R18 Regulation *Subject code:2E1AJ*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech I Semester Supplementary Examinations, June 2026

C PROGRAMMING USING C

(Common to ECE & CSE)

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 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 (10X2M=20 Marks)		Marks	CO	BTL
1	Define Algorithm?	2M	1	L1
2	Differentiate while and do-while?	2M	1	L1
3	What is storage class? What are the types of storage classes?	2M	2	L1
4	Define function and state the advantages?	2M	2	L1
5	What is pointer to a pointer?	2M	3	L1
6	List string input/output functions.	2M	3	L1
7	Differentiate Structures and Unions	2M	4	L1
8	How does a structure different from an array?	2M	4	L1
9	What are the different types of File modes?	2M	5	L1
10	Differentiate Text file and Binary file ?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) What are the selection statements available in C, Explain them with syntax? b) Write a C Program to check the given number is Armstrong or not	5M 5M	1	L2
	OR			
12	a) Define data type? What are the different data types in C explain? b) Write a C Program to find the roots of quadratic equation?	5M 5M	1	L2
13	Write a C Program to add two matrices.	10M	2	L2
	OR			
14	Define recursion? Write a C Program to find the factorial of a given number using recursion.	10M	2	L2
15	What is dynamic memory allocation? What are the advantages of dynamic memory allocation? What are dynamic memory allocation functions available in C Explain with syntax?	10M	3	L2
	OR			

16	a) Explain how to pass an array to function with example? b) Explain string handing functions with syntax.	5M 5M	3	L2
17	Define Structure? Explain how to declare, initialize and access a structure?	10M	4	L2
	OR			
18	Define a structure of student with attributes RollNo, Name and Marks in 3 subjects. Write a C Program to find the average marks of each student of a class having 10 students using array of structures.	10M	4	L2
19	What are the file positioning functions? Explain the purpose of each function with syntax.	10M	5	L2
	OR			
20	Write a C Program to copy the contents of one file to another file.	10M	5	L2