# HTML 5

### Introduction to HTML

* **HyperText Markup Language • History of HTML • Versions of HTML • What is W3C**

### HTML Tags

* **What is HTML Tag • Types of HTML Tags • !DOCTYPE**

### Structure of HTML Document

* **Creating HTML Document • !DOCTYPE, HEAD Section, Body Section • Viewing HTML Document • HTML Comments**

### Basic HTML Formatting Tags

* **Basic Tags • Headings • Formatting Tags • HTML Colour Coding**
* **Fonts • Background colour**

### HTML Elements

* **Elements • Attributes • Entities • Symbols**

### HTML Miscellaneous Tags

* **Marquee • Abbreviations • Blockquotes • Code and Variable**
* **Div and Span**

# HTML 5

### URL

* **What is URL • Absolute Address • Relative Address**

### HTML Links

* **Text Links • Image Links • Email Links**

### HTML Lists

* **Ordered Lists • Unordered Lists • Nested Lists • Description Lists**

### HTML Tables

* **Table • Rows and Columns • Table Structure • Table Header, Body and Footer • Table Caption**

### HTML Frames

* **Frames • IFrames • Placing Youtube video in HTML page**
* **Placing Location Map in HTML page**

### HTML Forms

* **Forms • HTML Form Controls • HTML Input Types • HTML Input Attributes • HTML Form Attributes • Multiline Text Box • Select Box Control • File Upload Control • Buttons • Hidden Control**

### Embedding Multimedia elements

* **Embedding Multimedia Elements • Audio • Video • Objects**

# HTML 5

### HTML 5 New Elements

* **Section Elements: Main, Article, Section, Aside, Header, Nav, Footer • Semantic Elements: Figure, Caption, Mark, Ruby**
* **Progress, Meter, Output**

### HTML 5 Audio and Video

* **Audio • Video**

### HTML Head Section Tags

* **Meta Tags • HTML Charset • Favicon • Style • Script**

# CSS 3

### Cascading Style Sheets

* **Introduction to CSS • Advantages of CSS •**

### Style Sheets

* **What is Stylesheet • Types of Stylesheets**

### CSS Syntax

* **Style Rules • Parts of Style Rules • Selector • Declaration Block**
* **Style Declarations • Style Property and Value**

### CSS Selectors

* **Selectors • Simple Selectors • Element Type Selector • ID Selector • Class Selector • Grouping Selectors**

### CSS Color Properties

* **Color Property • CSS Coloring • CSS Units**

### CSS Background Properties

* **Background Color • Background Image • Background Position**
* **Background Repeat • Background Attachment • CSS Coloring**

### CSS Font Properties

* **Font Family • Font Pairings • Font Size • Font Weight**
* **Font Style • Font Variant • Line Height**

# CSS 3

### CSS Text Properties

* **Text Align • Text Decoration • Text and Word Spacing**
* **Text Transformation • Text Shadow • Text Effects**

### CSS List Properties

* **Types of Lists • List Item Markers • List Item Image Marker**

### Advanced CSS Selectors

* **Combinator Selectors • Attribute Selectors • Pseudo Class Selectors • Pseudo Element Selectors**

### CSS Box Model

* **CSS Box • Box Properties • Box Dimension Properties**

### CSS Border Properties

* **Border Width • Border Style • Border Color • Rounded Corners**
* **Border Images**

### CSS Margin and Outline Properties

* **Margin Property • Outline Property**

# CSS 3

### CSS Image Properties

* **Image Height and Width • Image Border**

### CSS Positioning Properties

* **Static positioning, Absolute positioning, Relative positioning, Fixed positioning • Position Coordinates • Z-Index Property**

### CSS Float and Clear

* **Float • Clear**

### CSS Display and Visibility properties

* **Display Properties • Visibility Properties**

### CSS Overflow Properties

* + **Overflow • Overflow X and Y**

### CSS Multi-Columns

* **Multi Column Layouts • Column Count • Column Width**
* **Column Gap • Colum Rule • Column Span**

### CSS Gradients

* **Linear Gradients • Radial Gradients**

# CSS 3

### Google Fonts

* **Font Format Types • Google Fonts • Using @Font Face**

### CSS Transforms

* **2D Transforms • 3D Transforms**

### CSS Transitions

* **Transition • Transition Delay • Transition Duration**

### CSS Animations

* **Key Frames • Animation • Animation Duration • Animation Delay**
* **Animation Duration • Animation Timing and Iteration Count**

