Unit 1: Introduction to the Internet
Short Questions:

Q. WWW (Nov 22)
Ans. The World Wide Web (WWW) is a system of interlinked hypertext documents accessed via the internet using web browsers. It enables users to navigate between pages using hyperlinks.

Q. What is hypertext? (Nov 23)
Ans. Hypertext refers to text that contains links to other texts or resources, allowing users to jump between web pages or sections non-linearly. It is the foundation of web navigation.

Long Questions:
Q. What is Internet? List and explain applications of Internet.(Nov 22), (Nov 23), (Nov 24)
Ans. The **Internet** is a global network of interconnected computers and servers that communicate using standardized protocols (such as TCP/IP). It allows users around the world to access and exchange information, communicate, and perform countless activities through various online services. The Internet works by connecting devices via local networks, routers, and servers, forming a massive web of data transmission.

Applications of the Internet:

1. **Communication**: Email, instant messaging, video calls, and social media platforms allow people to connect instantly across the globe.
2. **Information Access**: The Internet is a vast source of information on any topic. Search engines like Google help users find websites, articles, videos, and more.
3. **E-commerce**: Online shopping websites (e.g., Amazon, Flipkart) let consumers buy goods and services from anywhere, anytime.
4. **Online Banking**: Banks offer internet banking services for money transfers, bill payments, and account management.
5. **Education and E-learning**: Students can attend virtual classes, access e-books, and use educational platforms like Coursera or Khan Academy.
6. **Entertainment**: Streaming platforms like YouTube, Netflix, and Spotify provide movies, music, and videos.
7. **Remote Work**: Tools like Zoom, Microsoft Teams, and Google Workspace support working from home.

The Internet has revolutionized how we live, work, and communicate.

Unit 2: Introduction to HTML

Short Questions:

Q. What is the Home page of a website? Explain. (Nov 24)

Ans. The home page is the main or introductory page of a website, usually serving as the starting point for navigation. It provides links to other important sections of the site.

Q. Differentiate between website and web page. (Nov 24)

Ans. A **web page** is a single document on the internet, while a **website** is a collection of related web pages under one domain, accessible through a common homepage.

Q. What is Domain Name? (Nov 24)

Ans. A domain name is the human-readable address of a website (e.g., www.example.com) that maps to its IP address, making it easier to access online resources.

Long Questions:

Q. What is HTML? (Nov 22)

Ans. **HTML (HyperText Markup Language)** is the standard language used to create and design the structure of web pages on the World Wide Web. It is not a programming language but a **markup language**, which means it is used to define the layout and elements of a webpage using **tags**.

HTML consists of various **elements** and **attributes** enclosed in **angle brackets** (e.g., <html>, <head>, <body>, <p>, <a>, <img>). These tags tell the web browser how to display content like text, images, links, and videos. For example, <h1> defines a main heading, <p> defines a paragraph, and <a href="..."> defines a hyperlink.

A basic HTML document begins with <!DOCTYPE html>, followed by <html>, and contains two main parts:

- <head>: contains metadata, title, and links to stylesheets.
- <body>: contains all the visible content of the page like text, images, and forms.

HTML works in conjunction with other technologies like **CSS (Cascading Style Sheets)** for styling and **JavaScript** for interactivity.

In summary, HTML is the backbone of any website. It allows developers to organize content in a structured way, making it accessible, user-friendly, and presentable on web browsers.

Unit 3: Tags, Attributes, Lists, and Tables
Short Questions:

Q. Design (Nov 22)
Ans. Design in web technologies refers to the layout, appearance, and user interface of a website, focusing on visual appeal and user experience.

Q. Formatting (Nov 22)
Ans. Formatting in HTML involves using tags to structure and style content, such as headings, bold, italic, and alignment to enhance readability.

Q. Unpaired tag (Nov 22)
Ans. An unpaired tag is an HTML tag that does not require a closing tag, such as
, <hr>, and <img>.

