

BHARATHIAR UNIVERSITY :: COIMBATORE-641 046

**Electronics/ B.Sc Common to B.Sc Electronics & Communication
Systems degree courses**

(For the students admitted during the academic year 2007-08 batch and onwards)

**III Semester — Group B- Allied B- Paper — I -
C Programming**

Unit-I : Introduction — Names — Data types & qualifiers — Constant — variables — Assignment of variables — initialization. Operators: arithmetic assignment, relational, logical, bitwise, conditional, compound assignment unary and other operators — Order of precedence and associativity of operations.

Unit-II : Program Control Constructs : Conditional & multiple branching iteration — jump constructs- Console — input and output : console I/O functions — getch, putch, getchar, putchar, gets puts, print, and scan functions - formatted I/O . Functions: definition — prototype - recursion — simple programs.

Unit-III : Arrays: Initializations — multidimensional arrays — characts arrays, pointers: declaration and initialization of pointer variables pointers and functions — pointers and arrays — pointers and strings — arrays of pointers and pointer to an array - command line arguments - dynamic memory allocation.

Unit- IV : Structures & unions : Definition & initializing structure variables — array of structures — pointer to structures — array of pointers structures — passing structures to functions — bitfields — unions types

Unit - V: Files: File structure — opening & closing of files — characters functions — line I/O functions — Formatted I/O functions — Block I/O functions, Preprocessor directive: file inclusion — macro substitution — conditional compilation.

Text Book: C. Balasubramanian: ANSI C. TMH. 1992.