

Curriculum plan (ODD Semester)

2026-27

Teacher Name: Neha Singh

Paper name: Programming using C++

Class type: BA (prog), Semester-I

Paper shared with: Dr. Reena Jain

S.No	Schedule (Approximate)	Topic
1	August	Unit- 1 Introduction to C++: Overview of Procedural and Object-Oriented Programming, Using main() function, Header Files, Compiling and Executing Simple Programs in C++ Unit-2 Programming Fundamentals: Data types, Variables, Operators, Expressions, Arrays, Keywords, Decision making constructs, Iteration, Type Casting, Input-output statements, Functions, Command Line Arguments/Parameters Assignment 1, Test and Quizzes
2	September	Unit-3 Object Oriented Programming: Concepts of Abstraction, Encapsulation. Creating Classes and objects, Modifiers and Access Control, Constructors, Destructors, Implementation of Inheritance and Polymorphism, Template functions and classes. Assignment 2, Test and Quizzes
3	October	Unit- 4 Pointers and References: Static and dynamic memory allocation, Pointer and Reference Variables, Implementing Runtime polymorphism using pointers and references Unit- 5 Exception and File Handling: Using try, catch, throw, throws and finally; Test and Quizzes
4	November	Unit- 5 Exception and File Handling: Nested try, creating user defined exceptions, File I/O Basics, File Operations Revision, Doubts Clearing, Viva

References

1. Stephen Prata C++ Primer Plus, 6th Edition, Pearson India, 2015
2. E Balaguruswamy Object Oriented Programming with C++, 8 th edition, McGraw-Hill Education, 2020
3. D.S. Malik, C++ Programming: From Problem Analysis to Program Design, 6 th edition, Cengage Learning, 2013