# CAP173:PROGRAMMING METHODOLOGIES-LABORATORY

L:0 T:0 P:2 Credits:1

**Course Outcomes:** Through this course students should be able to

CO1:: understand how programming concepts relate to algorithms.

CO2:: apply different operations that can be performed on a file.

CO3:: analyze how to compile, debug, run and test programs.

CO4:: develop the logic which will help to create programs and applications.

# **List of Practicals / Experiments:**

#### Introduction

- Installation of TurboC and Code Block
- Overview of Interface
- Implement printing of messages on the screen
- · printing of messages in multiple lines with tab spaces
- taking inputs from the user

# **Data Types and Operators**

- Implement data types
- arithmetic operators
- logical operators
- Relational operators
- · Conditional Operator

# **Control Statements and Decision Making**

- Implement different types of Conditional statements
- switch statement
- looping statements
- break and continue statements
- goto statement

#### **Functions**

- Implement functions
- arguments to function
- Implementation of pointers
- call by value and call by reference

# **Introduction to Arrays**

- · Declaring ,initialization and processing arrays in C
- 1-D arrays
- 2-D arrays
- · addition of two matrices
- Sorting and searching operations
- Implement strings

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• String Handling Functions

# File Handling

- Opening and closing files
- Reading and writing in files
- Structure declaration, definition and initialization
- Union declaration, definition and initialization

Text Books: 1. C: THE COMPLETE REFERENCE by SCHILDT AND HERBERT, MC GRAW HILL

**References:** 1. PROGRAMMING IN ANSIC by BALAGURUSAMY, KINDLE EDITION

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