

SREE VIDYANIKETHAN ENGINEERING COLLEGE (Autonomous)

SREE SAINATH NAGAR, A. RANGAMPET – 517 102

LESSON PLAN

Name of the Subject : Programming in C

Class & Semester : I B.Tech - I Semester

S. No.	Topic	No. of periods	Book(s) followed	Topics for self study
UNIT – I:INTRODUCTION TO C PROGRAMMING, OPERATORS & EXPRESSIONS				
1.	Introduction to C Programming: The C Character set, Writing First Program of C	1	T1	Algorithms and Flowchart Representations
2.	Identifiers and Keywords,	1	T1	
3.	Datatypes, Constants	1	T1	
4.	Tutorial-1	1	T1	
5.	Variables and Arrays, Declarations,	1	T1	
6.	Expressions, Statements, Symbolic Constants.	1	T1	
7.	Operators and Expressions: Arithmetic Operators, Unary Operators, Relational and Logical Operators,	1	T1	
8.	Tutorial-2	1	T1	
9.	Assignment Operators, the Conditional Operators	1	T1	
Total periods required:		10		
UNIT – II: DATA INPUT AND OUTPUT & CONTROL STATEMENTS				
10.	Data Input and Output: Single Character Input& Output, Input Data & Output data	1	T1	Interactive (Conversational) Programming
11.	Tutorial-3	1	T1	
12.	The Gets and Puts Function,	1	T1	
13.	Control Statements: Branching: The if-else Statement	1	T1	
14.	Looping: The while Statement	1	T1	
15.	Tutorial-4	1	T1	
16.	More Looping: The Do-While Statement, Still More Looping: The For Statement	1	T1	
17.	Nested Control Statement, The Switch Statement, The Break Statement, The Continue Statement	1	T1	
18.	The Goto Statement	1	T1	
19.	Tutorial-5	1	T1	
Total periods required:		10		
UNIT -III: FUNCTIONS, PROGRAM STRUCTURES & ARRAYS				
20.	Functions: A Brief Overview, Defining a Function, Accessing a Function	1	T1	Multidimensional Arrays
21.	Function Prototypes, Parsing Argument	1	T1	

S. No.	Topic	No. of periods	Book(s) followed	Topics for self study
	to a Function			
22.	Recursion	1	T1	
23.	Tutorial-6	1	T1	
24.	Program Structure: Storage Classes, Automatic Variables, External(Global) Variables, Static Variables, Multi file Programs	2	T1	
25.	Arrays: Defining an Array, Processing an Array	1	T1	
26.	Tutorial-7	1	T1	
27.	Processing Array to function, Multidimensional Arrays	2	T1	
28.	Linear search, Binary search,	1	T1	
29.	Bubble sort and Insertion sort	2	T1	
Total periods required:		13		
UNIT – IV: STRINGS & POINTERS				
30.	Strings: Defining a String, NULL Character, Initialization of Strings	1	T1	Pointers to pointers
31.	Reading and Writing a String, Processing a Strings	1	T1	
32.	Tutorial-8	1	T1	
33.	Character Arithmetic, Searching and Sorting of Strings , Library Functions for Strings.	2	T1	
34.	Pointers: Fundamentals, Pointer Declaration	1	T1	
35.	Tutorial-9	1	T1	
36.	Passing Pointers to a Function, Pointers and One-dimensional Arrays	1	T1	
37.	Dynamic Memory Allocation, Operations on Pointers	1	T1	
38.	Tutorial-10	1	T1	
39.	Pointers and Multidimensional Arrays, Arrays of Pointers	1	T1	
Total periods required:		11		
UNIT – V: STRUCTURES AND UNIONS & FILE HANDLING				
40.	Structures and Unions: Defining a Structure, Processing a Structure	1	T1	Pointers and structures
41.	Tutorial-11	1	T1	
42.	User-Defined Datatypes (typedef), Structures and Pointers	2	T1	
43.	Passing Structures to Function, Self – Referential Structures, Unions	1	T1	
44.	Tutorial-12	1	T1	
45.	File Handling: Files introduction, Opening and Closing a Data File, Reading and Writing a Data File	2	T1	
46.	Processing a Data File, Unformatted Data File	1	T1	

S. No.	Topic	No. of periods	Book(s) followed	Topics for self study
47.	Tutorial-13	1	T1	
48.	Concept of Binary Files, Accessing the File Randomly(Using Fseek)	1	T1	
49.	Tutorial-14	1	T1	
Total periods required:		11		
Grand total periods required:		55		

TEXT BOOK:

T1. Byron Gottfried and Jitender Kumar C "*Programming with C,*" Third Edition, McGraw Hill Education(India) Pvt,ltd, NewDelhi, 2016.

REFERENCE BOOKS:

R1. PradipDey and Manas Ghosh, "*Programming in C,*"Second Edition, Oxford University Press, NewDelhi, 2007.

R2. E. Balagurusamy"*Programming in C,*" Sixth Edition, McGraw Hill Education (India) Pvt,ltd, NewDelhi, 2014.