Q. Ordered list (Nov 22), (Nov 23)
Ans. An ordered list in HTML is created using the <ol> tag and displays items in a numbered sequence.

Q. Cell spacing (Nov 22)
Ans. Cell spacing is an attribute of the <table> tag that defines the space between individual table cells.

Q. What is cell padding? (Nov 23)
Ans. Cell padding controls the space between the content of a cell and its border within an HTML table.

Q. What is the purpose of the rowspan attribute of the <td>tag? (Nov 23)
Ans. The rowspan attribute allows a table cell to extend vertically across multiple rows.

Q. List any-four paired tags. (Nov 23)
Ans. Examples: <html>, <body>, <b>, <i> – each has an opening and a closing tag.

Q. What do you mean by paired tags and unpaired tags in HTML? (Nov 24)
Ans. Paired tags come in a set like ... , while unpaired tags stand alone like
.

Q. Differentiate between cellpadding and cellspacing attributes of Table. (Nov 24)
Ans. Cellpadding defines space inside cells; cellspacing defines space between cells in a table.

Q. Explain <B> and <I> tags. (Nov 24)
Ans. <b> makes text bold; <i> displays text in italic style for emphasis or styling.

Q. Explain <sup> and <sub> tags. (Nov 24)
Ans. <sup> is used for superscript (e.g., x^2), and <sub> for subscript (e.g., H_2O).

Q. How to insert an image in HTML page? Give example. (Nov 24)
Ans. Use the <img> tag:
<imgsrc="image.jpg" alt="Example Image">

Q. How to insert an image at background? (Nov 24)
Ans. Use the background attribute in the <body> tag (deprecated) or CSS:
<body style="background-image: url('bg.jpg');">

Long Questions:
Q. Why is cell padding done?

Ans. **Cell padding** is a property used in HTML tables to control the **spacing between the content inside a table cell and its cell border**. It enhances the readability, aesthetics, and overall presentation of table data on a web page.

By default, if no cell padding is applied, the content in a table cell may appear too close to the borders, making it look cramped or hard to read. Cell padding adds **internal space** around the content, such as text or images, ensuring that the data is visually separated from the edges of the cell.

In HTML, cell padding can be defined using the cellpadding attribute within the <table> tag, like this:

```
<table cellpadding="10">
```

This adds 10 pixels of space inside each cell.

Alternatively, in modern web design, padding is more commonly applied using **CSS**:

```
td {
  padding: 10px;
}
```

Purpose and Benefits:

- Improves **readability** of table content.
- Enhances **visual clarity** and neatness.
- Creates a **more user-friendly** design.
- Helps maintain consistent **spacing and alignment**.

In summary, cell padding is essential for better layout control and a polished appearance of tabular data on a website.

Q. Distinguish between ordered and unordered list. (Nov 22)

Ans. In HTML, **lists** are used to group related items together. There are two main types of lists: **ordered lists** and **unordered lists**, and each serves a specific purpose based on the type of content.

An **ordered list** (<ol>) is used when the **sequence or order of items matters**. The list items are automatically numbered by the browser (1, 2, 3... or Roman numerals, letters, etc.). Ordered lists are useful for instructions, rankings, steps in a process, or any data that follows a logical order. For example:

```
<ol>
<li>Turn on the computer</li>
<li>Open the browser</li>
<li>Visit the website</li>
</ol>
```

An **unordered list** (<ul>) is used when the **order of items is not important**. The list items are marked with bullets or other symbols rather than numbers. This type of list is typically used for features, groceries, or categories. For example:

```
<ul>
<li>Milk</li>
<li>Bread</li>
<li>Eggs</li>
</ul>
```

Key Differences:

- Ordered lists use numbers; unordered lists use bullets.
- Ordered lists imply priority or sequence; unordered lists do not.
- Both use the <li> tag to define individual items.

Choosing the right list type ensures better content structure and readability.

