Syllabus of C

- Program
  Programming
  Programming Languages
  Types of Software
  Used of C in software

- Introduction of C,
  History of C, Advantages of C in old era,
  Current Development based on c Programing,
  Features of C,
  Application of C

- Character set ,ASCII Table,
  Tokens, Keywords,
  identifiers and naming rules in C

- Constant , Data Types,
  Type Qualifiers ,
  Data storing Structure,
  Memory utilization with data types

- Variable Declaration,
  Variable Assignment ,
  variable Assignment ,
  Initialization of the variable,
  Comments in C Defining Constants

- Arithmetic Operators ,
  Arithmetic Expression,
  Evaluation of Expression ,
  Relational Operators ,Logical Operators

- Assignment Operators ,
  Increment & Decrement Operators
  Conditional Operators , Bitwise operators ,Type casting

- Size of operator ,
  comma operator ,
  Operator Precedence and Associativity

- Expression in C,
  Evaluation of various Expression ,
  Performing various programs on printing various patterns

- Input output library functions, Non Formatted input output in c,
  Character oriented Libraries, Compiler Linker & Loader,
  Program Execution Phases, Formatted Library Function,
  Mathematical library Function,

- Introduction to various IDE in C,
  Installation of IDE, Basic programs

- Conditional Control statement (IF,IF ELSE,NESTED IF, IF Else IF
  Ladder)

- Switch Statement ,
  While , Do While , FOR, Nested LOOP

- Break, continue , go to return ,
  Hands on with all Programs

- Programs
  Set1- Program on For Loops
  Set 2- Programs on for Loops
  Set 3- Programs on While Loop

- Arrays, One dimensional Array ,
  Declaring array,
  initialization of array programs on creating and accessing array

- Two Dimensional array, Declaring 2D Array,
  Initializing 2D Array, Accessing 2D array, Programs on 2D arrays,

- Three Dimensional Array,
  Set4: Programs on Array Operations
  Set5: Programs(WAP to Print element, WAP to print array in reverse order, WAP to print sum of all element of array, WAP to copy element from one array to another, WAP to print duplicate element in array, WAP to print unique element in array)

- Declaring String, Storing String ,String Delimiters ,
  String & Character , Declaration ,initialization

- String function ,String array, String Input & Output, Strings as character arrays, Strings using character pointers, WAP using character array, String manipulation library function, Array of String , program using array of string

- Understanding Memory Address, Pointer Operators, Pointer in C, Pointer Limitations & Advantages, Declaration of Pointer Variable

- Null Pointer, void pointer, compatibility ,Array of Pointer, Pointer with arithmetic's , pointer to pointer, Dynamic memory allocation function

- Set6:Preparation on pointer Programing
  Set7: Memory allocation program in Pointer
  Set8: pointer accessibility programs

- Function, Adv. Using function, defining function , calling function, return statement ,Function Prototype, programs using function

- Scope, Recursion, Iteration, Nested Function, Call by value , call by address, Function returning pointer

- Pointer and One Dimensional Arrays , Pointer & Two Dimensional Array, Passing 1 D Array to function ,passing 2 D array to function Pointer and String , Passing String to function, Pointer to Function

- Object Attributes ,Scope, Extent , Linkage , Auto ,Static , extern, register

- Structure, Structure Type Declaration , Structure Variable Declaration, Initialization of structure

- Accessing the members of structure , WAP to operate the structure, Operation on structure (copying and controlling structure)

- Nested Structures, Structure containing Array, Array of structure

- Pointer to structure , dynamic memory allocation , pointer within structure , self –referential structures

- Passing structure to function, function returning structure ,unions

- Working with structure & Union , Enumerated Type, enum keyword, Tydef keyword ,Bit Fields