‘ओ’ लेवल के संशोधित पाठ्यक्रम (M2-R5.1) पर आधारित

वेब डिजाइनिंग एंड पब्लिशिंग

(Web Designing and Publishing)

तृतीय संस्करण

हिन्दी माध्यम

लेखक

Manish Mathur

[B.Sc.(Maths), M.Sc.(IT), MBA)

Director: Softech Informatic Systems, Ajmer

Mohit Mathur

[B.Sc., SCCP (Sun, USA), M.Sc.(IT), MCA)

Chief Executive: Softech Informatic Systems, Ajmer

आस्था पब्लिकेशंस

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PREFACE

स्वामी विवेकानंद ने एक बार कहा था ''शिक्षा मनुष्य में पहले से मौजूद पूर्णता की अभिव्यक्ति है।'' शिक्षा सबसे शक्तिशाली हथियार है जिसका उपयोग दुनियाँ को बदलने के लिए किया जा सकता है। जब तकनीकी शिक्षा की बात आती है, तो हमें राष्ट्रीय स्तर की एक संस्थान की स्थापना के लिए NIELIT का आभारी होना चाहिए और प्रौद्योगिकी हेतू अपने ज्ञान का विस्तार करने के लिए सभी को समान अवसर प्रदान करना चाहिए। इस बात से कोई फर्क नहीं पड़ता कि आप शिक्षा की किस धारा से जुड़े हैं, फिर भी आप तकनीकी ज्ञान प्राप्त कर सकते हैं और NIELIT द्वारा आयोजित विभिन्न पाठ्यक्रमों और परिक्षाओं के माध्यम से तकनीकी ज्ञान का परीक्षण कर सकते हैं। 'O' Level, 'A' Level, 'B' Level और 'C' Level NIELIT द्वारा आयोजित पाठ्यक्रमों में चार सबसे लोकप्रिय कोर्स हैं जो डिप्लोमा से लेकर डिग्री तक का प्रमाण–पत्र प्रदान करती है।

हमने इस पुस्तक को 'O' Level, परीक्षा के द्वितीय पेपर "Web Designing and Publishing" के लिए तैयार किया है जो कि NIELIT द्वारा निर्धारित नवीनतम सलेब्स (M2-R5.1) पर आधारित है। यह पुस्तक वेब डिजाइनिंग और पब्लिशिंग की प्रत्येक अवधारणा को कवर करती है और इसमें प्रत्येक विषय को चित्र और उदाहरण के साथ विस्तारपूर्वक वर्णित किया गया है। हमने इस पुस्तक में सभी विण्डो, विजुअल या डायलॉग बॉक्स को विशेष कम्प्यूटर तकनीक द्वारा प्रस्तुत करने का प्रयास किया है जो विषय की समझ को बेहतर और दिलचस्प बनाता है। इस पुस्तक को 9 अध्यायों में विभाजित किया गया है और प्रत्येक अध्याय में एक विशेष विषय को वर्णित किया गया है। अध्याय के अंत में उस विषय से सम्बंधित कुछ परीक्षा स्तरीय प्रश्न अभ्यास के लिए दिए गए हैं। इसके अलावा पुस्तक के अंत में एक मॉडल टेस्ट पेपर भी दिया गया है। इस पुस्तक के सभी पाठकों से अनुरोध है कि वे इन सभी प्रश्नों और अभ्यासों को हल करें।

हमने इस पुस्तक को त्रुटियों और अन्य गलतियों के बिना पूरा करने की पूरी कोशिश की है, लेकिन फिर भी कुछ त्रुटियां हो सकती हैं। इसके लिए हमें आपके सहयोग की आवश्यकता होगी। इस पुस्तक की गुणवत्ता में सुधार करने के लिए इसकी कवरेज, पठनीयता और प्रस्तुतीकरण के बारे में अपनी महत्वपूर्ण राय या सुझाव हमें भेजने की कृपा करें।

Authors

Outline of Module

Objectives

This module is designed to start web designing, irrespective of knowledge currently the students have in this area. The businesses, nowadays, are heavily relying on web based applications. The purpose of this module is to provide skill to students in designing layouts of web sites. By the end of this module, students will be able to describe the structure and functionality of the World Wide Web, create web pages using a combination of HTML, CSS, and JavaScript and Angular JS.

