

Based on 'O' Level Revised Syllabus (M2-R5.1)

Web Designing and Publishing

Third Edition

~Author~

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PREFACE

Swami Vivekananda once said – “Education is the manifestation of perfection present already in man.” Education is the most powerful weapon which one can use to change the world. When it comes to technical education we must be thankful to NIELIT to setup an institution at national level and providing equal opportunity to all to expand their knowledge to technology. No matter to which stream of education you belong you can still get the technical knowledge and test the technical knowledge by various courses and examinations conducted by NIELIT. The 'O'-level, 'A'-level, 'B'-level and 'C'-level are the four most popular courses that provides certification from diploma to degree.

We have prepared this book for one of the papers in 'O'-level examination namely “Web Designing and Publishing”. Based on the latest syllabus prescribed by NIELIT, this book is covering each and every concept of web designing and publishing. Every tool is described in detail with diagrams and examples. Using special computer technique we have tried to present all windows, visuals or dialog boxes in this book, which appears on screen while working on computer. It makes the understanding of the subject better and interesting. This book is divided into 9 chapters where at the end of each chapter some exercises have been given in the same patters as of 'O'-level examination. All the readers of this book are requested to solve those exercises.

We have tried our best to complete this book without errors and other mistakes in printing or proof reading but still some errors may be possible and in this regard your kind cooperation is solicited. We shall feel obliged to the readers if they send us their critical opinion regarding coverage, readability and presentation in this book and request them to email their suggestion, if any, to improve the quality of this book.

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		Marks (Max.)
		Theory	Practical	
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

Download 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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 - 1.2.2 Graphical User interface
 - 1.2.3 Interactivity
 - 1.2.4 Information Organization
 - 1.2.5 Web Casting
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- 1.3 What is Website?
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