

I Year B Com (CA), Semester – III
Discipline: COMPUTER APPLICATIONS
Course 3C: Programming with C & C++

(Five units with each unit having 12 hours of class work)

SYLLABUS

Course 3C: Programming with C & C++

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

IV Classes and Objects

Introduction to OOP and its basic features - C++ program structure - Classes and objects - Friend Functions- Static Functions –Constructor – Types of constructors – Destructors - Unary Operators

V Inheritance:

Inheritance - Types of Inheritance -Types of derivation- Public – Private - Protected
Hierarchical Inheritance - Multilevel Inheritance – Multiple Inheritance - Hybrid Inheritance