1M	CO2	L2
d	Differentiate formal parameters and actual parameters.	1M	CO2	L3
e	Define pointer.	1M	CO3	L1
f	Define Function.	1M	CO3	L1
g	Define structure.	1M	CO4	L3
h	What are user defined data types?	1M	CO4	L1
i	Define file.	1M	CO5	L2
j	What is the use of rewind() function.	1M	CO5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
2	Explain Different types of Operators used in C programming.	10M	CO1	L2
OR				
3	Explain repetition loops with examples.	10M	CO1	L2
4	Demonstrate call by value and call by reference with suitable example	10M	CO2	L2
OR				
5	Explain Stack and queues implementation with examples.	10M	CO2	L2
6	Discuss the following string handling functions with syntax and suitable example program in C language. i) strcmp() ii) strchr() iii) strcat() iv) strrev()	10M	CO3	L2
OR				
7	a) What is a pointer? Explain declaration, initialization and accessing of a pointer variable.	5M	CO3	L2
	b) Swap two integers using pointers.	5M		L2

8	a) What is a structure? Explain the syntax of structure declaration in 'C' with an example	5M	CO4	L2
	b) What are nested structures? Explain with example.	5M		L1
OR				
9	Explain different types of pre-processor commands with examples.	10M	CO4	L2
10	Write a program in C to merge contents of two files and write it in a new file.	10M	CO5	L5
	OR			
11	Demonstrate fopen() , fclose(),fseek(). with suitable example.	10M	CO5	L2