LESSON PLAN

Discipline: MECHANICAL ENGINEERING	Semester: 1st	Name of the Teaching Faculty: PARTHA SARATHI MALLICK		
Subject: COMPUTER APPLICATION (Th-1b)	No. of days/ per week class allotted: 4	Semester From Date : 25/10/2022 to Date: 20/02/2023 No. of Weeks: 15		
Week	**Class Day**	**Theory/ Practical Topics**		
1st	1st	**COMPUTER ORGANISATION:** Introduction to Computer Evolution of Computers Generation of Computers Classification of Computers.		
	2nd	Basic Organisation of Computer (Functional Block diagram) Input Devices, CPU &		
	3rd	Scope of Mechatronics in Industrial Sector		
	4th	Computer Memory and Classification of Memory		
2nd	1st	Computer Memory and Classification of Memory		
	2nd	**COMPUTER SOFTWARE:** Software concept, System software, Application software		
	3rd	Overview of Operating System Objectives and Functions of O.S		
	4th	Types of Operating System: Batch Processing, Multiprogramming, Time Sharing OS		
3rd	1st	Types of Operating System: Batch Processing, Multiprogramming, Time Sharing OS		
	2nd	Programming Languages Compiler, interpreter Computer Virus		
	3rd	Different Types of computer virus.Detection and prevention of Virus		
	4th	Application of computers in different Domain		
4th	1st	**COMPUTER NETWORK AND INTERNET:** Networking concept, Protocol, Connecting Media		
	2nd	Date Transmission mode, Network Topologies, Types of Network		
	3rd	Networking Devices like Hub, Repeater.		
	4th	Switch, Bridge, Router, Gateway & NIC		
5th	1st	Internet Services like E-Mail, WWW, FTP.		
	2nd	Chatting, Internet Conferencing		
	3rd	Electronic Newspaper & Online Shopping		
	4th	Different types of Internet connectivity and ISP		
6th	1st	**FILE MANAGEMENT AND DATA PROCESSING:** Concept of File and Folder		
	2nd	File Access and Storage methods.		
	3rd	Sequential, Direct, ISAM		
	4th	Data Capture, Data storage		

7th	1st	Data Processing and Retrieval
	2nd	**PROBLEM SOLVING METHODOLOGY:** Algorithm
	3rd	Pseudo code
	4th	Flowchart Generation of Programming Languages
8th	1st	Structured Programming Language
	2nd	Examples of Problem solving through Flowchart
	3rd	**OVERVIEW OF C PROGRAMMING LANGUAGE:** Constants, Variables and Data types in C Managing Input and
	4th	Constants, Variables and Data types in C Managing Input and Output operations.
9th	1st	Constants, Variables and Data types in C Managing Input and Output operations.
	2nd	Operators, Expressions, Type conversion & Typecasting
	3rd	Operators, Expressions, Type conversion & Typecasting
	4th	Operators, Expressions, Type conversion & Typecasting
10th	1st	Operators, Expressions, Type conversion & Typecasting
	2nd	Decision Control and Looping Statements (If, If-else, If-else-if, Switch, While, Dowhile, For, Break, Continue & Goto)
	3rd	Decision Control and Looping Statements (If, If-else, If-else-if, Switch, While, Dowhile, For, Break, Continue & Goto)
	4th	Decision Control and Looping Statements (If, If-else, If-else-if, Switch, While, Dowhile, For, Break, Continue & Goto)
11th	1st	Decision Control and Looping Statements (If, If-else, If-else-if, Switch, While, Dowhile, For, Break, Continue & Goto)
	2nd	Decision Control and Looping Statements (If, If-else, If-else-if, Switch, While, Dowhile, For, Break, Continue & Goto)
	3rd	Programming Assignments using the above features
	4th	Programming Assignments using the above features
12th	1st	Programming Assignments using the above features
	2nd	**ADVANCED FEATURES OF C: Functions and Passing Parameters to the Function (Call by Value and Call by Reference) Scope of Variables and Storage Classes**
	3rd	Functions and Passing Parameters to the Function (Call by Value and Call by Reference) Scope of Variables and Storage Classes
	4th	**Functions and Passing Parameters to the Function (Call by Value and Call by Reference) Scope of Variables and Storage Classes**
13th	1st	Functions and Passing Parameters to the Function (Call by Value and Call by Reference) Scope of Variables and Storage Classes
	2nd	Functions and Passing Parameters to the Function (Call by Value and Call by Reference) Scope of Variables and Storage Classes

	3rd	Functions and Passing Parameters to the Function (Call by Value and Call by Reference) Scope of Variables and Storage Classes
	4th	Recursion Function and Types of Recursion
14th	1st	Recursion Function and Types of Recursion
	2nd	One Dimensional Array and Multidimensional Array
	3rd	One Dimensional Array and Multidimensional Array
	4th	String Operations and Pointers
15th	1st	String Operations and Pointers
	2nd	Pointer Expression and Pointer Arithmetic Programming Assignments using the above features. Structure and Union (Only concepts, No Programming)
	3rd	Pointer Expression and Pointer Arithmetic Programming Assignments using the above features. Structure and Union (Only concepts, No Programming)
	4th	Pointer Expression and Pointer Arithmetic Programming Assignments using the above features. Structure and Union (Only concepts, No Programming)

Parthasarathi Mallick