

# CAP281:OBJECT ORIENTED PROGRAMMING-LABORATORY

L:0    T:0    P:3    Credits:2

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

- differentiate between the Procedure-oriented and Object-oriented programming languages.
- describe the basic concepts of Object-oriented programming.
- examine the functionality of each concept of Object-oriented programming.
- apply the various OOP concepts to solve situation specific problems.

## List of Practicals / Experiments:

### Basics of C++

- Implement different decision making statements
- Implement different looping and jumping statements

### Classes and Objects

- Implement the concept of call by value and call by reference
- Implement the concept of classes,objects and array of objects
- Implement the concept of objects as function arguments.
- Implement Inline and Friend Functions

### Constructors and Destructors

- Implement different types of constructors
- Implement the concept of constructor overloading
- Implement the concept of destructors

### Operator Overloading

- Implement unary and binary operator overloading
- Implement different type conversions

### Inheritance and Polymorphism

- Implement the different types of Inheritance
- Implement the concept of abstract classes and virtual functions

### Working with Files and Streams

- Implement C++ stream classes
- Perform different file operations

## Text Books:

1. OBJECT ORIENTED PROGRAMMING WITH C ++ by E. BALAGURUSAMY, PRENTICE HALL
2. LET US C++ by KANETKAR, BPB PUBLICATIONS

## References:

1. THE ANNOTATED C++ REFERENCE MANUAL by J MARGET A. ELLIS AND BJARNE STROUSTRUP, ADDISON WISELY, ADDISON-WESLEY
2. C++ PROGRAMMING LANGUAGE by BJARNE STROUSTRUP, PEARSON