**Lesson Plan**

**Name of the Faculty** : Nawal Kishore Arora **Discipline :** ECE

**Semester :** 1ST

# Subject : FUNDAMENTALS OF INFORMATION TECHNOLOGY

**Lesson Plan Duration** : 15 weeks (from Oct. 2022 to Jan 2023)

**Work Load (Lecture / Practical) per week (in hours):** Lectures-02, Practical-04

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| **Week** | **Theory** | | **Practical** | |
| **Lecture day** | **Topic**  **(including assignment / test)** | **Practical Day** | **Topic** |
| **1st** | **1st** | Basics of Computer Brief history of development of computers, Definition of Computer | 1st | Prac. 1  1. Browser features, browsing, using various search engines, writing search queries |
| **2nd** | Block diagram of a Computer, Hardware, Software, Booting: Cold and Hot Booting |
| **3rd** | Interaction between the CPU and Memory with Input/Output devices |
| **2nd** | **4th** | Function of CPU and major functional parts of CPU.Memory | 2nd | Prac. 2  . Visit various e-governance/ Digital India portals, understand their features, services offered. |
| **5th** | Bit, Nibble, Byte, KB, MB, GB, TB, PB, Functions of memory, Use of storage devices in a Computer |
| **6th** | List types of memory used in a Computer, Importance of cache memory |
| **3rd** | **7th** | CPU speed and CPU word length | 3rd | Prac. 3  Read Wikipedia pages on computer hardware components, look at those components in  lab, identify them, recognize various ports/interfaces and related cables, etc. |
| **8th** | Basic Internet Skills Understanding browser, Introduction to WWW |
| **9th** | efficient use of search engines, |
| **4th** | **10th** | awareness about Digital India portals (state and national portals) and college portals. | 4th | Prac. 4  4. Using Administrative Tools/Control Panel Settings of Operating Systems |
| **11th** | Advantages of Email Various email service providers, Creation of email id |
| **12th** | sending and receiving emails, |
| **5th** | **13th** | attaching documents with email and drive. | 5th | Prac. 5  5. Connect various peripherals (printer, scanner, etc.) to computer, explore various features  of peripheral and their device driver software. |
| **14th** | Effective use of Gmail, G-Drive, Google Calendar, Google Sites, Google Sheets |
| **15th** | Online mode of communication using Google Meet & WebEx. |
| **6th** | **16th** | Basic Logic building Introduction to Programming, Steps involved in problem solving, | 6th | Prac. 6  6. Explore features of Open Office tools and MS-Office, create documents, create  presentation, create spread sheet, using these features, do it multiple times |
| **17th** | Definition of Algorithm, Definition of Flowchart |
| **18th** | Steps involved in algorithm development, |
| **7th** | **19th** | differentiate algorithm and flowchart | 7th | Prac. 7  7. Working with Conversion Software like pdf To Word, Word To PPT, etc. |
| **20th** | symbols used in flowcharts |

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| **21st** |  |  |
| **8th** | **22nd** | algorithms for simple problems | 8th | Prac. 8  8. Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile Applications |
| **23rd** | flowcharts for simple problems, |
| **24th** | Practice logic building using flowchart/algorithms |
| **9th** | **25th** | Office Tools like LibreOffice | 9th | Prac. 9  9. Creating email id, sending and receiving mails with attachments. |
| **26th** | OpenOffice |
| **27th** | MSOffice. |
| **10th** | **28th** | OpenOffice Writer – Typesetting Text and Basic Formatting | 10th | Prac 10  10. Using Google drive, Google calendar |
| **29th** | Inserting Images, Hyperlinks, Bookmarks |
| **30th** | Tables and Table Properties in Writer |
| **11th** | **31st** | Introducing LibreOffice/OpenOffice Calc, Working with Cells, Sheets, data | 11th | 11. Create Flow chart and Algorithm for the following: a. Addition of n numbers and display result b. To convert temperature from Celsius to Fahrenheit c. To find Area and Perimeter of Square |
| **32nd** | tables, using formulae and functions, using charts and graphics |
| **33rd** | OpenOffice Impress – Creating and Viewing Presentations, Inserting Pictures and Tables |
| **12th** | **34th** | Slide Master and Slide Design | 12th | d. Swap Two Numbers  e. find the smallest of two numbers  f. Find whether given number is Even or Odd |
| **35th** | Custom Animation |
| **36th** | Use of Social Media |
| **13th** | **37th** | Introduction to Digital Marketing – Why Digital Marketing | 13th | g. To print first n even Numbers  h. find sum of series 1+2+3+.....+N  i. print multiplication Table of a number |
| **38th** | Characteristics of Digital Marketing, |
| **39th** | Tools for Digital Marketing |
| **14th** | **40th** | Effective use of Social Media like LinkedIn, Google+, | 14th | j. generate first n Fibonacci terms 0,1,1,2,3,5...n (n>2)  k. sum and average of given series of numbers  l. Factorial of number n ( n!=1x2x3x...n)  m. Armstrong Number |
| **41st** | Facebook |
| **42nd** | Twitter, etc.: Features of Social media, |
| **15th** | **43rd** | Advantages of Social Media. | 15th | Revision |
| **44th** | Disadvantages of Social Media. |
| **45th** | Revision |