Course in Designing and Publishing

Sr. No.	Modules
1.	IT Foundation and Digital Tools
2.	Basics of Web Page Designing
3.	Desktop Publishing and Graphic Designing Tools (Photoshop, CorelDraw & Illustrator)
4.	Employability Skills (30 hrs.)
5.	OJT/ Project & Viva (30 hrs.)

Module - 1 IT Foundation and Digital Tools

1. **Computer Fundamentals & Operating System**

   - What is a Computer
   - Characteristics of a Computer
   - Basic Applications of Computer
   - Advantages and Disadvantages of a Computer
   - History of Computer
   - Generation of Computer
   - Classification of Computers
   - Components of computer (Input unit, Arithmetic and logic unit, Control unit, Storage /Memory unit, Output unit)
   - Computer Memory (What is computer memory, Types of memory, Difference between Primary memory & Secondary memory)
   - Concepts of Hardware and Software (Definition of Hardware and Software, Input devices, Secondary Storage devices, Output devices, Mother board, Power supply, System software, Application Software)
   - Languages (Machine Language, Assembly Language, High Level Language)
   - Concepts of data and information
   - Number System (Base conversion, binary, decimal, hexadecimal, and octal systems, conversion from one system to the other)
   - Binary Arithmetic(Addition, subtraction and multiplication)
   - IECT (Information Electronics and Communication Technology) and its applications of IECT
     - E-governance
     - Multimedia and Entertainment

2. **Knowing GUI based Operating System and basic troubleshooting**

- Operating System and types of operating systems
- Functions of Operating System.
- GUI Operating Systems.
- Types of GUI Operating System (Window, Linux, Android, Apple IOS, MAC OS)
- Elements of GUI Operating System(Desktop, Windows, Title Bar, Task Bar, Start Menu/ Launcher, Icon, Button, Menu, Dialogue Box, Tab, Toolbar, Ribbon)
- How Graphical User Interface Works?
- Advantages and Disadvantages of GUI
- Difference between GUI and CUI Operating System
- Window Operating System
- Managing files and folders in Window Operating System
- Control Panel
- Connecting keyboard, mouse, monitor, printer and projector to CPU
- Basic Troubleshooting for common computer issues (power Supply), Handling issues related to printer (paper jam, printer isn't printing, paper size mismatch, Printer error etc.), Handling issues related to scanner (paper jam, poor image quality etc.)

3. **Introduction to Word Processing**

- Opening Word Processing Package
- Menu Bar
- Creating, opening and saving document
- Entering and editing text
- paragraph creation
- Moving text (Cut, Copy & Paste)
- Undo, Redo, Using Shortcuts
- Formatting Documents (Setting font styles, size, color, Typeface (Bold, Italic, Underline), Font effects, Change case, Highlighting, paragraph indenting , Alignments, Line Spacing, Drop cap, Bullets & Numberings, Borders & shadings, Header & Footer, Footnote & Endnote, Inserting Page break, Page numbering, Date & Time, Line Break, Word Wrap, Creating Cover page, Page Border, Table of Contents, Using Page Themes & Color, Inserting Watermarks)
- Working with Tables (Creating tables, Table Styles, Borders & Shadings, Cell Alignment, Inserting & Deleting rows or columns, Merging, Splitting, Sorting, Using formula. Converting table into graphs)
- Inserting Objects- Inserting Pictures, Formatting & editing pictures, picture styles, Picture borders, effects & layouts, Positioning, grouping & ordering, rotating and cropping, Adding and Editing Textbox, Shapes & SmartArt, Inserting Various types of charts, Charts layout and formatting.
- Page Layout & Printing- Page Orientation, Setting page margins, Page size, Columns, Page Setup & Printing.
- Features & Tools- Find and Replace, Auto Correct, Bookmarks, Hyperlinks, Spell Check, Thesaurus, Mail Merge.
- Converting document into pdf

4. Typing Skills

- Keyboard basics
- Correct way of typing
- Alphabet Placement and Positioning
- Typing with Various keys
- Speed typing
- Using shortcut keys.

5. Introduction to Spreadsheet

- Opening, creating and saving Spreadsheet.
- Entering & editing data, Selecting Range
- Cell Addressing
- Creating text, number and date series.
- Inserting, Deleting or Hiding a Row & Column.
- Changing Cell Height & Width.
- Formulas & Functions
- Cell Referencing (Absolute, Relative & Mixed)
- HLookup & VLookup.
- Conditional Formatting.
- Data Sorting & Filtering, Creating Data List, Data Validation
- Consolidation, What-if Analysis.
- Creating Charts and Graphs- Adding different types of Charts, Charts layout and formatting.
- Find & Replace, Spell Check, Thesaurus
- Page Setup & Printing.

