

## Lesson Plan(2023-2024)

<b>Discipline: Civil/Mechanical</b>	<b>Semester: 1<sup>st</sup></b>	<b>Name Of The Teaching Faculty: Priyadarshini Acharya</b>
<b>Subject: Computer Application</b>	<b>No. Of Days/Week Class Allotted: 4</b>	<b>No. Of Weeks:15 From – 16.08.2023 to 11.12.2023</b>
<b>Week</b>	<b>Class Day</b>	<b>Theory Topics</b>
1 <sup>st</sup>	1 <sup>st</sup>	<b>Chapter 1: COMPUTER ORGANIZATION:</b> Introduction to computer, Evolution of computer, Generation of computer
	2 <sup>nd</sup>	Define classifications of computer
	3 <sup>rd</sup>	Basic organization of computer(Functional Block Diagram)
	4 <sup>th</sup>	Input Devices, CPU, Output Devices
2 <sup>nd</sup>	1 <sup>st</sup>	Computer Memory and Classification of Memory
	2 <sup>nd</sup>	<b>Chapter 2: COMPUTER SOFTWARE :</b> Software concept, System software, Application software
	3 <sup>rd</sup>	Overview of operating system Objectives and Functions of O.S, Types of Operating System(Batch Processing, Multiprogramming, Time Sharing Operating System)
	4 <sup>th</sup>	Features of DOS, define commands in Dos and its uses
3 <sup>rd</sup>	1 <sup>st</sup>	Define WINDOWS and UNIX ,Programming Languages Compiler , Interpreter
	2 <sup>nd</sup>	Computer virus, Different Types of computer virus, Detection and prevention of Virus
	3 <sup>rd</sup>	Applications of computers in different domain

	4 <sup>th</sup>	<b>Chapter 3: COMPUTER NETWORK AND INTERNET :</b> What is internet and its use in world , Internet process
4	1 <sup>st</sup>	Networking Concepts
	2 <sup>nd</sup>	Networking Protocol
	3 <sup>rd</sup>	Date Transmission mode(Simplex mode, half-duplex mode, full-duplex mode)
	4 <sup>th</sup>	Connecting Media(Twisted pair cable, co-axial cable, fibre optic cable)_
5	1 <sup>st</sup>	Network Topologies(Bus, star, ring, tree, mesh)
	2 <sup>nd</sup>	Types of Network(LAN, MAN, WAN, PAN)
	3 <sup>rd</sup>	Uses of network
	4 <sup>th</sup>	Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gateway & NIC
6	1 <sup>st</sup>	What is Internet and define their services
	2 <sup>nd</sup>	Internet Services like E-Mail, WWW, FTP, Chatting
	3 <sup>rd</sup>	Internet Conferencing, Electronic Newspaper & Online Shopping
	4 <sup>th</sup>	Different types of Internet connectivity and ISP
7	1 <sup>st</sup>	<b>Chapter 4: FILE MANAGEMENT AND DATA PROCESSING:</b> What is file and folder
	2 <sup>nd</sup>	How to create a folder in our computer
	3 <sup>rd</sup>	How to use file and folder in computer system

	4 <sup>th</sup>	What is data processing and use of file and folder
8 <sup>th</sup>	1 <sup>st</sup>	What is file access , method, file storage method
	2 <sup>nd</sup>	Define types of file access and storage method sequential, direct method
	3 <sup>rd</sup>	ISAM(Index Sequential access method)
	4 <sup>th</sup>	Define use and process of ISAM
9 <sup>th</sup>	1 <sup>st</sup>	Define Data Capture method
	2 <sup>nd</sup>	Define Data storage method
	3 <sup>rd</sup>	Define Data processing method
	4 <sup>th</sup>	Define Retrieval method
10 <sup>th</sup>	1 <sup>st</sup>	<b>Chapter 5: PROBLEM SOLVING METHODOLOGY:</b> Define problem solving methodology
	2 <sup>nd</sup>	What is Algorithm, Define its functions, it's types
	3 <sup>rd</sup>	Algorithm methods like symbols, start, end etc
	4 <sup>th</sup>	Define Problem Solving through Flowchart and define many problems
11 <sup>th</sup>	1 <sup>st</sup>	Define Pseudo Code
	2 <sup>nd</sup>	Define Generation of programming languages and their uses
	3 <sup>rd</sup>	What is Structured programming Language

	4 <sup>th</sup>	Examples of Problem solving through Flowchart
12 <sup>th</sup>	1 <sup>st</sup>	<b>Chapter 6: OVERVIEW OF C-PROGRAMMING LANGUAGE:</b> What is C-programming language
	2 <sup>nd</sup>	Define programming languages like C, C++, JAVA, PYTHON etc
	3 <sup>rd</sup>	What is Constant and Define Variable
	4 <sup>th</sup>	Difference between the Constants and variables, Define Data types in C Managing Input and Output Operations
13 <sup>th</sup>	1 <sup>st</sup>	What is Operators, Define types and functions of Operators
	2 <sup>nd</sup>	What is Expression, Type Conversion and Type Casting
	3 <sup>rd</sup>	Decision Control and Looping statements(If, If-else, If-else-if, Switch, While, Do- while, For, Break, Continue & Go to)
	4 <sup>th</sup>	Programming Assignments using the above features
14 <sup>th</sup>	1 <sup>st</sup>	<b>Chapter 7: ADVANCED FEATURES OF C:</b> Features of C-programming
	2 <sup>nd</sup>	Functions and Passing Parameters to the Function (Call by Value and Call by Reference)
	3 <sup>rd</sup>	Differences between the Call by Value and Call by Reference in C-programming
	4 <sup>th</sup>	What is Scope of Variables and Storage Classes in C-programming
15 <sup>th</sup>	1 <sup>st</sup>	What is Function, Define Recursion and types of Recursion function
	2 <sup>nd</sup>	What is Array, Define types of Array , One Dimensional Array and Multi Dimensional Array

	3 <sup>rd</sup>	What is String Operations and Pointers
	4 <sup>th</sup>	Pointer Expression and Pointer Arithmetic Programming Assignments using the above features. Structure and Union (Only concepts, No Programming)

