



TKRCE
Autonomous Institute of Engineering & Technology
K. J. Somaiya Institute of Engineering & Technology

R22 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

Subject code: 4E2AB

B.Tech II Semester Supplementary Examinations, January 2024

C PROGRAMMING FOR PROBLEM SOLVING

(CE)

Maximum Marks: 60

Date: 23.01.2024 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	Bloom Tx
1	List out characteristics of an algorithm.	CO1	L1
2	Define expression.	CO1	L1
3	Declare a float array of size 5 and assign 5 values to it.	CO2	L2
4	Compare the various ways of initialization of string array.	CO2	L1
5	List out the disadvantages of pointers.	CO3	L1
6	Define a pointer.	CO3	L1
7	Define union.	CO4	L1
8	What is the use of #define pre-processor directive?	CO4	L1
9	Define Error Handling in C.	CO5	L1
10	Explain rewind ()	CO5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)			
11	What are the different types of Operators used in C language? (10M)	CO1	L1
	OR		
12	Write an algorithm to find the given number is Prime or not. (10M)	CO1	L1
13	Write a Recursive function for Factorial of a given number. (10M)	CO2	L1
	OR		
14	Explain Binary search with an example program. (10M)	CO2	L2
15	Explain inter function communication with example. (10M)	CO3	L2
	OR		
16	Write a program to search a number in a given set of unsorted array containing 'n' numbers using pointer. (10M)	CO3	L2
17	Explain about nested structures with example. (10M)	CO4	L2
	OR		

18	Differentiate between structure and union with an examples. (10M)	CO4	L2
19	What is a file and explain file input and output functions. (10M)	CO5	L2
	OR		
20	Explain about file positioning functions in C. (10M)	CO5	L2