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| **Programming in C** | | | |
| **Test** | **Content** | **Total Lectures** | **Scheduled Date** |
| ST 1 | The Problem-Solving aspect, Problem definition phase, Getting started on a problem, The use of specific examples, Similarities among problems | 1-18 | 27-Jan-23 |
| Working backward from the solution, General problem-solving strategies, |
| Introduction to programming in C, First program in C, Variables and Identifiers, Data types |
| Basic Input Output in C, Formatted IO, Arithmetic Operators |
| Relational and Logical Operators |
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| Precedence and Associativity of operators |  |
|  |
| if statement, if-else statement, if statement mistakes, nested if statements, Conditional operators, Switch statement |  |
| ST 2 | Looping - While loop, for loop, Control with break and continue, Variants of for loop, Nested loops, Printing patterns with loops, do-while loop | 19-42 | 20-Feb-23 |  |
| Functions in C, Definition and declaration of a function, Scope of a function, auto storage class, extern storage class, static storage class, register storage class |  |
| Introduction to Pointers in C, Parameter passing techniques, Pointer arithmetic in C |  |
| Arrays, Searching an element, Arrays and memory in C, Pointers with arrays, Functions and arrays, 2 Dimensional Arrays, Pointers and 2D arrays, Array of pointers |  |
| Strings in C, Strings and pointers, Strings and functions, Library of string functions |  |
| ST 3 | Recursion - An introduction, Recursion examples, Introduction to structures, typedef, Structure pointers and nested structures, Structures and functions, Structure assignments and arrays | 43-60 | 15-Mar-23 |  |
| Union & Enumeration |  |
| File handling |  |
| ETE | Practice of Coding Exercises |  | 31-Mar-23 |  |