



R17 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

Subject: 1E1AD

B.Tech. I Year I Semester Supplementary Examinations, July 2021

Computer Programming in C

(Common to Civil Engineering and Mechanical Engineering)

Maximum Marks: 70

Date: 24.01.2024 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. How Algorithm is different from a flow chart.
2. What is the size of the double data type? Which conversion specifier is used?
3. List the types of storage classes.
4. What is a predefined function?
5. What are the different storage classes in C?
6. Differentiate between Union and Structure.
7. What is the difference between the User defined functions and Library functions?
8. What are the differences between structures and functions?
9. What is the use of rewind()?
10. Write the syntax and usage of fseek()?

Part-B

Answer all the questions

5X10M=50M

11. Write a 'C' program to print all prime numbers from 1 to N using while loop. 10M

OR

12. Discuss about the various bitwise operators supported by Language 'C'. 10M
13. Define two dimensional arrays. Write a 'C' program to multiply two matrices. [10]

OR

14. a) Distinguish between Linear and Non Linear data structures with examples? 5M
b) Compare and contrast array of pointer and pointer to arrays. 5M

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. With the help of syntax and example program explain the various string handling functions? 10M

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. Write a 'C' program to count the number of words, white spaces and tab spaces present. 10M