

## LESSON PLAN

Discipline: <b>Civil &amp; Mechanical</b>	Semester: <b>First</b>	Name of the Teaching Faculty: <b>Er.Asish Mohapatra, Manas Ranjan Mohanty(CSE).</b>
Subject: <b>Th.1b Computer Application</b>	No. of days class allotted/week: <b>04</b>	Semester from date: <b>25/10/2022 to 31/01/2023, 20/03/2023 to 24.06.2023</b> ,  No. of weeks: <b>15</b>
<b>Week</b>	<b>Class Day</b>	<b>Theory</b>
<b>1<sup>ST</sup></b>	<b>1<sup>st</sup></b>	Introduction to Computer & Evolution of Computers
	<b>2<sup>nd</sup></b>	Generation of Computers
	<b>3<sup>rd</sup></b>	Classification of Computers
	<b>4<sup>th</sup></b>	Basic Organisation of Computer (Functional Block diagram) Input Devices, CPU & Output Devices.
<b>2<sup>ND</sup></b>	<b>1<sup>st</sup></b>	Computer Memory and Classification of Memory
	<b>2<sup>nd</sup></b>	Software concept, System software, Application software
	<b>3<sup>rd</sup></b>	Overview of Operating System Objectives and Functions of O.S.
	<b>4<sup>th</sup></b>	Types of Operating System: Batch Processing, Multiprogramming, Time Sharing OS
<b>3<sup>RD</sup></b>	<b>1<sup>st</sup></b>	Features of DOS, Windows and UNIX
	<b>2<sup>nd</sup></b>	Programming Languages Compiler, interpreter
	<b>3<sup>rd</sup></b>	Computer Virus, Different Types of computer virus
	<b>4<sup>th</sup></b>	Detection and prevention of Virus, Application of computers in different Domain
<b>4<sup>TH</sup></b>	<b>1<sup>st</sup></b>	Networking concept, Protocol,
	<b>2<sup>nd</sup></b>	Connecting Media
	<b>3<sup>rd</sup></b>	Data Transmission mode
	<b>4<sup>th</sup></b>	Network Topologies
<b>5<sup>TH</sup></b>	<b>1<sup>st</sup></b>	Types of Network
	<b>2<sup>nd</sup></b>	Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gateway & NIC
	<b>3<sup>rd</sup></b>	Internet Services like E-Mail, WWW, FTP, Chatting, Internet Conferencing, Electronic Newspaper & Online Shopping
	<b>4<sup>th</sup></b>	Different types of Internet connectivity and ISP
<b>6<sup>TH</sup></b>	<b>1<sup>st</sup></b>	Concept of File and Folder
	<b>2<sup>nd</sup></b>	File Access and Storage methods. Sequential, Direct, ISAM
	<b>3<sup>rd</sup></b>	Data Capture
	<b>4<sup>th</sup></b>	Data storage
<b>7<sup>TH</sup></b>	<b>1<sup>st</sup></b>	Data Processing and Retrieval
	<b>2<sup>nd</sup></b>	Algorithm, Pseudo code and Flowchart
	<b>3<sup>rd</sup></b>	Generation of Programming Languages
	<b>4<sup>th</sup></b>	Structured Programming Language
<b>8<sup>TH</sup></b>	<b>1<sup>st</sup></b>	Examples of Problem solving through Flowchart
	<b>2<sup>nd</sup></b>	Examples of Problem solving through Flowchart
	<b>3<sup>rd</sup></b>	<b>Introduction to C Programming</b>
	<b>4<sup>th</sup></b>	Structure of a C program
<b>9<sup>TH</sup></b>	<b>1<sup>st</sup></b>	Tokens in C: Character, Keyword, Datatype
	<b>2<sup>nd</sup></b>	Constant in C
	<b>3<sup>rd</sup></b>	Variable declaration and initialization
	<b>4<sup>th</sup></b>	Managing Input-Output(I/O) Operations
<b>10<sup>TH</sup></b>	<b>1<sup>st</sup></b>	Operators in C
	<b>2<sup>nd</sup></b>	Typecasting:
	<b>3<sup>rd</sup></b>	Operator Precedence and Associativity

	4 <sup>th</sup>	Decision Control statement: if, if..else, nested if
11 <sup>TH</sup>	1 <sup>st</sup>	Decision Control statement:if else ladder, switch statement
	2 <sup>nd</sup>	Looping or iteration statements: while, do while
	3 <sup>rd</sup>	Looping or iteration statements: for, nested for
	4 <sup>th</sup>	Jumping statements: goto, break, continue
12 <sup>TH</sup>	1 <sup>st</sup>	Jumping statements : break, continue
	2 <sup>nd</sup>	<b>Fuction:</b> Function declaration, function definition
	3 <sup>rd</sup>	Accessing a function, Formal Arguments, Actual Arguments
	4 <sup>th</sup>	Passing parameters to the function:Call by value, Call by reference
13 <sup>TH</sup>	1 <sup>st</sup>	Function recursion
	2 <sup>nd</sup>	Storage classes
	3 <sup>rd</sup>	Array: Array declaration and definition 1D, Accessing elements of an array
	4 <sup>th</sup>	Multidimensional Array
14 <sup>TH</sup>	1 <sup>st</sup>	Strings, strings constants
	2 <sup>nd</sup>	Strings library function
	3 <sup>rd</sup>	Pointers: Declaration and initialization
	4 <sup>th</sup>	Pointer Expression and Arithmetic
15 <sup>TH</sup>	1 <sup>st</sup>	Programming Assignment using Pointers
	2 <sup>nd</sup>	Programming Assignment using Pointers
	3 <sup>rd</sup>	Structure: declaration and Definition
	4 <sup>th</sup>	Union: Declaration and Definition

### **Syllabus coverage upto I.A**

Chapter- 1,2,3,4

#### Books Recommended

1. Computer Fundamentals and Programming in C by Reema Theraja, Oxford University Press
2. Programming in ANSI C by A.N. Kamthane, Pearson Education
3. Computer Application by Kalyani Publisher
4. Let us C by Y. Kanetkar, BPB
5. Computer Fundamental by E. Balaguruswamy, TMH