

**B. Com (Comp)/B. Com (IT)/ BBA (IT)**  
**I Year, II-Semester**  
**'C' PROGRAMMING**

**Scheme of Instruction**

Total durations Hrs : 60

Hours/Week : 06(4T+2P)

Credits : 5

Instruction Mode: Lecture +practical

Course Code : BS.05.201.24T

**Scheme of Examination**

Max. Marks : 100

Internal Examination :30

SBT : 10

External Examination :60

Exam Duration : 3 Hrs

**Unit - I**

**Introduction to Programming:** Problem analysis, Introduction to algorithms, flow charts, structured programming and modular programming.

**Overview of C:** History of C, Importance of C, Basic Structure of C program, Writing and Executing a C Program. Constants, Variables and Data types, Input/output statements, Operators and Expressions,

**Unit – II**

**Decision Making and Branching:** Introduction, if, if-else, Nested-If statements, Switch-case statement.

**Decision Making and Looping:** Introduction, *While* Statement, *Do-while statement*, For Statements, break and continue statements.

**Unit – III**

**Arrays:** Introduction, Defining, creating and initializing an array One-Dimensional Array, Two-Dimensional Array.

**Pointers:** Introduction, Understanding Pointer-creating and assigning pointer, Accessing address of a variable. Pointers to arrays.

**Unit – IV**

**Functions:** Introduction, types of functions, built-in Functions-String Functions, Date Functions.

**User-defined functions:** Introduction, Elements of functions-Function Declaration, function definition, function calls, Parameter Passing-call by value and call by reference, Recursion, Passing arrays to functions.

**Unit -V**

**Structures and Unions:** Introduction, Defining Structures, declaring structure variables, Structures initialization, Accessing Structure members. Structure vs. Unions, Enumerated Data Types.