# Lesson plan

Name of the faculty Discipline

Semester Subject

Shashi Bhushan Electrical Engg. 1st

FUNDAMENTALS OF IT

# September-2023 to Dec-2024

**Work load (Lecture/Practical) per week : Lectures-02, Practicals-04**

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| **Week** | **Theory** | | **Practical** | | | |
|  | Lecture  day | Topic | Signature | Practical  day | Topic | Signature |
| 1 | 1 | Brief history of development of computers, Definition of Computer |  | 1 | Browser features, browsing, using various search engines, writing search  queries |  |
| 2 | Block diagram of a Computer, Hardware, Software |  | 2 | Visit various e- governance/Digital India portals, understand their  features, services |  |
| 2 | 3 | Booting: Cold and Hot Booting, Interaction between the CPU and Memory with Input/Output devices |  | 3 | Read Wikipedia pages on computer hardware components, look at those components in lab, identify them, recognize various ports/interfaces and related  cables, etc. |  |
| 4 | Function of CPU and major functional parts of CPU |  | 4 | Using Administrative Tools/Control Panel Settings of Operating Systems |  |
| 3 | 5 | Memory, Bit, Nibble, Byte, KB, MB, GB, TB, PB, Functions of memory,List types of memory used in a Computer, cache memory |  | 5 | Connect various peripherals (printer, scanner, etc.) to computer, explore various featuresof peripheral and their device driver software. |  |
| 4 | 6 | Use of storage devices in a Computer, CPU speed and CPU word length |  | 6 | Explore features of Open Office tools and MS-Office, create documents, create presentation, create spread sheet, using these features, do it multiple times |  |
| 5 | 7 | Understanding browser, Introduction to WWW |  | 7 | Working with Conversion Software like pdfToWord, WordToPPT, etc. |  |
| 8 | Efficient use of search engines, awareness about Digital India portals (state and national portals) and college portals |  | 8 | Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile  Applications |  |
| 6 | 9 | Advantages of Email,Various email service providers |  | 9 | Creating email id, sending and receiving mails with  attachments. |  |

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|  | 10 | Creation of email id, sending and  receiving emails, attaching documents with email and drive. |  | 10 | Using Google drive, Google calendar |  |
| 7 | 11 | Effective use of Gmail, G-Drive,  Google Calendar, |  | 11 | Create Flow chart and  Algorithm for the following |  |
| 12 | Google Sites, Google Sheets | i. Addition of n numbers and  display result |  |
| 8 | 13 | Online mode of communication  using Google Meet & WebEx. |  | 12 | ii. To convert temperature  from Celsius to Fahrenheit |  |
| 14 | Revision ch1 | iii. To find Area and  Perimeter of Square |  |
| 9 | 15 | Introduction to Programming, |  | 13 | iv. Swap Two Numbers |  |
| 16 | Steps involved in problem solving, Definition of Algorithm,Definition of Flowchart, Symbols | v. find the smallest of two numbers |  |
| 10 | 17 | Steps involved in algorithm development,Algorithms for simple  problems |  | 14 | vi. Find whether given number is Even or Odd |  |
| 18 | flowcharts for simple Problems,flowcharts for simple  Problems | vii. To print first n even Numbers |  |
| 11 | 19 | Office Tools like  LibreOffice/OpenOffice/MSOffice. |  | 15 | viii. find sum of series  1+2+3+…..+N |  |
| 20 | OpenOffice Writer – Typesetting  Text and Basic Formatting, | ix. print multiplication Table  of a number |  |
| 12 | 21 | Inserting Images, Hyperlinks |  | 16 | x. generate first n Fibonacci terms 0,1,1,2,3,5…n (n>2) |  |
| 22 | Bookmarks, Tables and Table  Properties in Writer | xi. sum and average of given  series of numbers |  |
| 13 | 23 | Introducing LibreOffice/OpenOffice  Calc, |  | 17 | xii. Factorial of number n (  n!=1x2x3x…n) |  |
| 24 | Working with Cells, Sheets, data,  tables | xiii. Armstrong Number |  |
| 14 | 25 | formulae and functions |  | 18 | xiv. Find whether given  number is Prime or not |  |
| 26 | OpenOffice Impress – Creating and  Viewing Presentations |  |  |  |  |
| 15 | 27 | Inserting Pictures and Tables, Slide |  |  |  |  |
| 28 | Master and Slide Design |  |  |  |  |
| 13 | 29 | Custom Animation,Use of Social  Media |  |  |  |  |
| 30 | Introduction to Digital Marketing |  |  |  |  |
| 14 | 31 | Why Digital Marketing |  |  |  |  |
| 32 | Characteristics and Tools of Digital  Marketing |  |  |  |  |
| 15 | 33 | Effective use of Social Media like  LinkedIn Google+, Facebook, |  |  |  |  |
| 34 | Features ,Advantages and  Disadvantages of Social media |  |  |  |  |