

## Lesson Plan

Name of the Faculty : Sh. Manvendra Nath Tripathi (T)

Discipline : Mechanical Engineering

Semester : 1<sup>st</sup>

**Subject : FUNDAMENTALS OF IT**

Lesson Plan duration : 15 weeks (from 01.09.2023 to 15.12.2023)

Work load per week : Lecture – 02, Practical – 04

Week	Theory		Execution	
	Lecture	Topic (Including assessment/test)	Date	Sign.
1 <sup>st</sup>	1 <sup>st</sup>	<b>UNIT I : Basics of Computer</b> Brief history of development of computers, Definition of Computer,		
	2 <sup>nd</sup>	Block diagram of a Computer, Hardware, Software, Booting: Cold and Hot Booting,		
2 <sup>nd</sup>	3 <sup>rd</sup>	Interaction between the CPU and Memory with Input/Output devices, Function of CPU and major functional parts of CPU.		
	4 <sup>th</sup>	Memory, Bit, Nibble, Byte, KB, MB, GB, TB, PB,		
3 <sup>rd</sup>	5 <sup>th</sup>	Functions of memory, Use of storage devices in a Computer, List types of memory used in a Computer,		
	6 <sup>th</sup>	Importance of cache memory, CPU speed and CPU word length		
4 <sup>th</sup>	7 <sup>th</sup>	<b>UNIT II</b> <b>Basic Internet Skills</b> Understanding browser, Introduction to WWW, efficient use of search engines,		
	8 <sup>th</sup>	awareness about Digital India portals (state and national portals) and college portals.		
5 <sup>th</sup>	9 <sup>th</sup>	Advantages of Email, Various email service providers, Creation of email id, sending and receiving emails, attaching documents with email and drive.		
	10 <sup>th</sup>	Effective use of Gmail, G-Drive, Google Calendar, Google Sites, Google Sheets,		
6 <sup>th</sup>	11 <sup>th</sup>	Online mode of communication using Google Meet & WebEx.		
	12 <sup>th</sup>	<b>1<sup>st</sup> Sessional Test (Tentative)</b>		
7 <sup>th</sup>	13 <sup>th</sup>	<b>UNIT III: Basic Logic building</b> Introduction to Programming, Steps involved in problem solving, Definition of Algorithm, Definition of Flowchart,		
	14 <sup>th</sup>	Steps involved in algorithm development, differentiate algorithm and flowchart, symbols used in flowcharts,		

8 <sup>th</sup>	15 <sup>th</sup>	algorithms for simple problems, flowcharts for simple problems,		
	16 <sup>th</sup>	Practice logic building using flowchart/algorithms		
9 <sup>th</sup>	17 <sup>th</sup>	<b>UNIT IV: Office Tools</b> Office Tools like LibreOffice/OpenOffice/MsOffice.		
	18 <sup>th</sup>	OpenOffice Writer – Typesetting Text and Basic Formatting, Inserting Images, Hyperlinks, Bookmarks, Tables and Table Properties in Writer		
10 <sup>th</sup>	19 <sup>th</sup>	Introducing LibreOffice/OpenOffice <i>Calc</i> , Working with Cells, Sheets, data, tables, using formulae and functions, using charts and graphics.		
	20 <sup>th</sup>	<b>2<sup>nd</sup> Sessional Test (Tentative)</b>		
11 <sup>th</sup>	21 <sup>st</sup>	Introducing LibreOffice/OpenOffice <i>Calc</i> , Working with Cells, Sheets, data, tables, using formulae and functions, using charts and graphics.		
	22 <sup>nd</sup>	OpenOffice Impress – Creating and Viewing		
12 <sup>th</sup>	23 <sup>rd</sup>	Presentations, Inserting Pictures and Tables, Slide Master and Slide Design, Custom Animation.		
	24 <sup>th</sup>	<b>UNIT V :Use of Social Media</b> Introduction to Digital Marketing – Why Digital Marketing, Characteristics of Digital Marketing		
13 <sup>th</sup>	25 <sup>th</sup>	Tools for Digital Marketing, Effective use of Social Media like LinkedIn, Google+, Facebook, Twitter, etc.		
	26 <sup>th</sup>	Tools for Digital Marketing, Effective use of Social Media like LinkedIn, Google+, Facebook, Twitter, etc.		
14 <sup>th</sup>	27 <sup>th</sup>	Features of Social media, Advantages and Disadvantages of Social Media.		
	28 <sup>th</sup>	<b>3<sup>rd</sup> Sessional Test (Tentative)</b>		
15 <sup>th</sup>	29 <sup>th</sup>	Revision		
	30 <sup>th</sup>	Revision		
16 <sup>th</sup>	31 <sup>st</sup>	Revision		
	32 <sup>nd</sup>	Evaluation		

