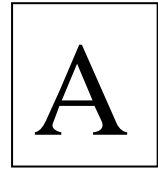


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**SNS College of Technology, Coimbatore-35.**  
**(Autonomous)**  
**B.E/B.Tech- Internal Assessment -II**  
**Academic Year 2022-2023(EVEN)**  
**Second Semester**



**19ITT101 & PROGRAMMING IN C AND DATA STRUCTURES**  
**[Common to AERO, AUTO, CIVIL, FT& MCT]**

**Time: 1<sup>1/2</sup> Hours**

**Maximum Marks: 50**

**Answer All Questions**

**PART-A (5 x 2 = 10 Marks)**

- |    |  |     |     |
|----|--|-----|-----|
| 1. | List out the loop statements in C.                               | CO2 | Rem |
| 2. | Compare and Contrast Call by value & Call by reference function. | CO2 | Ana |
| 3. | State the syntax for declaration of one & two dimensional array. | CO3 | Rem |
| 4. | What is the use of pointers.                                     | CO3 | Und |
| 5. | Define Data Structures.  | CO3 | Und |

**PART-B (13+13+14 = 40 Marks)**

- |    |  |    |     |     |
|----|--|----|-----|-----|
| 6. | (a) Discuss in detail about different looping statements and write a program to find whether the given number is palindrome or not using while loop. | 13 | CO2 | App |
|    | (or)   |    |     |     |
|    | (b) i) Demonstrate on implementation of switch statement with an example program.  | 7  | CO2 | Und |
|    | ii) Write a program for initializing function call without arguments and with return value to perform addition of two numbers.                       | 6  | CO2 | App |
| 7. | (a) i) Write a program for searching element in an one dimensional array for the given input elements (21,55,18,72,34,45,88)                         | 7  | CO3 | App |
|    | ii) Discuss about the application of pointers and how pointer variable will be declared and initialized.   | 6  | CO3 | Und |

(or)

- |   |     |   |    |     |     |
|---|-----|---|----|-----|-----|
|   | (b) | Elaborate in detail on the concept and implementation of structures and analyze how it can be implemented for gathering student's details.                      | 13 | CO3 | App |
| 8 | a)  | Summarize in detail about the implementation and usage of functions. And construct program to swap two values using function call by value & call by reference. | 14 | CO2 | App |

(or)

- |  |    |   |    |     |     |
|--|----|---|----|-----|-----|
|  | b) | Elaborate in detail about arrays and write a program to implement matrix multiplication using two dimensional array | 14 | CO3 | App |
|--|----|---|----|-----|-----|

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(Note: Und-Understand Rem-Remember Ana-Analyze App-Apply)

**Prepared by**

**Verified by**

**HoD**