C. U. SHAH UNIVERSITY

FACULTY OF: Computer Science
DEPARTMENT OF: M.Sc(CA & IT)
SEMESTER : III
CODE: 4CS03ACP1
NAME: Advanced C Programming

Sr. No	Subject Code	Subject Name	Teaching Hours/Week				Credits	Evaluation Scheme/Semester						Total Marks
								Theory		Practical				
			TH	TU	PR	TOTAL		Sessional Exam	University Exam	Sessional Exam		University Exam		
								Marks	Hrs	Marks	Marks	Hrs	Total Marks	
1	4CS03ACP1	Advanced C Programming	5	0	0	5	5	30	1.5	70	50	1.5	0	100

Objectives:
• To introduce the basics of programming to the students. Students will familiar with problem solving techniques.
• To introduce basic and intermediate level concepts and techniques of the C programming language.
Pre-requisites: Awareness of Computer is required.

Sr.No	Course Contents	No of Hours
1	**String** String, String storage, Reading and writing string, String handling functions.	10
2	**User Define Functions** Concept of user defined functions, function prototype, definition of function, parameter passing, calling a function, category of function, recursive function.	4
3	**Structure and Union** Basics of structure, structure members, accessing structure members, array of structures, array within structure, size of structures, unions, bit -fields.	4
4	**Pointers** Basics of pointers, pointer and array, pointer to array, array of pointers, pointer as function argument, function returning a pointer.	7
5	**File Management** Introduction to file I/O operations on file, Reading from and writing to files, File handling functions, command line arguments.	5

Learning Outcomes:
• At the end of this course the students can solve problem usingC, fundamental of programming language and also improve the programming skills.

Books Recommended:

1, "*Programming in ANSI C",*EBalagurusamy TMH Publication. (4th Edition).
2, "*C : The Complete Reference*", Herbert Schildt, TMH Publication.(4th Edition).
3, "*Let us C*", Y Kanetkar, BPB Publication(3rd Edition).
4, "*C Programming Language*", Brian W. Kernighan(2nd Edition).
5, "*The C Programming Language*",BrainW,Pearson(2nd Edition).