Lesson Plan

Name of the Faculty : Rohtash Kumar

Discipline : Mechanical Engineering

Semester : 1st Semester

Subject : Fundamental of Information Technology Lesson Plan Duration : 15 weeks (from Aug 2024 to Nov 2024)

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

| **Week** | **Theory** | | **Practical** | |
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| **Lecture**  **day** | **Topic** | **Practical**  **week** | **Topic** |
| 1st | 1st | Basics of Computer Brief history of development of computers, Definition of Computer | 1st | Pr- 1  Browser features, browsing, using various search engines, writing search queries |
| 2nd | Block diagram of a Computer, Hardware, Software, Booting: Cold and Hot Booting |
| 2nd | 3RD | Function of CPU and major functional parts of CPU.Memory | 2nd | Pr- 2  Visit various e-governance/ Digital India portals, understand their features, services offered. |
| 4TH | Bit, Nibble, Byte, KB, MB, GB, TB, PB, Functions of memory, Use of storage devices in a Computer List types of memory used in a Computer, Importance of cache memory |
| 3rd | 5th | CPU speed and CPU word length | 3rd | Pr- 3  Read Wikipedia pages on computer hardware components, look at those components in lab, identify them, recognize various ports/interfaces and related cables, etc. |
| 6th | Basic Internet Skills Understanding browser, Introduction to WWW |
| 4th | 7th | efficient use of search engines,awareness about Digital India portals (state and national portals) and college portals. | 4th | Pr- 4  Using Administrative Tools/Control Panel Settings of Operating Systems |
| 8th | Advantages of Email Various email service providers, Creation of email id sending and receiving emails, attaching documents with email and drive.  **Assignment-1** |

| 5th | 9th | **Test-1** | 5th | Pr- 5  Connect various peripherals (printer, scanner, etc.) to computer, explore various features  of peripheral and their device driver software. |
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| 10th | Effective use of Gmail, G-Drive, Google Calendar, Google Sites, Google Sheets Online mode of communication using Google Meet & WebEx |
| 6th | 11th | Basic Logic building Introduction to  Programming, Steps involved in problem solving, | 6th | Pr- 6  Explore features of Open Office tools and MS-Office, create documents, create presentation, create spread sheet, using these features, do it multiple times |
| 12th | Definition of Algorithm, Definition of Flowchart |
| 7th | 13th | Steps involved in algorithm development differentiate algorithm and flowchart symbols used in flowcharts | 7th | Pr- 7  Working with Conversion Software like pdf To Word, Word To PPT, etc. |
| 14th | **Test-2** |
| 8th | 15th | Algorithms for simple problems | 8th | Pr- 8  Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings,  Govt. of India Mobile Applications |
| 16th | Flowcharts for simple problems, Practice logic building using flowchart/algorithms  **Assignment-2** |
| 9th | 17th | Office Tools like LibreOffice OpenOffice MSOffice | 9th | Pr- 9  Creating email id, sending and receiving mails with attachments. |
| 18th | **Revision** |
| 10th | 19th | OpenOffice Writer – Typesetting Text and Basic Formatting | 10th | Pr- 10  Using Google drive, Google calendar |
| 20th | Inserting Images, Hyperlinks, Bookmarks |
| 11th | 21st | Tables and Table Properties in Writer Introducing LibreOffice/OpenOffice Calc,  Working with Cells, Sheets, data | 11th | Pr-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 |
| 22nd | tables, using formulae and functions, using charts and graphics |
| 12th | 23rd | OpenOffice Impress – Creating and Viewing and Tables Presentations, Inserting Pictures Slide Master and Slide Design | 12th | Pr-12  Swap Two Numbers, find the smallest of two numbers, find whether given number is Even or Odd |
| 24th | Custom Animation Use of Social Media Introduction to Digital Marketing – Why Digital Marketing |

| 13th | 25th | **Assignment-3,** | 13th | Pr-13  To print first n even Number, find sum of series 1+2+3+. +N, print  multiplication Table of a number |
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| 26th | Characteristics of Digital Marketing, Tools for Digital Marketing |
| 14th | 27th | Effective use of Social Media like LinkedIn, Google+, | 14th | Pr-14  Generate first n Fibonacci terms 0,1,1,2,3,5...n (n>2), sum and  average of given series of numbers, Factorial of number n ( n!=1x2x3x...n), Armstrong Number |
| 28th | Facebook Twitter, etc.: Features of Social media, |
| th  15 | 29th | Advantages of Social Media. Disadvantages of Social Media.  **Assignment-3, Test-3** | 15th | **Revision** |
| 30th | **Revision** |