



R17 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous & Accredited by NAAC with 'A' Grade)

Subject: IEIAD

B.Tech. I Year I Semester Supplementary Examinations, September 2023

Computer Programming in C

(Common to Civil Engineering and Mechanical Engineering)

Maximum Marks:70

Date: 04.10.2023 Duration: 3hours

- 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. Define the term Algorithm.
2. What is the size of the double data type?
3. Distinguish between built – in and user – defined functions.
4. List the dynamic memory handling functions used in 'C'.
5. Define data structure
6. Differentiate between Union and Structure.
7. Define linear search.
8. Define Array.
9. What is the use of rewind()?
10. Write about file positioning functions?

Part-B

Answer all the questions

5X10M=50M

11. Discuss about the various bitwise operators supported by Language 'C'. 10M

OR

12. Write a program to swap the two numbers without using a temporary variable. 10M
13. Why we need storage classes? List and explain the various storage classes present in language 'C'. [10]

OR

14. Write a program to accept a set of names and display them by using array. 10M
15. What is null pointer? What is a void pointer? Explain when null pointer and void pointer are used with a suitable example for each? 10M

OR

16. Write a 'C' program using functions that reads an array of integers and reverses the elements of an array using pointers? 10M
17. Explain the various string handling functions with an example. 10M

OR

18. Write a program to define a structure for hotel that has members - name, address, grade, number of rooms and room charges. Write a function to print the names of a hotel in a particular grade. Also write a function to print names of a hotel that have room charges less than the specified value. 10M
19. a) Discuss in detail about the file positions functions. 5M
- b) Distinguish between r, r+ and w, w+ modes of files. 5M

OR

20. Explain the file input and output functions with example programs. 10M