

Reg.No.

23638

Velammal College of Engineering and Technology
Viraganoor, Madurai – 625 009
(Autonomous)

B.E./ B.Tech. End Semester Examinations April 2024

Second Semester
Time : 3 Hours

Regulation 2021
Max. Marks 100

21CSI03 – PROGRAMMING IN C
(Common to Computer Science and Engineering & Information Technology)

Answer ALL Questions
PART-A (10 x 2 = 20 Marks)

1. What is the difference between Logical AND and Bitwise AND?
2. What is Ternary operator? Give an example.
3. Show the syntax about two dimensional array declaration and initialization with example.
4. Compare linear search and binary search.
5. Define function declaration, function call, function definition and show the syntax for the same.
6. List out the applications of pointers.
7. Compare between structure and union
8. Show the syntax for malloc() function.
9. Compare fputs and fprintf.
10. Define Random Access file.

Part – B (5 x 13 = 65 marks)

- 11 a) Write short notes on the following:
 - a. 'for' loop
 - b. 'while' loop
 - c. 'do...while' loop

OR

b) Explain the various types of operators in 'C' language along with its priority

12. a) Develop a 'C' program to find the transpose for the given matrix.

OR

b) Develop a C program to concatenate three strings "welcome", "to", "VCET" into one string as "welcome to VCET" without using built-in functions.

13. a) Explain all types of Function Prototypes supported in C with simple C program.

OR

b) Explain in detail about pointers and types of pointers with suitable examples.

14. a) Develop a C program using structures to prepare the employee pay roll of a company.

OR

b) Develop a C program to perform insertion and deletion operation in a singly linked list.

15. a) Develop a C Program for finding the average of number stored in sequential access file.

OR

b) Develop a program that will receive a filename and a line of text as command line arguments and write the text to the file.

Part – C (1 x 15 marks)

16. a) (i) Develop C program to re-order a one-dimensional array of numbers in descending order.

(ii) Develop C program to copy all elements of an array into another array. (8 + 7 Marks)

OR

b) Develop a C Program to use the arrays inside union variables.