C PROGRAMMING

Course Objectives:

- To impart adequate knowledge on the need of programming languages and problem-solving techniques.
- To enable effective usage of arrays, structures, functions, pointers and to implement the memory management concepts.
- To study the advantages of user defined data type which provides flexibility for application development. To teach the basics of pre-processors available with C compiler.

Detailed Syllabus

Unit-1

Algorithm and Programming Development steps in development of a program, Flow charts, Algorithm development, Program Debugging. Program Structure:- I/o statements, assign statements. Constants, variables and data types, Operators and Expressions, Standards and Formatted, Use of Header & Library files.

Unit-2

Control Structures: Introduction, Decision making with IF - statement, IF - Else and Nested IF, While and do-while, for loop, Break and switch statements.

Unit-3

Functions:- Introduction to functions, Global and Local Variables, Function Declaration, Standard functions, Parameters and Parameter Passing, Call -by value/reference, Recursion.

Unit-4

Introduction to Arrays, Array Declaration and Initialization, Single and Multidimensional Array. Arrays of characters.

Unit-5

Pointers:- Introduction to Pointers, Address operator and pointers, Declaring and Initializing pointers.