

Discipline **Semester** **Name of the Teaching faculty**
 Civil 1st sem/2nd sem Debasis Gouda
 Electrical 1st sem/2nd sem

Subject **No. of days/week** **From:**

Computer Application (Theory) **No. of periods/week (Theory)**

Monday	1 period	2 periods
Tuesday	2 periods	0 periods
Wednesday	1 period	0 periods
Thursday	0 periods	0 periods
Friday	0 periods	0 periods
Saturday	0 periods	2 periods

Civil Electrical

Week	No. of class / day	Topic of the lesson to be taught
1 st	1 st	Computer Organisation (05 periods) Introduction of Computer.
	2 nd	Evolution of computers, Generation of Computers, Classification of Computers.
	3 rd	
	4 th	Basic Organisation of Computer (Functional Block Diagram) Input Devices, CPU & Output Devices
2 nd	1 st	Computer Memory & Classification of memory
3 rd	2 nd , 3 rd , 4 th	Computer Network and Internet (09) { Networking Concept, Protocol, Types of Network, Connecting Media, Data Transmission Mode, Network Topologies.
	1 st 2 nd	Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gateway & NIC

2nd 2nd Internet Services like E-mail, WWW, FTP, Chatting, Internet Conferencing, Electronic Newspaper & online shopping
 4th 1st Different types of Internet connectivity and ISP

Computer Software (07 periods)

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, Multi programming, Time sharing OS
 5th 1st Features of DOS, Windows & UNIX
 2nd Programming Languages Compilers, Interpreter Computer Virus,
 3rd Different Types of Computer Virus
 4th Detection and Prevention of virus
 Application of Computers in different Domain.

File Management and Data Processing (05 periods)

6th 1st Concept of file and folder
 file Access and Storage methods:
 2nd / 3rd Sequential, Direct, ISAM
 4th Data Capture, Data Storage
 7th 1st Data Processing and Retrieval

Problem Solving Methodology (15 periods)

Algorithm, Pseudo code and Flow chart Generation of programming languages.

Structured Programming languages
Examples of Problem Solving through flowchart.

Overview of C programming Language (15 periods)

Constants, Variables and Data types in C managing input and output operations.

Operators, Expressions, Type conversion and Typecasting

Decision Control and Looping statements (if, if-else, if-else-if, Switch, While, Do-while, for, Break, Continue and Goto)

Programming Assignments using the above features.

Advanced Features of C (15 periods)

Functions and passing parameters to the functions (Call by value and Call by Reference)

Scope of Variables and Storage classes.

Recursion function and Types of Recursion.

One Dimensional Array and Multidimensional Array

String Operations and pointers
Printer Expression and pointer
Arithmetic Programming Assign-
ments using the above features.
Structure and Union (Only
concepts, no programming)

Subject	No. of day / week	Time	No. of periods / week (LAB)	
Computer Application (Lab)				
		Monday	02 periods	02 periods
		Tuesday	02 periods	02 periods
		Wednesday	02 periods	0 periods
		Thursday	02 periods	02 periods
		Friday	0 periods	02 periods
		Saturday	0 periods	0 periods
			Civil	Electrical

Week	No. of class / day	Topic of the lesson to be taught
1 st	2 nd / 2 nd	<u>Basic Computer Operation (04 periods)</u> Identification of different components of Computer Switch on and Booting Process Shutdown, Restart of Computers
	3 rd / 4 th	
2 nd	3 rd / 2 nd	<u>Personal Computer System (12 periods)</u> Study of device and power supply form factor of Personal Computer System. Identification of various Mother Board components
	3 rd / 4 th	
3 rd	4 th / 2 nd	Identification of different parts Type of connectors and their

2nd / 1st / 1st

purpose, Cooling System of Processor and Case

3rd / 2nd

Identification and Study of ROM, RAM, Adapter Cards, Expansion Slots, SATA Connectors study of Adapters and Converters

3rd

Computer Lab Safety and Study of Lab Tools (06 periods)

Study of various types of LAB Safety measures (General Safety, Electrical Safety, Fire Safety),

4th

Analysis of various Power fluctuations Types (Blackout, Brownout, Noise, Spike, Power Surge).

5th

5th

Power Protective Devices (Surge Suppressor, UPS, Standby power supply), Procedures for proper disposal or recycling of hazardous

5th / 5th

computer components (Batteries, Monitors, Toner kits, Cartridges, chemical solvents and Aerosol cans) Study of General Lab

4th

Tools (ESD tools, Hand tools, Cable tools, Cleaning tools, Diagnostic tools, Disk Management Tools.

6th

3rd / 2nd / 2nd / 2nd

Operating System (08 periods)

Basic DOS commands (CLS, DIR, DATE, TIME, VERSION, MD, CD, RD, DEL, COPY, REN, USE OF WILD CARDS, PATH).

2nd / 3rd / 4th

Basic Windows OS operations, Mouse operations, Utilities and Accessories, Installation and Configurations of OS

5th / 6th

Working With MS-OFFICE (12 periods)
Basic Operations of Word Processing Package (MS-Word).

7th / 8th

Basic operations of Electronic Spread Sheet package (MS-Excel)
Basic operations of Presentation Package (MS-PowerPoint).

10th / 11th / 12th / 13th / 14th

(Create, Edit, Format, Save, Print/View in the above three packages)

11th / 12th / 13th / 14th

Working With Internet (06 periods)

Getting acquainted with Internet Connection, Browser, website, URL, webpage, http, WWW, Net Browsing

12th / 13th / 14th / 15th / 16th

Creating E-mail Id, Sending and receiving E-mail chatting

13th / 14th / 15th / 16th / 17th / 18th

C-Programming (12 periods)

1. Write a program in C to find the greatest number among three numbers.

2. Write a program in C to find the average of n numbers by using for loop.

3. Write a program in C to determine whether a given number

is prime or not?

4. Write a program in C to check whether a given number is palindromic or not?

5. Write a program in C to compute the sine series.

6. Write a program in C to accept row wise and column wise element in a two dimensional array and print them.

7. Write a program in C to find vowels in a given string.

8. Write a program in C to find the factorial of a number by using recursion.

9. Write a program in C to find the sum of Fibonacci series by using function.

10. Write a program in C to accept a number a number from keyboard and print it in reverse order of entry, by using function.