

I B.Sc, (CS)	PROGRAMMING IN C	CS101S
SEMESTER - I		HRS/WK-4
CORE - 1		CREDIT - 3

**Objective:**

To understand the basic concepts of a structured programming language.

**UNIT – I**

**10hrs**

**Basics Of C:** C fundamentals Character set – Identifier and keywords – data types – constants– Variables – Declarations – Expressions – Statements – operators – Library functions.

**UNIT – II**

**10hrs**

**I/O and Control Statements:** Data input output functions - Simple C programs - Flow of control – if, if-else, while, do-while, for loop, nested control structures – switch, break and continue, go to statements.

**UNIT –III**

**15hrs**

**Function and Storage classes:** Function – Definition – Prototypes – Passing arguments – Recursion - Storage classes.

**UNIT – IV**

**15hrs**

**Arrays, Structures and Unions:** Arrays – Defining and Processing – Passing arrays to functions – Arrays and string - Structures and Unions.

**UNIT – V**

**10hrs**

**Pointers and Files:** Pointers – Declarations – Passing pointers to function – Operation on Pointers – Pointer and Arrays – Files and operation on files.

**Text Books:**

1. Programming in ANSI C by E.Balagurusamy.
2. Ashok N.Kamthane, Programming with ANSI and Turbo C, Pearson Education.

**Reference Books:**

1. B.W. Kernighan and D.M. Ritchie, the C programming Language.
2. H. Schildt, C: The Complete Reference, TMH Edition,.
3. Kanetkar Y., "Let us C", BPB Pub., New Delhi.

**NOTE:**

Please refer text book 1 for Question Paper and key preparation.