

**Objective(s)**

As, C language is koine of programming, anewbie can start their programming journey by understanding and practicing input/output using various control statements and manipulate Array & pointers of various data types.

**UNIT I****Basic of programming**

Introduction to Flowcharts and Algorithms, need of Computer languages and types of computer languages.

**UNIT II****Introduction to C Language and its artifacts**

C character set, Identifiers and keywords, Data types, Declarations, Expressions, statements and symbolic constants, Operators.

**UNIT III****Input/output functions**

Basic input/output library functions, control statements, storage types, Defining and accessing, passing arguments, Function prototypes, Recursion, Library functions.

**UNIT IV****Arrays & String**

Defining and processing Arrays, passing arrays to a function, Multi-dimensional arrays, Define String, Using String, Printing a String.

**UNIT V****Pointers, Structures & Union**

Define Pointer, Pointer Arithmetic, passing pointer to function, Function data return with a Pointer, define structure, passing structure to a function, Unions, typedef, array of structure and pointer to structure.

**Reference Book(s)**

1. Let US C –By Yashwant Karnetkar
2. C – programming E.Balagurusamy Tata McGray Hill
3. Schaum’s outline of Theory and Problems of programming with C : Gottfried
4. Complete reference with C Tata McGraw Hill
5. The C programming language :Kerninghan and Ritchie
6. Programming in ANSI C : Ramkumar Agarwal
7. Mastering C by Venugopal, Prasad – TMH 8. Sprit of C

**Practical(s)**

1. Explain & Practice for structure of C program and its basic constructs
2. Explain & Practice for basic input/output library functions
3. Explain & Practice for conditional statement
4. Explain & Practice for Loop statements.
5. Practice for series programs.
6. Explain & Practice for functions.
7. Explain & Practice for Arrays.
8. Explain & Practice for Multidimensional array.

9. Explain & Practice for String manipulation.
10. Explain & Practice for Pointers.
11. Explain & Practice for structures.
12. Explain & Practice for union.