UkaTarsadia University

Department of Commerce and Management

B.Com
(Computer Applications)

CC 6 Programming in 'C'
(030100315)

Semester - III

Effective from June-2016

Syllabus Version: 1.01

Semester-III

(030100315) CC 6 Programming in 'C'
Practical Syllabus

Credits: 4 Theory **Contact Hours per Week: 4**

Credits: 2Practical **Contact Hours per Week: 4**

Course Objective:

To impart the knowledge of specification and structure of C programming language and to make the students compile, execute & debug a C program in a programming environment.

Course Outcomes: The learners will be able to translate the program specification into the C language.

No.	Unit	Minimum No. of Contact Hours (PR)	Approx. Weight age %
1	Programming Language and Overview of C	02	15
2	Decision Making, Branching, Looping Statement and Array	14	20
3	String and Functions	09	15
4	User Defined Functions	14	20
5	Structure and Unions	09	15
6	Pointers	04	15
	Total	**52**	**100**

B.Com (Computer Applications)	Subject	Hours
Semester – III	(030100315) CC 6 Programming in 'C'	4hrs/week (Theory) 4hrs/week (Practical)
	(Practical Syllabus)	2 Credits

SECTION I			
Unit	Topics		Hours TH
Unit-1 [Weightage 15%]	**Programming Language and Overview of C**		02
	1.1	Structure of C Program, Tokens, Keywords, Identifiers, Constants, Variables, Data Types, Types of Operators and Expressions, Input and Output Functions in C	
Unit-2 [Weightage 20%]	**Decision Making, Branching, Looping Statementand Array**		14
	2.1	Decision Statement – IF-ELSE Statement and Nested IF statement, Break, Continue,Goto, Switch Case ,While Loop, Do-While Loop, For Loop, Nested Loops, Definition - Types of Arrays - One-Dimensional Array ,Two Dimensional Array & Multi-Dimensional Array, declaration and initialization of Arrays	
Unit-3 [Weightage 15%]	**String and Functions**		09
	3.1	Introduction to String literals, Working with String and Characters, Declaration and initialization of String Variables,Reading and writing Strings, String handling Functions ,Types of Storage Classes , Scope, visibility and lifetime of variables rules	

SECTION II			
Unit	**Topics**		**Hours**
			TH
Unit-4 [Weightage 20%]	**User Defined Functions**		**14**
	4.1	User defined Function – Declaration and Prototype, Elements of User-defined functions, Return values and its types, Types of Functions ,Function call and function declaration , Call by Value and Reference, Function with Operators ,Function with Decision statements , Function with Arrays , Recursion	
Unit-5 [Weightage 15%]	**Structure and Unions**		**09**
	5.1	Declaration and Initialization of Structure,defining Structure, Accessing Structure Elements,How Structure Elements are Stored, Structure within Structure, Array of Structure ,Pointer to Structure, Unions	
Unit-6 [Weightage 15%]	**Pointers**		**04**
	6.1	Introduction to Pointers, Declaration and initialization of Pointers, Arithmetic Operations using Pointers, Pointers and Function arguments, Array of Pointers, Pointers to Pointers	

Text Book:

1. Balagurusamy, E. *Programming in ANSI C.* New Delhi: Tata McGraw Hill Publishing. Company Ltd, 2011.

Reference Books:

1. Kanetkar, Yashwant. *Let us C.* New Delhi: BPB Publications, 2010.
2. Kernigham, Brian W and Dennis M Richie. *C Programming Language*. New Delhi: Prentice-Hall of India Pvt Ltd, 1988.
3. Schildt, Herbert. *C Complete Reference.* New Delhi: Tata McGraw-Hill Publishing Company Ltd, 2004.