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

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

REFERENCE BOOKS:

1. **"Computer Fundamentals" by P K Sinha**
2. **"FUNDAMENTALS OF COMPUTERS" by E Balagurusamy**
3. **"Computer Basics and C Programming" by Rajaraman V**