

C Programming (Day wise Workshop Schedule)

Day	Content
Day-1 (Monday)	Algorithm and Flowchart, Translator and its types, Applications of C programming , Transition from algorithm to program, Syntax, logical errors and Runtime errors, Keywords, identifiers, constant, Data types, Type conversion, Operators and their types, Precedence and associativity,
Day-2 (Tuesday)	(RECAP OF PREVIOUS DAY) if, else-if, nested if - else, switch statements, use of break, and default with switch, Concept of loops, for, while and do while, multiple loop variables, use of break and continue statements, nested loop.
Day-3 (Wednesday)	(RECAP OF PREVIOUS DAY) Sub Programming , function, types of functions, passing parameters to functions: call by value Recursion: Definition, Types of recursive functions, Tower of Hanoi problem, scope of variable, local and global variables, Nesting of Scope Storage classes: Auto, Register, Static and Extern,
Day-4 (Thursday)	Revision for topics taught between Day-1 to Day-3 (First assessment From topics taught between Day-1 to Day-3)
Day-5 (Friday)	(RECAP OF PREVIOUS DAY) Pointer, pointer arithmetic and scaling, Pointer Aliasing. call by reference. Array (one dimensional), array using pointers, manipulating array elements, Linear search, Binary search, Bubble sort.
Day-6 (Saturday)	(RECAP OF PREVIOUS DAY) Array (Two dimensional), its uses in matrix computation(Addition, multiplication, sum of diagonal elements, transpose). Passing array to function.
Day-7 (Monday)	(RECAP OF PREVIOUS DAY) Strings: Introduction, initializing strings, accessing string elements, Array of strings, Passing strings to functions, String functions like strlen, strcat, strcmp, strcpy, strrev and other string functions.

Day-8 (Tuesday)	Revision Day for topics taught between Day-5 to Day-7
	(Second assessment From topics taught between Day-5 to Day-7)
Day-9 (Wednesday)	(RECAP OF PREVIOUS DAY) Structure, Structure within structure, Array of structure, Union, Difference between Structure and Union, Dynamic Memory Allocation: malloc, calloc, realloc and free.
Day-10 (Thursday)	(RECAP OF PREVIOUS DAY) Basics, File Types, File operations, File pointer, File opening modes, File handling functions, Command Line Arguments, File handling through command line argument, Record I/O in files, Preprocessor directives: Macros and File inclusion
Day-11 (Friday)	(RECAP OF PREVIOUS DAY) Introduction to Embedded System, Factors for Selecting the Embedded Programming Language, Difference Between C and Embedded C, Keyword, Data Types, Components of Embedded Program, Program Structure, Basic concepts of Embedded Programming
	(Third assessment From topics taught between Day-9 to Day-11)
Day-12 (Saturday)	External Practical Examination