

Discipline: ELECTRICAL,ETC, CIVIL	Semester: 2ND	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
1 ST	1 st	Introduction to Computer & Evolution of Computers
	2 nd	Generation of Computers
	3 rd	Classification of Computers
	4 th	Basic Organisation of Computer (Functional Block diagram) Input Devices, CPU & Output Devices.
2 ND	1 st	Computer Memory and Classification of Memory
	2 nd	Software concept, System software, Application software
	3 rd	Overview of Operating System Objectives and Functions of O.S.
	4 th	Types of Operating System: Batch Processing, Multiprogramming, Time Sharing OS
3 RD	1 st	Features of DOS, Windows and UNIX
	2 nd	Programming Languages Compiler, interpreter
	3 rd	Computer Virus, Different Types of computer virus
	4 th	Detection and prevention of Virus, Application of computers in different Domain
4 TH	1 st	Networking concept, Protocol,
	2 nd	Connecting Media
	3 rd	Data Transmission mode
	4 th	Network Topologies
5 TH	1 st	Types of Network
	2 nd	Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gateway & NIC
	3 rd	Internet Services like E-Mail, WWW, FTP, Chatting, Internet Conferencing, Electronic Newspaper & Online Shopping
	4 th	Different types of Internet connectivity and ISP
6 TH	1 st	Concept of File and Folder
	2 nd	File Access and Storage methods. Sequential, Direct, ISAM
	3 rd	Data Capture
	4 th	Data storage
7 TH	1 st	Data Processing and Retrieval
	2 nd	Algorithm, Pseudo code and Flowchart
	3 rd	Generation of Programming Languages
	4 th	Structured Programming Language
8 TH	1 st	Examples of Problem solving through Flowchart
	2 nd	Examples of Problem solving through Flowchart
	3 rd	Introduction to C Programming
	4 th	Structure of a C program
9 TH	1 st	Tokens in C: Character, Keyword, Datatype
	2 nd	Constant in C
	3 rd	Variable declaration and initialization
	4 th	Managing Input-Output(I/O) Operations
10 TH	1 st	Operators in C
	2 nd	Typecasting:
	3 rd	Operator Precedence and Associativity

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