## Lesson Plan

Name of the Faculty : Sh. Abhay Tiwari (P-G1), Sh. Manvendra Nath Tripathi (P-G2)

Discipline : Mechanical Engg.

Semester : 1<sup>st</sup>

Subject : **FUNDAMENTALS OF IT**

Lesson Plan duration : 15 weeks (from 01.09.2023 to 15.12.2023)

Work load per week : Lecture – 02, Practical – 04

Week	Practical		EXECUTION		
	Practical Day	Topic	G1	G2	Sign.
1 <sup>st</sup>	1 <sup>st</sup>	1. Browser features, browsing, using various search engines, writing search queries			
2 <sup>nd</sup>	2 <sup>nd</sup>	2. Visit various e-governance/Digital India portals, understand their features, services offered			
3 <sup>rd</sup>	3 <sup>rd</sup>	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 <sup>th</sup>	4 <sup>th</sup>	4. Using Administrative Tools/Control Panel Settings of Operating Systems			
5 <sup>th</sup>	5 <sup>th</sup>	5. Connect various peripherals (printer, scanner, etc.) to computer, explore various features of peripheral and their device driver software.			
6 <sup>th</sup>	6 <sup>th</sup>	Checking of Practical file/ <b>1st sessional test (Tentative)</b>			
7 <sup>th</sup>	7 <sup>th</sup>	6. Explore features of Open Office tools and MS-Office, create documents, create presentation, create spread sheet, using these features, do it multiple times 7. Working with Conversion Software like pdf To Word, Word To PPT, etc.			
8 <sup>th</sup>	8 <sup>th</sup>	8. Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile Applications			

<b>9<sup>th</sup></b>	9 <sup>th</sup>	9. Creating email id, sending and receiving mails with attachments. 10. Using Google drive, Google calendar			
<b>10<sup>th</sup></b>	10 <sup>th</sup>	Checking of Practical file/ <b>2nd sessional test (Tentative)</b>			
<b>11<sup>th</sup></b>	11 <sup>th</sup>	11. Create Flow chart and Algorithm for the following i. Addition of n numbers and display result ii. To convert temperature from Celsius to Fahrenheit iii. To find Area and Perimeter of Square iv. Swap Two Numbers			
<b>12<sup>th</sup></b>	12 <sup>th</sup>	v. find the smallest of two numbers vi. Find whether given number is Even or Odd vii. To print first n even Numbers viii. find sum of series $1+2+3+\dots+N$ ix. print multiplication Table of a number			
<b>13<sup>th</sup></b>	13 <sup>th</sup>	x. generate first n Fibonacci terms $0,1,1,2,3,5\dots n$ ( $n>2$ ) xi. sum and average of given series of numbers xii. Factorial of number n ( $n!=1\times 2\times 3\times \dots n$ ) xiii. Armstrong Number xiv. Find whether given number is Prime or not			
<b>14<sup>th</sup></b>	14 <sup>th</sup>	Checking of Practical file/ <b>3rd sessional test (Tentative)</b>			
<b>15<sup>th</sup></b>	15 <sup>th</sup>	Revision			