### CSS Box Sizing and Resize

* **Box Sizing**

### CSS Flexbox

* **Flexible Responsive Layout**

### CSS Media Queries

* **Media Queries • Media Types**

## Javascript

### Introduction to Javascript

* **What is Javascript • Evolution of Javascript • Scripting Language**
* **Types of Javascript • ECMA Script • Javascript versions**

### Javascript Syntax

* **Variables • Expressions • Keywords • Comments • Datatypes**

### Getting started with Javascript

* **First Javascript Program • Javascript inside HTML • Where to write/place Javascript code • <script> tag**

### Javascript Operators

* **Arithmetic Operators • Assignment Operators • String Operator**
* **Comparision Operators • Logical Operators • Bitwise Operator**

### Javascript Popup Boxes

* **Dialog boxes • Alert Box • Prompt Box • Confirm Box**

### Javascript Conditional Statements

* **if • if-else • if-else if-else • switch-case • Conditional Operator**

### Javascript Looping Statements

* **while loop • do-while loop • for loop •Jumping statements**

## Javascript

### Javascript Functions

* **User-defined functions • Benefits of using Functions • Function Declaration • Function Calling • Arguments vs Parameters**
* **Arguments Object • Variable Scope – Global, Local, Outer**
* **Variable Hoisting**

### Javascript Built-in Objects

* **Objects • Number • String • Math • Array • Date • Boolean**
* **RegExp**

### Errors and Exception Handling and Debugging

* **Errors • Types of Errors • Exceptions • Exception Handling**
* **try, catch, finally, throw • onerror method and error event**

### HTML DOM

* **What is DOM • Working with HTML DOM • DOM Levels • DOM Objects, Nodes and Hierarchy of Nodes • DOM Events • Reacting to Events • Mouse Events, Keyboard Events, Form Events, Document/Window Events • Event Listener**

## Javascript

### Browser DOM

* **Windows • Location • History**

### Form Validations

* **Client-side validation • Data validation • Validating text, number, password, checkboxes, radio buttons, email, range, URL**
* **Regular Expressions • Validating using Regular Expressions**

### Working with Javascript objects

* **Objects • Object Properties • Object Methods • this keyword**
* **Object Constructors**

### Advanced working with functions

* **Variable Scopes •Code Blocks • Closures • Anonymous Functions**

## jQuery

### Introduction to jQuery

* **What is the jQuery • Overview of jQuery • Advantages of jQuery**

### How to use jQuery

* **Creating First jQuery Program • jQuery Syntax • Document Ready Function • How to escape special characters**

### jQuery Selectors

* **Simple Selectors • ID, Class, Attribute, Multiple Selectors**

### jQuery Selectors

* **Simple Selectors • ID, Class, Attribute, Multiple Selectors**

### DOM Traversing

* **Traversal Functions • Traversing Upwards, Downwards and Sideways • Filtering, Map, Slice**

### HTML DOM Manipulation

* **Getting and Setting values from Elements • Handling Attributes**
* **Inserting Elements • Deleting Elements • CSS Manipulations**

### Effects

* **Showing/Hiding Elements • Sliding Elements • Fading Elements**
* **Creating Animations • Deleting Animating Elements**

## jQuery

### Events

* **Working with Events • Event Methods**

### AJAX and JSON

* **AJAX with jQuery • Load Method • JSON • get and getJson methods • Post Request**

## Bootstrap 5

### Introduction to Bootstrap

* **What is Bootstrap? • Bootstrap Mobile First Framework**
* **Where to get BS • Install via CDN • Basic Bootstrap pages**

### Bootstrap Grid System

* **Grids, Grid System, Grid Classes • Structure of Bootstrap grid**
* **Bootstrap Container**

### Bootstrap Styles

* **BS Text/Typography • BS Colors • BS Buttons, BS Button Groups**
* **BS Tables • BS Images • BS Alerts • BS Glyph Icons**
* **BS Jumbotron • BS Badges/Labels • BS Progress Bar**
* **BS Pagination • BS List Groups • BS Panels • BS Dropdowns**
* **BS Forms • BS Inputs • BS Media Objects • BS Carousel**
* **BS Modal • BS Tooltip • BS Accordion • BS Breadcrumb**
* **BS Padding • BS Margin • BS Navbar • BS Layout • BS Offset**
* **BS Border • BS Icon**