

DSMDC124 Introduction to Programming II

Semester: II	Course Title: Introduction to Programming II	Credit: 4
Course No.: DSMDC124		(3 T + 1 P)

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 1	REMEMBERING	Remember the array syntax
CO 2	UNDERSTANDING	Understand concepts of array, strings and user-defined function
CO 3	APPLYING	Learn about structure and union
CO 4	ANALYSING	Understand about Pointers and file management functions
CO 5	EVALUATING	Evaluate the program using debugging and testing
CO 6	CREATING	Create computer programs for the real-world problems.

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	3	0	2	-	1
CO 2	2	1	1	-	1
CO 3	3	1	1	-	1
CO 4	2	1	-	1	1
CO 5	3	1	1	1	1
CO 6	3	1	1	-	-

Unit No.	Detailed Syllabus	Teaching Hours
I	Array and Strings: Introduction to Array, Concept of Dimensions in arrays, Initialization values in an array, Overflow and Underflow, Concepts of Multidimensional Array Introduction, Declaring and initializing string variables, Reading string from terminal, Writing string to screen, Arithmetic operations on characters, Putting string together, String Operations: String Copy, String Compare, String Concatenation and String Length, String Handling functions, Table of strings	15
II	User Defined Functions: Need for user-defined functions, the form of C function, return values and their types, calling a function, category of functions, no arguments and no return values, arguments with return values, handling of non-integer functions, nesting of functions, recursion, functions with arrays, the scope, visibility and lifetime of variables in functions Structures & Unions: Structure definition, Assigning values into members, structure initialization, comparison of structures, arrays of structures, arrays within structures, structures within structures. Introduction of Union. Difference between Structure and Union	15
III	Pointers & File Management: Introduction, Understanding pointers, Accessing the address of variable,	15

	Declaring and initializing pointers, Accessing a variable through its pointer, Pointer expressions, Pointer increments and scale factor, Pointers and arrays, Pointers and character strings, Pointers and Functions, Pointers and structures Introduction, Defining files and its Operations, Error handling during I/O operations, Random access files, Command line arguments Dynamic Memory Allocation , Introduction of Dynamic Memory Allocation, Dynamic Memory Allocation functions	
IV	Practical Component • Programs on single dimensional array. • Programs on two-dimensional array. • Programs on String operations (with and without library functions). • Programs on Functions (including searching and sorting). • Programs on Recursive Functions. • Programs on Pointers. • Programs on Dynamic Memory Allocation. • Programs on Structure & Union. • Programs on File Handling. • Programs on Searching and Sorting.	15

Suggested Reference Books:

1. Programming in ANSI C by E Balagurusamy - TMH Publications
2. Programming in C by Pradip Dey and Manash Ghosh - Oxford University Press Publication
3. Let us 'C' by Yashwant Kanetkar –BPP Publications
4. Forouzan, B. A., & Gilberg, R. F. (2007). A Structured Programming Approach Using C (3rd ed.). Cengage Publication.
5. Kernighan, B. W., & Ritchie, D. M. (2015). The C Programming Language (2nd ed.).Prentice Hall of India.
6. Gottfried, B. (2017). Schaum's Outline of Programming with C (3rd ed.). McGrawHillBook.

AEC125 Language Through Literature-II

Semester: II	Course Title: Language Through Literature-II	Credit: 2
Course No.: AEC125		Hours: 2/week

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
CO 1	REMEMBERING	
CO 2	UNDERSTANDING	Students will demonstrate an increased interest in reading stories and poems in English, developing a habit of literary exploration.
CO 3	APPLYING	Students will exhibit proficiency in identifying and using