: Library Website: Design and Development (9231)

Level: BS-LIS

Semester: Autumn, 2024

ASSIGNMENT No. 1

(Units 1–5)

Q.1 Describe how you can use Microsoft Word to create a basic web page layout. What features and tools within Microsoft Word can be utilized to simulate the structure of a webpage, and how can you ensure the layout is visually appealing and organized? *(20 marks)*

Microsoft Word can be used to create a basic web page layout by utilizing its formatting and design tools to simulate the structure of a webpage. The key steps include:

Page Setup: Set the page orientation to landscape for a wider layout similar to a webpage.

Tables for Structure: Insert tables to organize different sections such as the header, navigation menu, main content, and footer.

Headers and Footers: Use the header for the website title and footer for copyright information.

Text Formatting: Utilize heading styles (H1, H2, H3) to create a hierarchical structure.

Hyperlinks: Add links using the "Insert Hyperlink" option to mimic website navigation.

Images and Graphics: Insert images and position them appropriately using "Wrap Text" options.

Color and Themes: Apply colors and themes to enhance visual appeal and ensure consistency.

By following these steps, Microsoft Word can effectively be used to draft a webpage layout.

Q.2 Explain the basic structure of an HTML document. Describe what a Document Type Definition (DTD) is in the context of HTML. Provide examples relevant to a library website. *(20 marks)*

An HTML document consists of the following essential components:

<!DOCTYPE html> - Specifies the HTML version being used.

<html> - The root element containing all content.

<head> - Contains metadata, title, and links to stylesheets.

<body> - Holds all visible content.

Example:

```
<!DOCTYPE html>
<html>
<head>
<title>Library Website</title>
</head>
<body>
```

```html
<h1>Welcome to the Library</h1>
<p>Find books, resources, and events.</p>
</body>
</html>
```

Document Type Definition (DTD):

A DTD defines the rules and structure of an HTML document. For example, in HTML5, the DTD is `<!DOCTYPE html>`.

For a library website, the structure may include:

```html
<!DOCTYPE html>
<html>
<head>
<title>Library Catalog</title>
</head>
<body>
<h1>Library Catalog</h1>
<p>Search for books and articles.</p>
</body>
</html>
```

Q.3 Explain the purpose and role of the <head> section, file structure, and color in an HTML document. Identify and describe the key elements that can be included within the <head> section, such as <title>, <meta>, <link>, and <script>. *(20 marks)*

The <head> section of an HTML document contains metadata and links to external resources. It does not display content on the webpage but plays a crucial role in defining styles, scripts, and SEO.

Key Elements in <head>:

<title>: Defines the page title shown in the browser tab.

<meta>: Provides metadata such as description and keywords for SEO.

<link>: Links external stylesheets.

<script>: Includes JavaScript files for interactivity.

Example:

```
<head>
<title>Library Homepage</title>
<meta charset="UTF-8">
<meta name="description" content="Library resources and
events">
<link rel="stylesheet" href="styles.css">
<script src="script.js"></script>
</head>
```

File Structure:

index.html (Main page)

styles.css (Stylesheet)

script.js (JavaScript file)

Color in Web Design: Color enhances readability and
aesthetics. CSS can define colors:

```
body {
background-color: #f4f4f4;
color: #333;
}
```

Q.4 What are the different HTML tags used to structure and display text on a webpage? Explain the purpose of tags with examples. *(20 marks)*

Common HTML tags for structuring text:

Headings: <h1> to <h6>

Paragraphs: <p>

Bold & Italics: <b>, <i>

Lists: , <ol>,

Links: <a href="">

Tables: <table>, <tr>, <td>

Example:

<h1>Library Books</h1>
<p>Find your favorite books here.</p>

Fiction

Non-Fiction

Q.5 Describe the role of Cascading Style Sheets (CSS) in web design. How can CSS be used to change the appearance of text links on a webpage? *(20 marks)*

CSS styles HTML elements to improve the webpage design.

Benefits:

Consistency across pages

Separation of content and design

Faster page loading

Changing Text Links with CSS:

```
a {
color: blue;
text-decoration: none;
}
```

a:hover {

color: red;

}

ASSIGNMENT No. 2

(Units 6–9)

Q.1 How can lists be used to enhance navigation? Provide an example. *(20 marks)*

Lists organize menu items for easy navigation.

```
<ul>
<li><a href="home.html">Home</a></li>
<li><a href="catalog.html">Catalog</a></li>
<li><a href="events.html">Events</a></li>
<li><a href="contact.html">Contact Us</a></li>
</ul>
```

Q.2 Key components of a library website. *(20 marks)*

Header: Displays the site title.

Navigation Bar: Links to major sections.

Main Content: Displays books, events, and resources.

Footer: Includes contact details and copyright.

Q.3 Steps for launching a website. *(20 marks)*

Content Review

Testing Functionality

SEO Optimization

Cross-Browser Compatibility

Server Deployment

Q.4 Library Website Launch Checklist. *(20 marks)*

Test all links

Ensure mobile responsiveness

Check SEO settings

Prepare social media promotion

Verify hosting and domain setup

Q.5 Explain Web Page Navigation, Image Mapping, Marquees, and Transitions. *(20 marks)*

Web Page Navigation: Enables users to move between pages.

Image Mapping: Allows clickable areas on images.

Marquees: Scrolls text across the screen.

Transitions: Smooth visual effects between states.

Example CSS transition:

```
div {
transition: all 0.5s ease;
}
```