

**SARDAR PATEL UNIVERSITY**  
**Programme: BCA**  
**Semester: I**  
**Syllabus with effect from: JUNE 2011**

<b>Paper Code: US01CBCA01</b>	<b>Total Credit: 3</b>
<b>Title Of Paper: Fundamentals Of Computer Programming Using C</b>	

Unit	Description in detail	Weighting (%)
I	<b>Concept of Algorithm, Flowchart and Languages</b> Concept of an algorithm and a flow chart, need and definition Symbols used to draw a flow chart Typical (primitive) examples of flow charts and algorithms Generations of computer languages High-level and low-level languages Translators Introduction to editors and details about one of the editors	25%
II	<b>Basics of Programming</b> Problem analysis Variables, expressions & manipulation Data types in a high-level language, operators I/O statements, Assignment statements Control strategies, Conditions	25%
III	<b>Structured Programming, Library Functions and Arrays</b> Loop statements Method of structured programming Common standard library functions Arrays	25%
IV	<b>Strings, User-Defined Functions and Command-line arguments</b> String handling. Working with functions Calling functions, passing arguments User-defined functions Command-line arguments	25%

**Basic Text & Reference Books :-**

- Kernighan B., Ritchie D. : The C Programming Language, Prentice Hall.
- Cooper H. & Mullish H : The Sprit of C, Jaico Publication House, New Delhi.
- Balaguruswami : Programming in ANSI C., Tata McGraw Hill Publication.

