P.B. SIDDHARTHA COLLEGE OF ARTS & SCIENCE

Siddhartha Nagar, Vijayawada – 520 010
Reaccredited at 'A+' level by NAAC
Autonomous & ISO 9001:2015 Certified

Title of the Course: C PROGRAMMING LAB
Semester : I

Course Code	22MA1L1	Course Delivery Method	Blended Mode
Credits	3	CIA Marks	30
No. of Lecture Hours / Week	6	Semester End Exam Marks	70
Total Number of Lecture Hours	90	Total Marks	100
Year of Introduction : 2020-2021	Year of offering : 2022-2023	Year of Revision: ---	Percentage of Revision :---

Course Objectives: This course is designed to develop the programming skills of C-language through problem solving.

Course Outcomes: After successful completion of this course, students will be able to

CO-NO	COURSE OUTCOME	BTL	PO	PSO
CO1	understand the basic computer concepts and programming principles of C language.	**K3**	**1**	**1**
CO2	develop C programs to solve simple mathematical and decision making problems.	**K4**	**7**	**2**
CO3	develop C programs to solve simple problems using looping constructs.	**K4**	**3**	**2**
CO4	develop C programs to demonstrate the applications of derived data types such as arrays and Pointers.	**K4**	**7**	**2**
CO5	develop C programs to demonstrate the applications of derived data types such as strings and functions.	**K4**	**1**	**2**

Mapping of Course Outcomes:

CO-PO-PSO MATRIX										
22MA1L1	**CO-PO**	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PSO1**	**PSO2**
	CO1	**2**							**2**	
	CO2							**3**		**3**
	CO3			**3**						**3**
	CO4							**3**		**3**
	CO5	**3**								**2**

LIST OF C – PROGRAMS :

1. To find factorial of a number. (CO5, K3)
2. To reverse a number. (CO1, K3)
3. To find GCD of two numbers using Euclidean algorithm. (CO3, K3)
4. To find Fibonacci numbers up to "N" (CO2, K4)
5. To find perfect numbers up to "N" (CO2, K4)
6. To find prime numbers up to "N" (CO1, K3)
7. To find sum of digits of a number. (CO3, K3)
8. To check a number palindrome or not. (CO3, K4)
9. To find the sum of squares of first ten natural numbers using function. (CO5, K4)
10. To find biggest of three numbers using function. (CO5, K4)
11. To find biggest element in an array. (CO4, K4)
12. To find the transpose of a Matrix. (CO4, K4)
13. To find the sum of the matrices. (CO4, K3)
14. To find the product of the matrices. (CO4, K3)
15. To find string length using user defined function. (CO5, K3)

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