

Subject Code: 1SC2040205

Subject Title: PROGRAMMING IN 'C' LANGUAGE & APPLICATIONS (PRACTICAL)

Course Objective:

- To develop a programming logic and skills for practical programs using 'C'

Teaching scheme (hours) per week			Credit				Theory Marks		Practical Marks		Total
Theory	Tutorial	Practical	Thy	Tuto	Pract	Total	Uni. Assessment	Cont. Assessment	Uni. Assessment	Cont. Assessment	
-	1	3	-	1	3	4	--	--	60	40	100

Subject Contents			
Unit. No	Topic	Total Hours	Weight (%)
1	- Largest among the numbers, Sum of individual digits of a given number - Reverse order of a given number, evaluations of operators, - Determination of roots of quadratic equations, $Ax^2+Bx+C=0$,	16	25
2	- Arranging given set of numbers in increasing/decreasing order, calculation of Mean. - Evaluation of sum of power series eg. e^x, $\sin x$, $\cos x$, $\log(1+x)$. - Calculation of GCD/LCM of two integers, sum of given numbers, Fibonacci numbers	16	25
3	- Evaluation of factorial of a positive integer and evaluation of binomial coefficients. - Evaluation of Prime and Armstrong numbers, Generation of twin primes, automorphic numbers	16	25
4	- Addition, subtraction and multiplication of matrices, Transpose, determinant...etc - Writing a given number in words using function, Arranging a set of names in alphabetical order. - Operations with strings and sorting.etc.	16	25

Course Outcome:

On successful completion of the course, students should be able to

- Students' logic and ability to solve the problems efficiently using C programming will be developed.

List of References:

- "Programming in ANSI C" by E. Balagurusamy, The McGraw-Hill Pub. Co. Ltd., 1992.
- "Computer programming in C", V Rajaraman, PHI-2002
- "The C Programming Language" by B. W. Kernighan and B. M. Ritchie. Prentice-Hall, 1977.
- "The C Primer" by L. Hancock and M. Krieger, McGraw-Hill, 1987.