The students will also learn how to design and integrate multimedia objects in web site. Further, the student will learn how web sites are published. After completing the module, the student will be able to:

- Design and create effective web pages.
- Integrate graphics in web pages.
- Integrate various tools and techniques like HTML, CSS, JavaScript, Angular JS etc.
- Design and edit images using tools.
- Embed the images in web pages

Duration

120 Hours - (Theory: 48hrs + Practical: 72 hrs)

Sr.	Module Unit or Chapter Name	Duration Theory	Duration Practical	Marks (Max.)
1.	Introduction to Web Design	2	3	25
2.	Editors	2	3	
3.	HTML Basics	10	15	
4.	Cascading Style Sheets (CSS)	10	15	20
5.	CSS Framework	6	9	15
6.	JavaScript and Angular JS	10	15	20
7.	Photo Editor	6	9	20
8.	Web Publishing and Browsing	2	3	
	Total	**48**	**72**	**100**

SYLLABUS

1. **Introduction to Web Design**
   Introduction of Internet, WWW, Working of Websites, Webpages, Front End, Back End, Client & Server Scripting Languages, Responsive Web Designing, Types of Websites (Static and Dynamic Websites).

2. **Editors**
   Downloading free Editors like Notepad++, Sublime Text Editor, Making use of Editors, File creation and editing, saving.

3. **HTML Basics**
   HTML: Introduction, Basic Structure of HTML, Head Section and Elements of Head Section, Formatting Tags: Bold, Italic, Underline, Strikethrough, Div, Pre Tag Anchor links and Named Anchors Image Tag, Paragraphs, Comments, Tables Attributes (Border, Cellpadding, Cellspacing, height, width), TR, TH, TD, Rowspan, Colspan Lists : Ordered List , Unordered List , Definition List, Forms, Form Elements, Input types, Input Attributes, Text Input Text Area, Dropdown, Radio buttons , Check boxes, Submit and Reset Buttons Frames: Frameset, nested Frames.HTML 5 Introduction, HTML5 New Elements: Section, Nav, Article, Aside, Audio Tag, Video Tag, HTML5 Form Validations: Require Attribute, Pattern, Autofocus Attribute, email, number type, date type, Range type, HTML embed multimedia, HTML Layout, HTML Iframe

4. **Cascading Style Sheets (CSS)**
   Introduction to CSS, Types of CSS, CSS Selectors: Universal Selector, ID selector, Tag Selector, Class Selector, Sub Selector, Attribute Selector, Group Selector, CSS Properties: Back Ground properties, Block Properties, Box properties, List properties, Border Properties, Positioning Properties, CSS Lists CSS Tables, CSS Menu Design CSS Image Gallery.

5. **CSS Framework**
   Web Site Development using W3.CSS Framework, W3.CSS Intro, W3.CSS, Colors, W3.CSS Containers, W3.CSS Panels, W3.CSS Fonts, W3.CSS Text, W3.CSS Tables, W3.CSS List, W3.CSS Images, W3.CSS Grid.

6. **JavaScript and Angular JS**
   Introduction to Client Side Scripting Language, Variables in Java Script, Operators in JS, Conditions Statements, JS Popup Boxes, JS Events, Basic Form Validations in JavaScript. Introduction to Angular JS: Expressions, Modules and Directives.

7. **Photo Editor**
   Features of Photo Editing, Tools: Selection Tools, Paint Tools, Transform Tools, Text Tool, Layers, Brightness/ Contrast, Improve Colors and tone, Filters.

8. **Web Publishing and Browsing**
   Overview, SGML (Standard Generalized Markup Language), Web hosting, Basics, Documents Interchange Standards, Components of Web Publishing, Document management, Web Page Design Considerations and Principles, Search Engines, WWW, Browser, HTTP, Publishing Tools.

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DETAILED SYLLABUS

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- 1.2 World Wide Web (WWW)
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  - 1.2.2 Graphical User interface
  - 1.2.3 Interactivity
  - 1.2.4 Information Organization
  - 1.2.5 Web Casting
  - 1.2.6 Platform Independence
- 1.3 What is Website?
  - 1.3.1 Domain Name System (DNS)
  - 1.3.2 How the website Work?
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  - 2.4.4 Editing the text
  - 2.4.5 Searching and Replace
  - 2.4.6 Writing Program code
  - 2.4.7 Multi Line Editing

3. HTML Basics

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- 3.2 Creating and Running HTML Code
- 3.3 Elements, Tags and Attributes
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  - 3.4.2 Head Section
  - 3.4.3 Title Section
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