

<b>B Com</b>	<b>Semester: III(Computer Applications)</b>
<b>Course: 3C</b>	<b>PROGRAMMING WITH C &amp;C++</b>

### **UNIT I:**

**Introduction and Control Structures:** History of 'C' - Structure of C program – C character set, Tokens, Constants, Variables, Keywords, Identifiers – C data types - C operators - Standard I/O in C - Applying if and Switch Statements.

### **UNIT II:**

**Loops And Arrays:** Use of While, Do While and For Loops - Use of Break and Continue Statements - Array Notation and Representation - Manipulating Array Elements - Using Multi Dimensional Arrays.

### **UNIT III:**

**Strings and Functions:** Declaration and Initialization of String Variables - String Handling Functions - Defining Functions - Function Call - Call By Value, Call By Reference – Recursion.

### **UNIT IV:**

**Principles of Object Oriented Programming:** Procedure Oriented Programming, Object Oriented Programming, Basic concepts of Object Oriented Programming, Applications of C++, A simple C++ Program, An example with Class, Structure of C++ Program, Creating source file, Compiling and Linking.

### **UNIT V:**

**Classes and Objects:** Tokens, Keywords, Declaration of Variables, Dynamic initialization of variables, Specifying a Class, Defining member functions, Function overloading, Operator overloading, Constructors and Destructors, Inheritance and types of Inheritance