

SARDAR PATEL UNIVERSITY
Programme & Subject: B.Sc. (CA & IT) – M.Sc. (CA & IT) Dual Degree
Semester: I
Proposed Syllabus: June 2018

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| Paper Code: PS01CIIT21 | Total Credit: 4 |
| Title Of Paper: Computer Programming Using C | |

| Unit | Description in detail | Weightage (%) |
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| 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, Prentice Hall.
2. Cooper H. & Mullish H : The Sprit of C, Jaico Publication House, New Delhi.
3. BalaguruSamy: Programming in ANSI C., Tata McGraw Hill Publication.