# C Language Syllabus

# What is C?

- 1. Execution of C Program
- 2. History
- 3. Structure of C Program

#### Variables and Keywords

- 1. Character Set
- 2. Identifier
- 3. Variable
- 4. Keywords
- 5. Escape Sequence Characters

### Constants

- 1. Real Constant
- 2. Integer Constant
- 3. Character Constant
- 4. String Constant

## Data Types

- 1. Data Types
- 2. Qualifier
- 3. Enum
- 4. Typedef

### **Operators**

- 1. Assignment Operator
- 2. Arithmetic Operators
- 3. Logical Operators
- 4. Relational Operators
- 5. Shorthand Operators
- 6. Unary Operators
- 7. Conditional / Ternary Operator
- 8. Biwise Operators
- 9. Operator Precedence and Associativity
- 10. If Statement
- 11. If-Else Statement
- 12. Nested If-Else
- 13. Switch Case

# Looping Statements

- 1. Looping / Iterative Statements
- 2. while
- 3. do while
- 4. for loop
- 5. Break Statement
- 6. Continue Statement
- 7. Goto

# **Storage Classes**

- 1. Storage Classes
- 2. Automatic Storage Class (auto)
- 3. Register Storage Class (register)
- 4. Static Storage Class (static)
- 5. External Storage Class (extern)

## Array

- 1. Array
- 2. Single / One Dimensional Array
- 3. Two Dimensional Array

## Structure

- 1. Structure
- 2. Array in Structures
- 3. Structure with Array
- 4. Difference between array and structure

## Pointer

- 1. An Introduction to Pointers
- 2. Pointer Notation in C Language
- 3. Back to Function Calls in C Language with practical
- 4. Recursion in C Language with practical
- 5. Summary

### Union

- 1. Union
- 2. Difference between structure and union
- 3. Strings
- 4. File Handling

### File Handling

- 1. File Input/Output in C Language with practical
- 2. File Operations in C Language with practical
- 3. Opening a File in C Language with practical

- 4. Reading from a File in C Language with practical
- 5. Closing the File in C Language with practical
- 6. Counting Characters, Tabs, Spaces, with practical
- 7. A File-copy Program in C Language
- 8. Writing to a File in C Language with practical
- 9. File Opening Modes
- 10. String (line) I/O in Files
- 11. Summary