6. Introduction to Digital Presentation

- Creating a Presentation using Template
- Creating a Blank Presentation
- Opening and saving a Presentation
- Entering and Editing Text
- Inserting and Deleting Slides in a Presentation
- Applying Themes & Background
- Adding Pictures, Textbox, Tables, Charts, Shapes, Word Tables or Excel Worksheets
- Adding Text to Shapes, Group/Ungroup Objects
- Adding Header & Footer, Using Slide Master.
- Setting Animation & Transition effects, Adding Audio & Video.
- Running a slide show
- Save as PDF, Image or Video file, PowerPoint Views, Printing handouts and slides.

7. **Secure Web Access and communication**
- **Concept of Internet** (What is Network, Types of networks, Concept of Client and Server, Network Topologies, Network communication media, Concept of Internet and its applications, Advantages and disadvantages of internet, Internet protocol, Domain Name System, IP Address, URL, Internet Connectivity, Using WiFi & Bluetooth on digital devices, WWW and Web browsers, Popular Search Engines, Navigating through web, Uploading & Downloading, Services on web, Using Online Services (Banking, Using e-governance websites, Shopping, Streaming, social networking sites))
- **Introduction to E-mail (**History of Email, E-mail addressing, Creating new email account, Composing & sending email without and with attachments, Email Drafts and Scheduled sending, Replying & forwarding, Sorting & searching email, Sending email to multiple users, CC and BCC, Email protocol, Signatures (appended to the end of outgoing messages)
- **Basic Internet Security Concepts (**Need of Security over internet, security threats, viruses and malwares, e-mail spam, security and privacy issues related to online shopping and social networking sites, safety measures-choosing strong password, Antivirus, Firewalls, safe browsing)

8. **Cloud Storage and Online Collaboration**
- What is cloud and cloud storage
- Types of cloud storage (Public, private, hybrid and community cloud)
- Cloud Storage Service Providers(Google Drive, OneDrive, Dropbox)
- Benefits of online storage over local storage and portable storage
- Creating and Managing Files on the Cloud
- Sharing and Collaborating on Documents
- Syncing Files Across Devices
- Introduction to Online Collaboration Tools (Google Workspace, Microsoft Office 365)

Module 2: Basics of Web Page Designing

1. **HTML**
- Introduction to HTML
- HTML elements
- Tags and Attributes
- Creating HTML Page
- Closed and unclosed tags
- Text formatting tags
- HTML links
- Lists & types of Lists
- Creating HTML tables
- Adding pictures & images
- Adding audio & video
- Working with Forms
- HTML 5 new tags (new elements, Input Types, Form Elements, Form Attributes, Canvas, SVG, Video, Audio).

2. CSS

- What is CSS
- Types of CSS(Inline, Internal & External)
- CSS2 (Backgrounds, Margins, Padding, Border, Positioning, Float, Z-index, Links, Text, Outline)
- CSS3 (Selectors, Border, Background, Text, Text effects, Box Shadow, 2D & 3D Transforms, Transition, Animation)

3. JavaScript

- Introduction to Client Side Scripting
- Introduction to JavaScript
- Application of JavaScript
- External JavaScript
- Variables, Data Types & Operators
- Conditional Statements & Loops
- JavaScript Popup Boxes(Alert, Prompt, Confirm)
- JavaScript Functions and Events
- JavaScript Objects and Browser Object Model (BOM)
- Introduction to DOM & Document Object
- getElementById, getElementsByName, getElementsByTagName
- innerHTML, innerText property
- JavaScript Forms and Validations.

Module 3- Desktop Publishing and Graphic Designing Tools

1. Introduction to Desktop Publishing

- What is Desktop Publishing
- Evolution of DTP Software
- Importance and Applications of DTP in various industries
- Types of DTP Content (Electronic Pages, Virtual Pages)
- Key Elements of Desktop Publishing (Images/ Graphics, Layout, Typography, Color, Page Elements, Templates, Output setting, Proofreading & Quality Control)
- Popular Desktop Publishing Software

2. Understanding of Graphic Designing

- What is Graphic Designing
- Elements of Graphic Designing(Line, Color, Shape, Size, & Scale, Space, Texture, Typography)
- Principles of Graphic Designing (Balance, Contrast, Alignment, Proximity, Repetition)
- Popular Digital tools & software
- Types of Graphic Design (Print Design, Digital/ Web Design/ Branding Design, Marketing Design, Packaging Design, Typographic Design, Animation Design, Environmental Design, User Interface(UI) Design)

