

# 10B17CI171: Computer Programming Lab

**Course Credit: 2**

**Semester: I**

## **Objective:**

Students will develop their ability to design, develop, test and document structured programs in C language.

## **Learning Outcomes:**

Students should be able to

1. Understand the basic terminology used in computer programming
2. Write, compile and debug programs in C language.
3. Use different data types in a computer program.
4. Design programs involving decision structures, loops and functions.
5. Explain the difference between call by value and call by reference
6. Understand the dynamics of memory by the use of pointers.
7. Enhance programming skills through problem solving and code development of small-size software applications.
8. Improve self-learning, teamwork and communication skills through project development practices.
9. Engage in continuing professional development under minimal guidance.

## **List of Experiments**

S NO	Topics
1	Introduction to C programming
2	Structured Program Development in C
3	Flowchart and Algorithm
4	C Program Control
5	C Functions
6	C Arrays
7	C Pointers
8	C Characters and Strings
9	C Structures, Unions, Bit Manipulations and Enumerations
10	C File Processing

## **References**

1. Yale N. Patt and Sanjay J. Patel, Introduction to Computing Systems, from bits & gates to C & beyond, 2<sup>nd</sup> Edition, 2004.
2. Deitel and Deitel, C How to Program, 7<sup>th</sup> Edition, 2013.
3. Venugopal Prasad, Mastering C, Tata McGraw Hill.
4. Complete Reference with C, Tata McGraw Hill.
5. Drmey, How to solve it by Computer, PHI.
6. Kerninghan and Ritchie, The C Programming Language.

**Evaluation Scheme:**

1. Mid Term Exam (Viva and Written Exam)	20
2. End term Exam (Viva and Written Exam)	30
3. Lab Records	5
4. Regular Assessment (Quality and quantity of experiment performed, Learning laboratory skills, Attendance etc.)	30
5. Project	15

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**Total****100**