Syllabus for B.Sc. 1st Year(Semester-II)
Subject: Information Technology
Programming in C (IT-02)

UNIT-I

Steps in problem solving, Flow-Charts, Algorithms, Flowcharts and Algorithms for various problems introduction to Programming Languages.
Fundamentals of C Programming Language-History of C,Character set, Identifiers and keywords, Data Types, Constants, Variables and Arrays, Declarations, Expressions, Library functions, Symbolic Constants.

UNIT-II

Operators- Unary, Binary and Ternary operators: increment/decrement operators, Arithmetic operators, Relational operators, Logical operators, Bitwise operators, Conditional operator
Data Input and Output- printf(), scanf(), getc(), getch(), getchar(), putc(), putchar(), gets(), puts().
Storage Class in C- Automatic, Register, static, external

UNIT-III

Control Statements- if statement, if-else statement, if-else ladder, nesting if-else, goto statement, switch-case statement
Loops- while, do-while, for, nested loops, break, continue, exit, comma operator

UNIT-IV

Arrays- Arrays, One dimensional array, Array operations, two dimensional arrays, Arrays and strings – standard string functions
Functions- defining function, function arguments, function prototype, recursion, passing array to a function

SUGGESTED READING:
1. "Programming in C" by Schaum Series (Mcgraw Hill)
2. "Let Us C" by Yashwant Kanitkar, BPB Publications
3. "Programming in ANSI C" by E. Balaguruswamy, Tata McGraw Hill
4. "Art and Craft of C" by R.B. Patel.
5. "The C Programming Language" 2nd, Edition by Brian W. Kernighan & Dennis Ritchie Pearson