

SARDAR PATEL UNIVERSITY
Programme & Subject: B.Sc. (CA & IT) – M.Sc. (CA & IT) Dual Degree
Semester: I
Syllabus with Effect from: June-2019

Paper Code: US01CIT21	Total Credit: 4
Title Of Paper: Computer Programming Using C	

Unit	Description in detail	Weightage (%)
I	Introduction to C Programming History of C, Translators – Compiler and Interpreter, Compiling & Linking, Execution of the C Program, Introduction to flowchart and algorithm, Rules for writing algorithm, Symbols used to draw a flowchart, Basic Structure of C Program, Variables, Constants, Data types in a high-level language, main() function, Operators, Precedence of operators, Expression, Type Conversion.	25%
II	Basics of Programming Console I/O statements, Character I/O using : getchar(), putchar (), getch(), Assignment statements, Control structures, Decision making Statements, goto statement, Loop statements, continue and break statements.	25%
III	Library Functions, Arrays & Strings Common standard library functions, Concept of Arrays - Concepts of Array, One and Two dimensional arrays, declaration and initialization of arrays, String handling.	25%
IV	User-Defined Functions Concepts of User defined functions, Need for User defined functions, Elements of User Defined Functions – Function Definition, Function call, Function Declaration, Return statement, Categories of Functions, Recursive function. Storage classes, Scope, Visibility and Lifetime of a variable.	25%

Basic Text & Reference Books:-

1. Kernighan B., Ritchie D. : The C Programming Language, PrenticeHall.
2. Cooper H. & Mullish H : The Sprit of C, Jaico Publication House, New Delhi.
3. BalaguruSamy: Programming in ANSI C., Tata McGraw Hill Publication.