**LESSON PLAN IT WORKSHOP**

**PC Hardware & Software Installation**

**WEEK 1:**

Task 1: Identify the peripherals of a computer, components in a CPU and its functions. Draw the block diagram of the CPU along with the configuration of each peripheral and submit it to your instructor.

**WEEK 2:**

Task 2: Every student should disassemble and assemble the PC back to working condition. Lab instructors should verify the work and follow it up with a Viva. Also, students need to go through the video which shows the process of assembling a PC. A video would be given as part of the course content.

**WEEK 3:**

Task 2: Repeat the process of how to be assembling and disassembling of PC.

**WEEK 4:**

Task 3: Every student should individually install MS windows on the personal computer. Lab instructor should verify the installation and follow it up with a Viva.

**WEEK 5:**

Task 4: Every student should install Linux on the computer. Lab instructor should verify the installation and follow it up with a Viva.

**WEEK 6:**

Task 5: Every student should be given awareness regarding dual boot. Lab instructors should follow it up with a Viva.

**Internet & World Wide Web**

**WEEK 7:**

Task 1: Orientation & Connectivity Boot Camp: Students should get connected to their Local Area Network and access the Internet. In the process they configure the TCP/IP setting. Finally, students should demonstrate to the instructor.

**WEEK 8:**

Task 1: How to access the websites and email. If there is no internet connectivity preparations need to be made by the instructors to simulate the WWW on the LAN.

**WEEK 9:**

Task 2: Web Browsers, Surfing the Web: Students customize their web browsers with the LAN proxy settings, bookmarks, search toolbars and pop-up blockers. Also, plug-ins like Macromedia Flash and JRE for applets should be configured.

**WEEK 10:**

Task 3: Search Engines & Netiquette: Students should know what search engines are and how to use the search engines. A few topics would be given to the students for which they need to search on Google. This should be demonstrated to the instructors by the student.

**WEEK 11:**

Task 4: Cyber Hygiene: Students would be exposed to the various threats on the internet and would be asked to configure their computer to be safe on the internet. They need to customize their browsers to block pop ups, block active x downloads to avoid viruses and/or worms.

**LaTeX and WORD**

**WEEK 12:**

Task 1 – Word Orientation: The mentor needs to give an overview of La TeX and Microsoft (MS) office or equivalent (FOSS) tool word: Importance of La TeX and MS office or equivalent (FOSS) tool Word as word Processors.

**WEEK 13:**

Task 1: Details of the four tasks and features that would be covered in each, Using La TeX and word ñ Accessing, overview of toolbars, saving files, Using help and resources, rulers, format painter in word.

**WEEK 14:**

Task 2: Using La TeX and Word to create a project certificate. Features to be covered: - Formatting Fonts in word, Drop Cap in word, Applying Text effects, Using Character Spacing, Borders and Colors, Inserting Header and Footer, Using Date and Time option in both La TeX and Word.

**WEEK 15:**

Task 3: Creating project abstract Features to be covered: -Formatting Styles, inserting table, Bullets and Numbering, Changing Text Direction, Cell alignment, Footnote, Hyperlink, Symbols, Spell Check, Track Changes.

**WEEK 16:**

Task 4: Creating a Newsletter: Features to be covered: - Table of Content, Newspaper columns, Images from files and clipart, Drawing toolbar and Word Art, Formatting Images, Textboxes, Paragraphs and Mail Merge in word.

**EXCEL**

**WEEK 17:**

Excel Orientation: The mentor needs to tell the importance of MS office or equivalent (FOSS) tool Excel as a Spreadsheet tool, give the details of the four tasks and features that would be covered in each. Using Excel ñ Accessing, overview of toolbars, saving excel files, Using help and resources.

**WEEK 18:**

Task 1: Creating a Scheduler - Features to be covered: Gridlines, Format Cells, Summation, auto fill, Formatting Text.

**WEEK 19:**

Task 2: Calculating GPA -. Features to be covered: - Cell Referencing, Formulae in excel ñ average, std. deviation, Charts, Renaming and Inserting worksheets, Hyper linking, Count function, **LOOKUP/VLOOKUP**

**WEEK 20:**

Task 3: Split cells, freeze panes, group and outline, Sorting, Boolean and logical operators, Conditional formatting

**POWER POINT**

**WEEK 21:**

Task 1: Students will be working on basic power point utilities and tools which help them

create basic power point presentations.

PPT Orientation, Slide Layouts, Inserting Text, Word Art, Formatting Text, Bullets and Numbering, Auto Shapes, Lines and Arrows in PowerPoint.

**WEEK 22:**

Task 2: Interactive presentations - Hyperlinks, Inserting images, Clip Art, Audio, Video, Objects, Tables and Charts.

**WEEK 23:**

Task 3: Master Layouts (slide, template, and notes), Types of views (basic, presentation, slide slotter, notes etc), and Inserting ñ Background, textures, Design Templates, Hidden slides.

**AI TOOLS – Chat GPT**

**WEEK 24:**

Task 1: Prompt Engineering: Experiment with different types of prompts to see how the model responds. Try asking questions, starting conversations, or even providing incomplete sentences to see how the model completes them. Ex: Prompt: "You are a knowledgeable AI. Please answer the following question: What is the capital of France?"

**WEEK 25:**

Task 2: Creative Writing: Use the model as a writing assistant. Provide the beginning of a story or a description of a scene, and let the model generate the rest of the content.

**WEEK 26:**

Task 2: This can be a fun way to brainstorm creative ideas Ex: Prompt: "In a world where gravity suddenly stopped working, people started floating upwards. Write a story about how society adapted to this new reality."

**WEEK 27:**

Task 3: Language Translation: Experiment with translation tasks by providing a sentence in one language and asking the model to translate it into another language.

**WEEK 28:**

Task 3: Compare the output to see how accurate and fluent the translations are. Ex: Prompt: "Translate the following English sentence to French: 'Hello, how are you doing today?'"

**Explore – GITHUB**

**WEEK 29:**

Task 1: Students should understand GITHUB and should possess accounts in it.

**WEEK 30:**

Task 2: Students should explore different repositories available in GITHUB and student should create his/ her own simple repositories.

**WEEK 31:**

Task 3: Students should take simple experiments /presentations and upload them in their GITHUB account.

**WEEK 32:**

Task 4: Students should understand how GITHUB Enterprise Cloud is used and explore the GIT and GIT HUB resources.