

BSc (IT) Second Semester

DSC-4: Advanced Concepts in C Programming (LTP::4:0:2)

6 Credits

UNIT I:

Strings : Declaring and initializing string variables, reading string from terminal, writing string to screen, putting strings together. Comparison of two strings, length of a string, copying a string, string operations using library functions & User defined functions.

Structures : Definition and declaration of a structure, assigning and accessing the members of a structure, structure initialization, structure elements in memory, comparison of structure variables, structure with in the structure, array within structures.

unions: Definition and declaration, accessing the members of a union. comparison of structure and union.

UNIT II

Pointers : Advantages of pointers, declaration of pointer variable, pointer expressions, pointers and functions: call by value and call by reference, pointers and arrays, array of pointers, pointer to pointer

UNIT III

File Handling: Definition, types of files. Creating text file. Modes of opening a file, formatted and unformatted i/o operations, random files. C processes and directives, Macros and Compilation directives.

UNIT IV

Bit level operators and their applications. Graphics in C, initializing graphic mode, displaying text, drawing different shapes and simple linear transformations.

Texts Books:

1. Problem Solving with C -PHI(EEE). By - M.T.Somashekara, D S Guru, K S Manjunath.
2. E. Balaguruswamy : Programming in ANSI C” Tata Mc Graw-Hill
3. S. ByronGottfried. : “Programming with C”, Tata McGraw-Hill(2000)
4. Yashawant Kanetkar : “Let us C”
5. Brain Verminghan & Dennis M. Ritchie “ANSI C Programming” (PHI)