



C. U. SHAH UNIVERSITY

Wadhwan City

FACULTY OF: Computer Science

DEPARTMENT OF: Bachelor of Computer Application

SEMESTER : I

CODE: - 4CS01BCP1

NAME: Programming Basics using C Language

Teaching and Evaluation Scheme

Sr. No	Subject Code	Subject Name	Teaching Hours/Week				Credits	Evaluation Scheme/Semester								
			Th	Tu	Pr	Total		Theory				Practical			Total Marks	
								Sessional Exam		University Exam		Internal		Uni.		
								Marks	Hrs	Marks	Hrs	Pr	TW	Pr		
4	4CS01BCP1	Programm ing Basics using C Language	4	-	-	4	4	30	1.5	70	3	-	-	-	100	

Objectives: At the end of the syllabus, Student can develop a various types of program using c language.

Pre-requisites: Fundamental knowledge of computer

Course Outline:

Ch. No	Chapter Name	Course Contents	Lect. Hours
1	Introduction of Programming Languages:	<ul style="list-style-type: none"> > Introduction to Machine, Assembly and Higher Level language > Limitation and features > Pre programming tools <ul style="list-style-type: none"> o Flowchart o Algorithm o Writing algorithms and development of flowcharts for the given list of problems. 	7
2	C language overview:	<ul style="list-style-type: none"> > History of C > Basic Structure of C > Executing C program > Character set & C Tokens > Identifiers & Keywords > Data Types > Constants and Variables > Comment 	8
3	Operator & Expression:	<ul style="list-style-type: none"> > Introduction > Types of operators > Arithmetic expression > Evaluation of expression 	10

		<ul style="list-style-type: none"> > Type conversion in expression > Operator Precedence and associativity 	
4	Decision Making Structure	<ul style="list-style-type: none"> o If statement o If-else statement o Nested If-else statement o Switch statement 	5
5	Loop Control Structure and Jumping statement	<ul style="list-style-type: none"> o While loop o Do-While loop o For loop o Nested loop <p>Jumping Statements</p> <ul style="list-style-type: none"> o break, continue, goto, exit 	7
6	Header files and library functions:	<p><stdio.h> : print(), scanf(), fflush(), gets(), puts() <conio.h>: getch(), getche(), getchar(), clrscr(), gotoxy(), textcolor(), textbackground(), cprintf() <math.h>: abs(), exp(), sqrt(), log(), ceil(), floor(), pow(), fmod(), fabs() <string.h>: strlen(), strcpy(), strcmp(), strcat(), strlen(),strupr(),strrev() <ctype.h> : isalpha(), isdigit(), isalnum(), isspace(), isupper(), islower(), isprint(), toupper(), tolower()</p>	5
7	Array	<ul style="list-style-type: none"> > Introduction <ul style="list-style-type: none"> o One dimensional array o Two dimensional array o Multi dimensional array o Dynamic array 	5
8	String	<ul style="list-style-type: none"> > Introduction > Declaring and initializing string variable > Writing string to screen > String Operations 	4
9	User Defined Function	<ul style="list-style-type: none"> > Introduction > Elements of User Defined Function > Category of UDF <ul style="list-style-type: none"> o Function with no argument and no return value o Function with argument and no return value o Function with argument and return value o Function with no argument but return value > Nesting of Function > Recursion > Storage class 	4
TOTAL			55

Reference Books:

- (1) Programming in Ansi C, by E Balagurusamy, Publisher: McGraw Hill Education India, ISBN-13: 978-1259004612
- (2) C: The Complete Reference, by Herbert Schildt, Publisher: McGraw Hill Education (India), ISBN-13: 978-0070411838
- (3) Let Us C, by Yashavant Kanetkar, Publisher: BPB, ISBN-13: 978-8183331630