PROGRAMMING WITH 'C'

Course Code	20SO8354	Year	II	Semester	I
Course Category	Skill Oriented Course	Branch	ECE	Course Type	Lab
Credits	2	L-T-P	1-0-2	Prerequisites	Nil
ContinuousInternal Evaluation	0	Semester End Evaluation	50	Total Marks	50

Course Outcomes	
Upon successful completion of the course, the student will be able to	
CO1	Build algorithm and flowchart for solving problems.(L3)
CO2	Apply Structured Programming/C constructs for solving problems (L3).
CO3	Analyze outputs using given constraints/test cases.(L4)
CO4	Develop an effective report based on various programs implemented and express with an effective oral communication. (L3)

Mapping of course outcomes with Program outcomes (CO/ PO/PSO Matrix)
Note: 1- Weak correlation   2-Medium correlation   3-Strong correlation
* - Average value indicates course correlation strength with mapped PO

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3												3	
CO2	3								3				3	
CO3		3											3	
CO4										3				
Average* (Roundedto nearest integer)	3	3							3	3			3	

Syllabus		
Expt.No.	Contents	Mapped CO
I	Fundamentals of Computer Hardware, Introduction to Programming Languages, DOS/UNIX Commands	CO2
II	Draw flowcharts for fundamental algorithms.	CO1,
III	C Programs to demonstrate Variables, Data Types.	CO1 -CO4
IV	C Programs to demonstrate C-tokens.	CO1 -CO4
V	C Programs to demonstrate Decision making and branching (Selection).	CO1 -CO4
VI	C programs to demonstrate different loops.	CO1 -CO4
VII	C programs to demonstrate arrays.	CO1 -CO4
VIII	C programs to perform operations on strings with String handling functions and without String handling functions.	CO1 -CO4
IX	C programs to demonstrate functions.	CO1 -CO4
X	C programs on pointers.	CO1 -CO4
XI	C programs on structures and unions.	CO1 -CO4
XII	C programs to demonstrate files.	CO1 -CO4

Learning Resources
Text Books
1. R.G. Dromey, How to Solve it by Computer, 1/e, Pearson Education, 2006.   2. ReemaThareja, Programming in C, Oxford University Press, AICTE Edition, 2018.
Reference Books
1. B. A. Forouzan and R. F. Gilberg, Computer Science: A Structured Programming ApproachUsing C, 3/e, Cengage Learning, 2007.   2. PradipDey, Manas Ghosh, Programming in C, Oxford University Press, AICTE Edition,   3. B. Gottfried, Programming with C, 3/e, Schaum's outlines, McGraw Hill   (India), 2017.4.Jeri R. Hanly, Ellot B. Koffman, Problem Solving and Program   Design in C, 5/e, Pearson.
e- Resources & other digital material
1. http://cprogramminglanguage.net/   2. https://www.geeksforgeeks.org/c-programming-language/   3. https://nptel.ac.in/courses/106105085/4