

**UNIVERSITY OF MADRAS**  
**B.Sc. DEGREE COURSE IN SOFTWARE APPLICATION**  
**SYLLABUS WITH EFFECT FROM 2020-2021**

**BSA-CSC04**

**CORE-IV: PRACTICAL - II**  
**C++ PROGRAMMING LAB**  
(Common paper to B.C.A.)

**I YEAR / II SEM**

**OBJECTIVES:**

- To implement the various object oriented programming concepts using C++

**OUTCOMES:**

- To understand the structure and model of the C++ programming language.
- To solve problems in C++ demonstrating Object Oriented Concepts

**LIST OF EXERCISES:**

1. Write a C++ program to demonstrate function overloading, Default Arguments and Inline function.
2. Write a C++ program to demonstrate Class and Objects
3. Write a C++ program to demonstrate the concept of Passing Objects to Functions
4. Write a C++ program to demonstrate the Friend Functions.
5. Write a C++ program to demonstrate the concept of Passing Objects to Functions
6. Write a C++ program to demonstrate Constructor and Destructor
7. Write a C++ program to demonstrate Unary Operator Overloading
8. Write a C++ program to demonstrate Binary Operator Overloading
9. Write a C++ program to demonstrate:
  - Single Inheritance
  - Multilevel Inheritance
  - Multiple Inheritance
  - Hierarchical Inheritance
  - Hybrid Inheritance
10. Write a C++ program to demonstrate Virtual Functions.
11. Write a C++ program to manipulate a Text File.
12. Write a C++ program to perform Sequential I/O Operations on a file.
13. Write a C++ program to find the Biggest Number using Command Line Arguments
14. Write a C++ program to demonstrate Class Template
15. Write a C++ program to demonstrate Function Template.
16. Write a C++ program to demonstrate Exception Handling.