R20 Regulation *Subject code:3E1AI*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B. Tech I Semester Supplementary Examinations, June 2026

C PROGRAMMING FOR PROBLEM SOLVING

(Common to ME, ECE CSE, CSE(AIML), CSE(DS) & IT)

Maximum Marks: 70 Date: 23.06.2026 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 (10X2M=20 Marks)		Marks	CO	BTL
1	What is conditional operator or ternary operator?	2M	1	L1
2	What are the iterative statements used in C?	2M	1	L1
3	List out Different storage class.	2M	2	L1
4	List the name of operations on stack.	2M	2	L1
5	Define string input/out functions?	2M	3	L1
6	What is array of strings?	2M	3	L1
7	What is union?	2M	4	L1
8	Write about Nested structures.	2M	4	L1
9	What is Files in C and its Uses?	2M	5	L1
10	What are the possible operations you can perform on Files?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Briefly discuss switch statement used in C language with example.	10M	1	L2
	OR			
12	Define an Algorithm? Explain the characteristics of an algorithm. Write an algorithm to find Fibonacci series of a given number.	10M	1	L2
13	State the properties of static and external storage classes along with an example.	10M	2	L2
	OR			
14	Write a c-program to perform binary search on array of integers.	10M	2	L2
15	Explain string handling functions with an Example?	10M	3	L2
	OR			
16	Describe about pointers for inter function communication with example.	10M	3	L2

17	Write a C program to handle students profile data using structures.	10M	4	L2
	OR			
18	Explain about bit fields with suitable example.	10M	4	L2
19	Write a C program to read name and marks of n number of students and store them in a file.	10M	5	L2
	OR			
20	Define file? What are the different types of files? What are the different modes of opening a file?	10M	5	L2