

## **Lesson Plan**

**Name of the Faculty** : Umesh Saroj

**Discipline** : ECE G P Jhajjar

**Semester** : 1ST

**Subject** : **FUNDAMENTALS OF INFORMATION TECHNOLOGY**

**Lesson Plan Duration** : 15 weeks (from Sept 2023 to Jan 2024)

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

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical Day	Topic
1 <sup>st</sup>	1 <sup>st</sup>	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
	2 <sup>nd</sup>	Block diagram of a Computer, Hardware, Software, Booting: Cold and Hot Booting		
	3 <sup>rd</sup>	Interaction between the CPU and Memory with Input/Output devices		
2 <sup>nd</sup>	4 <sup>th</sup>	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.
	5 <sup>th</sup>	Bit, Nibble, Byte, KB, MB, GB, TB, PB, Functions of memory, Use of storage devices in a Computer		
	6 <sup>th</sup>	List types of memory used in a Computer, Importance of cache memory		

<b>3<sup>rd</sup></b>	<b>7<sup>th</sup></b>	CPU speed and CPU word length	<b>3rd</b>	<b>Prac. 3</b> Read Wikipedia pages on computer hardware components, look at those components in  lab, identify them, recognize various ports/interfaces and related cables, etc.
	<b>8<sup>th</sup></b>	Basic Internet Skills Understanding browser, Introduction to WWW		
	<b>9<sup>th</sup></b>	efficient use of search engines,		
<b>4<sup>th</sup></b>	<b>10<sup>th</sup></b>	awareness about Digital India portals (state and national portals) and college portals.	<b>4th</b>	<b>Prac. 4</b> 4. Using Administrative Tools/Control Panel Settings of Operating Systems
	<b>11<sup>th</sup></b>	Advantages of Email Various email service providers, Creation of email id		
	<b>12<sup>th</sup></b>	sending and receiving emails,		
<b>5<sup>th</sup></b>	<b>13<sup>th</sup></b>	attaching documents with email and drive.	<b>5th</b>	<b>Prac. 5</b> 5. Connect various peripherals (printer, scanner, etc.) to computer, explore various features  of peripheral and their device driver software.
	<b>14<sup>th</sup></b>	Effective use of Gmail, G-Drive, Google Calendar, Google Sites, Google Sheets		
	<b>15<sup>th</sup></b>	Online mode of communication using Google Meet & WebEx.		
<b>6<sup>th</sup></b>	<b>16<sup>th</sup></b>	Basic Logic building Introduction to Programming, Steps involved in problem solving,	<b>6th</b>	<b>Prac. 6</b> 6. Explore features of Open Office tools and MS-Office, create documents, create  presentation, create spread sheet, using these features, do it multiple times
	<b>17<sup>th</sup></b>	Definition of Algorithm, Definition of Flowchart		
	<b>18<sup>th</sup></b>	Steps involved in algorithm development,		
<b>7<sup>th</sup></b>	<b>19<sup>th</sup></b>	differentiate algorithm and flowchart	<b>7th</b>	<b>Prac. 7</b> 7. Working with Conversion Software like pdf To Word, Word To PPT, etc.
	<b>20<sup>th</sup></b>	symbols used in flowcharts		
<b>8<sup>th</sup></b>	<b>22<sup>nd</sup></b>	algorithms for simple problems	<b>8th</b>	<b>Prac. 8</b> 8. Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile Applications
	<b>23<sup>rd</sup></b>	flowcharts for simple problems,		
	<b>24<sup>th</sup></b>	Practice logic building using flowchart/algorithms		
<b>9<sup>th</sup></b>	<b>25<sup>th</sup></b>	Office Tools like LibreOffice	<b>9th</b>	<b>Prac. 9</b> 9. Creating email id,
	<b>26<sup>th</sup></b>	OpenOffice		

	<b>27<sup>th</sup></b>	Msoffice.		sending and receiving mails with attachments.
<b>10<sup>th</sup></b>	<b>28<sup>th</sup></b>	OpenOffice Writer – Typesetting Text and Basic Formatting	10th	Prac 10 10. Using Google drive, Google calendar
	<b>29<sup>th</sup></b>	Inserting Images, Hyperlinks, Bookmarks		
	<b>30<sup>th</sup></b>	Tables and Table Properties in Writer		
<b>11<sup>th</sup></b>	<b>31<sup>st</sup></b>	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
	<b>32<sup>nd</sup></b>	tables, using formulae and functions, using charts and graphics		
	<b>33<sup>rd</sup></b>	OpenOffice Impress – Creating and Viewing Presentations, Inserting Pictures and Tables		
<b>12<sup>th</sup></b>	<b>34<sup>th</sup></b>	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
	<b>35<sup>th</sup></b>	Custom Animation		
	<b>36<sup>th</sup></b>	Use of Social Media		
<b>13<sup>th</sup></b>	<b>37<sup>th</sup></b>	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
	<b>38<sup>th</sup></b>	Characteristics of Digital Marketing,		
	<b>39<sup>th</sup></b>	Tools for Digital Marketing		
<b>14<sup>th</sup></b>	<b>40<sup>th</sup></b>	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 ( $n!=1\times2\times3\times...n$ )  m. Armstrong Number
	<b>41<sup>st</sup></b>	Facebook		
	<b>42<sup>nd</sup></b>	Twitter, etc.: Features of Social media,		
<b>15<sup>th</sup></b>	<b>43<sup>rd</sup></b>	Advantages of Social Media.	15th	Revision
	<b>44<sup>th</sup></b>	Disadvantages of Social Media.		
	<b>45<sup>th</sup></b>	Revision		