



R20 Regulation

Subject code: 3E1AI

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech I Semester Supplementary Examinations, September 2023

C PROGRAMMING FOR PROBLEM SOLVING

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

Maximum Marks: 70

Date: 04.10.2023 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)

- 1 What is conditional operator or ternary operator?
- 2 What are the iterative statements used in C?
- 3 List out Different storage classes.
- 4 Define the term Recursion.
- 5 What is NULL Pointer?
- 6 Write any three String manipulation Functions?
- 7 Define a structure? Write the syntax for declaration of a structure?
- 8 List out the different memory allocation functions?
- 9 What are the Character I/O Functions in C
- 10 What are File error handling functions in C.

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 Briefly discuss switch statement used in C language with example. 10M
OR
- 12 a. Briefly discuss about types of computer languages? 5M
b. Write a C program to find factorial of a positive integer. 5M
- 13 State the properties of static and external storage classes along with an example. 10M
OR
- 14 Write a C program to perform binary search on array of integers. 10M
- 15 Explain string handling functions with an example. 10M
OR

- 16 Explain about pointers to pointers with an example. 10M
- 17 Define structure? Write the syntax for declaring a structure? Briefly explain how to access the members of a structure. 10M
- OR
- 18 Write about Nested structures with suitable C program. 10M
- 19 Explain about binary files in C with example. 10M
- OR
- 20 Explain about the file positioning functions in C with example. 10M