## SARDAR PATEL UNIVERSITY Programme & Subject: B.Sc (Computer Science) Semester: III Syllabus with Effect from: June-2012

Paper Code: US03CCSC01	Total Credits 2
Title Of Paper: Fundamentals of Computer Programming Using C	Total Credit: 3

Unit	Description in detail	Weighting (%)
Ι	Development of Algorithms, Flow Charts & Language Fundamentals	
	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	25%
	Generations of computer languages	2.3 %
	High-level and low-level languages	
	Translators	
	Introduction to editors and details about one of the editors	
II	Logic Development	
	Problem analysis	
	Variables, expressions & manipulation	25%
	Data types in a high-level language, operators	23%
	I/O statements, Assignment statements	
	Control strategies, Conditions	
III	Structured Programming, Library Functions and Arrays	
	Loop statements	
	Method of structured programming	25%
	Common standard library functions	
	Arrays	
IV	Strings, User-Defined Functions and Command-line arguments	
	String handling.	
	Working with functions	250/
	Calling functions, passing arguments	25%
	User-defined functions	
	Command-line arguments	

## **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.
- Computer Fundamentals 4th Edition P.K. Sinha, Priti Sinha

