

Semester - III

**Computer Programming in C (with ANSI features)-
Theory and Practical-I**

Course No. MM-CP-310
Duration of Examination: 3 hrs

Maximum Marks: 100
(a) External Exam: 80
(b) Internal Exam: 20

UNIT-I

An overview of programming. Programming language, Classification. C Essentials- program development. Functions. Constants and Variables. Expressions. Assignment statements. Formatting source files. Continuation character. The processor.

UNIT-II

Scalar Data Types-Declaration, Different types of Integers. Different kinds of Integer Constants. Floating-point Types. Initialization. Mixing Type. Explicit Conversions-Casts. Enumeration Types. The Void Data Type. Typedefs. Finding the Address of an object.

UNIT-III

Control Flow- Conditional Branching. The Switch Statement. Looping. Nested Loops. The break and continue statements. The goto statement. Infinite Loops.

UNIT-IV

Operators and Expressions- Precedence and Associativity. Unary Plus and Minus Operators. Binary Arithmetic Operators. Arithmetic Assignment Operators. Increment and Decrement Operators. Comma Operators. Relational operators. Logical operators. Bit-Manipulation operators. Bitwise Assignment operators. Cast operator. Size of operators. Conditional operator. Memory operators.

Recommended Books:

1. Peter A. Darnell and Philip E. Margolis, C: A Software Engineering Approach, Narosa Publishing House (Spring International Student Edition) 1993.

Reference:

2. Samuel P. Harkinson and Gly L. Steele Jr., C: A Reference Manual 2nd Edition, Prentice Hall, 1984.
3. Brian W. Kernighan & Dennis M. Ritchie, The C programme Language, 2nd Edition (ANSI features) Prentice Hall 1989.