3. Image editing with Photoshop

- Getting Started with Photoshop
- Interface tour of Photoshop and palettes
- Color modes and resolution options
- Selection Tools (e.g., Marquee, Lasso, Magic Wand)
- Painting and Drawing Tools (e.g., Brush, Pencil, Eraser)
- Retouching Tools (e.g., Clone Stamp, Healing Brush, Spot Healing Brush)
- Transform Tools (e.g., Move, Rotate, Scale)
- Adjustment Tools (e.g., Levels, Curves, Hue/Saturation)
- Filters and Effects (e.g., Blur, Sharpen, Distort, Filters Gallery)
- Text Tools (e.g., Type Tool, Vertical Type Tool, Type Mask Tool)
- Working with layers(Using the Layers panel, Rearranging layers, Gradient Apply, layer style, Adding an adjustment layer, Updating layer effects, Adding a border, Flattening and saving files)
- Masks and Channels (Working with masks and channels, Using Select and Mask, Creating a quick mask, Manipulating an image, Using an alpha channel)
- Color Adjustment(color balance, hue/saturation, apply color corrections using adjustment layers and tools)
- Typographic Design (Creating a clipping mask from type, Creating type on a path, Warping point type, Designing paragraphs of type, Adding a rounded rectangle, Adding vertical text)
- Vector Drawing Techniques (About bitmap images and vector graphics, About paths and the Pen tool, Drawing with the Pen tool, Working with defined custom shapes, Importing a Smart Object, Adding color and depth to a shape using layer styles)
- Making GIF in Photoshop
- 3D editing and Printing
- Export and Sharing

4. CorelDraw

- Introduction to CorelDRAW
- Exploring the CorelDRAW Screen
- Moving Around the Current Page
- Viewing Modes
- Inserting and Deleting Pages
- Changing Pages
- Drawing And Shaping Objects (Drawing and Shaping Tools, Using the Freehand Tool, Drawing Lines and Polylines, Drawing Freehand Polygons, Drawing Shapes and Polygons, Reshaping Lines and Polylines, Drawing Curves, Reshaping Curves, Drawing Rectangles, Drawing Circles)
- Arranging Objects (Grouping and Ungrouping Objects, Using Guidelines, Using Dynamic Guides, Using Snap To, Aligning Objects)
- Working With Text (Choosing Paragraph Options, Setting Indents Using the Ruler, Importing Text, Using the Spell Checker)
- Outlining & Filling Objects (The Outline Tool, Choosing Outline Thickness, Choosing Outline Colors, Using Fill Tool , Text Tool, Creating Artistic Text, Editing Text, Formatting Paragraphs, Setting Text Options, Creating Paragraph , Copying Attributes, Setting Outline and Fill Defaults)
- Using Symbols and Clipart (Inserting Text Symbols, Adding Clipart, Modifying Clipart, Using the Scrapbook to Search for Clipart)

- Transforming Objects (Mirroring Objects, Rotating and Skewing Objects, Using Transform Docker)
- Special Effects (Fitting Text to a Path, Drawing With the Artistic Media Tool, Shaping an Object with an Envelope, Extruding an Object, Blending Two Objects, Using the Lens Effect, Adding Perspectives, Using PowerClips, Applying Contours, Applying Drop Shadows)
- Exporting Drawings (Exporting to Graphic Formats, Copy and Pasting Into Other Applications)
- Printing (Print Options, Print Previewing)

5. Illustrator
- Introduction to Adobe Illustrator (Overview of vector graphics and their advantages, Understanding the role of Illustrator in graphic design)
- Workspace and Interface (Customizing workspace and panels, Understanding tools and their functionalities)
- Basic Drawing Tools (Selection tools, Pen Tool, Shape Tools, Line Segment Tool and Arc Tool)
- Working with Paths and Shapes (Editing anchor points and paths, Manipulating shapes using transform tools, Using Pathfinder operations for shape interactions, Introduction to the Shape Builder Tool)
- Color and Gradients (Understanding color modes: RGB, CMYK, etc., Applying solid colors and gradients to shapes, Using the Color Picker, Color Panel, and Swatches panel, creating and editing gradients with the Gradient Tool)
- Typography and Text Effects (Adding and formatting text, Using the Character and Paragraph panels, Applying text effects: outlines, fills, strokes, etc., Working with Type on a Path tool)
- Drawing and Painting Techniques (Working with the Paintbrush Tool and Blob Brush Tool, Utilizing the Pencil Tool for freehand drawing, Creating and editing custom brushes)
- Layers and Organization (Understanding layers, Organizing artwork using layers, Using the Layers panel for navigation and editing)
- Transformations and Effects (Applying transformations: Scale, Rotate, Reflect, etc., Using the Transform panel and Transform Each command, Applying effects: Drop Shadow, Gaussian Blur, etc.)
- Working with Images (Importing and placing raster images, Tracing images with the Image Trace tool, Using clipping masks and opacity masks)
- Output and Export (Exporting artwork for print and web, Understanding file formats: AI, SVG, PDF, EPS, etc., Preparing files for different output requirements)
- Working with 3D effects and Perspective Grid.
- Using advanced drawing tools: Perspective Tools, Mesh Tool, etc.

Module- 9   Employability Skills (DGT 30 hrs.)

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion

- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for apprenticeship & Jobs

Module - 10   OJT/Project & Viva (30 hrs.)