

# **C++ Programming – Important Questions (Unit 1 to 5)**

## **UNIT 1 – Introduction to C++**

2/3 Marks: OOP concepts, Advantages of OOP, Object-oriented languages, C++ I/O, Control statements, Loops, Inline functions, Function overloading.

5/10 Marks: Key concepts of OOP, Control structures in C++, Functions in C++, Inline functions, Function overloading with examples.

## **UNIT 2 – Classes and Objects**

2/3 Marks: Class, Object, Member functions, Static members, Friend function, Constructor, Destructor.

5/10 Marks: Defining classes and objects, Static member variables & functions, Array of objects, Friend functions, Constructors & destructors with static members.

## **UNIT 3 – Operator Overloading & Inheritance**

2/3 Marks: Operator overloading, Unary & binary operators, Inheritance, Virtual base class, Abstract class.

5/10 Marks: Operator overloading using member & friend functions, Type conversion, Types of inheritance, Virtual base classes, Abstract classes.

## **UNIT 4 – Pointers**

2/3 Marks: Pointer declaration, this pointer, Pointer to object, new & delete operators, Virtual functions.

5/10 Marks: Pointers to classes & objects, Pointers to base & derived classes, Dynamic memory allocation, Polymorphism & virtual functions.

## **UNIT 5 – Files, Templates & Exception Handling**

2/3 Marks: File stream classes, File modes, Templates, Exception handling, String objects.

5/10 Marks: File handling in C++, Sequential & random access files, Binary & ASCII files, Templates, Exception handling, String operations.