

UNIT - 1**L- 10, T-3**

INTRODUCTION TO C PROGRAMMING: Structure of C program - Comments, Processor statement, Function header statement, Variable declaration statement and Executable statement; C character set, Constants, Identifiers, Operators, Punctuations, Keywords, Modifiers, Identifiers, Variables, C scopes, Basic data types, Type qualifiers, Storage classes, Reading and writing characters, Formatted I/O.

UNIT - 2**L-9, T-3**

OPERATORS AND CONTROL STATEMENTS: Operators - Assignment, Arithmetic, Relational, Logical, Bitwise, Ternary, Address, Indirection, Sizeof, Dot, Arrow, Parentheses operators; Expressions
- Operator precedence, Associative rules; Control statements - Category of statements, Selection, Iteration, Jump, Label, Expression and Block.

UNIT - 3**L-9, T-3**

FUNCTIONS AND ARRAYS: Function - Declaration, Prototype, Definition, Calling by value and call by address, Standard library functions and Recursive functions; Array - Declaration, Initialization, Reading, Writing, Accessing and Passing as a parameter to functions, 2D-arrays, Multidimensional arrays.

UNIT - 4**L-9, T-3**

STRINGS AND POINTERS: Strings - Declaration, String library functions, Array of strings, Command line arguments; Pointers - Declaration, Initializing pointers, Multiple indirection, Relationship between arrays and pointers; Scaling up - Array of arrays, Array of pointers, Pointer to a pointer, Pointer to an array; Pointer to functions, Dynamic memory allocation functions.

UNIT - 5**L-8, T-3**

STRUCTURES AND FILES: Structures - Declaration, Initialization and accessing, Array of structures and passing structures to functions, Structure pointers, Arrays and structures within structures, Unions, Bit-fields, Types and enumerations; Files - I/O and processing operations on text and binary files; Pre-processor directives.

TEXT BOOK:

1. Ajay Mittal, "Programming in C - A practical Approach", 1st edition, Pearson Education, India, 2015.

REFERENCE BOOKS:

1. Reema Thareja, "Introduction to C Programming", 2nd edition, Oxford University Press India, 2015.
 2. Herbert Schildt, C, "The Complete Reference", 4th edition, Tata McGraw-Hill, 2000.
 3. E. Balagurusamy, "Programming in ANSI C", 4th edition, Tata McGraw- Hill, 2008.
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