Q. Write HTML script to show various types of ordered lists and unordered lists. (Nov 24)

Ans. HTML provides different types of **ordered** and **unordered** lists using the <ol> and <ul> tags respectively. The type attribute in <ol> defines the numbering style, and for <ul>, it defines the bullet style using CSS.

Here's an HTML example that demonstrates various types:

```
<!DOCTYPE html>
<html>
```

```
<head>
<title>HTML Lists Example</title>
<style>
ul.circle{ list-style-type: circle; }
ul.square{ list-style-type: square; }
ul.none{ list-style-type: none; }
</style>
</head>
<body>

<h2>Ordered Lists</h2>
<ol type="1">
<li>First Item (Numbers)</li>
<li>Second Item</li>
</ol>

<ol type="A">
<li>First Item (Uppercase Letters)</li>
<li>Second Item</li>
</ol>

<ol type="a">
<li>First Item (Lowercase Letters)</li>
<li>Second Item</li>
</ol>

<ol type="I">
<li>First Item (Uppercase Roman)</li>
<li>Second Item</li>
</ol>

<h2>Unordered Lists</h2>
<ul class="circle">
<li>Circle Bullet</li>
<li>Another Item</li>
</ul>

<ul class="square">
<li>Square Bullet</li>
<li>Another Item</li>
</ul>

<ul class="none">
<li>No Bullet</li>
<li>Another Item</li>
</ul>

</body>
</html>
```

This script displays different bullet styles and number formats using attributes and CSS styling, helping improve the visual hierarchy and organization of content.

Q. Write HTML script to create a Table with 5 rows and 4 columns showing rowspan and colspan attributes. (Nov 24)

Ans. In HTML, the rowspan and colspan attributes are used in tables to merge cells across rows and columns. Here's an example that creates a table with **5 rows** and **4 columns**, demonstrating the use of both attributes:

```
<html>
<head>
<title>HTML Table with Rowspan and Colspan</title>
<style>
  table, th, td {
    border: 1px solid black;
    border-collapse: collapse;
    padding: 8px;
    text-align: center;
  }
</style>
</head>
<body>

<h2>HTML Table with Rowspan and Colspan</h2>

<table>
<tr>
<throwspan="2">Name</th>
<thcolspan="2">Marks</th>
<throwspan="2">Grade</th>
</tr>
<tr>
<th>Math</th>
<th>Science</th>
</tr>
<tr>
<td>Alice</td>
<td>85</td>
<td>90</td>
<td>A</td>
</tr>
<tr>
<td>Bob</td>
<td colspan="2">Absent</td>
<td>-</td>
</tr>
<tr>
<td>Charlie</td>
<td>78</td>
<td>88</td>
<td>B</td>
</tr>
</table>

</body>
</html>
```

Explanation:

- rowspan="2" merges two rows (for Name and Grade).
- colspan="2" merges two columns (for Marks and Absent).

This structure helps create organized and readable tabular data in webpages.

Q. Create an HTML document to describe an unordered list of a typical grocery shopping list you write. (Nov 23)

Ans. An unordered list is useful when the order of items does not matter, such as a **grocery shopping list**. Below is an HTML document that creates a simple web page with a grocery list using the <ul> tag:

```
<!DOCTYPE html>
<html>
<head>
<title>Grocery Shopping List</title>
<style>
   body {
     font-family: Arial, sans-serif;
     margin: 20px;
   }
   h2 {
color: #2c3e50;
   }
   ul {
     list-style-type: disc;
     padding-left: 20px;
   }
   li {
     margin-bottom: 5px;
   }
</style>
</head>
<body>

<h2>My Grocery Shopping List</h2>
<ul>
<li>Milk</li>
<li>Bread</li>
<li>Eggs</li>
<li>Fruits (Bananas, Apples, Oranges)</li>
<li>Vegetables (Tomatoes, Potatoes, Onions)</li>
<li>Cooking Oil</li>
<li>Rice</li>
<li>Sugar</li>
<li>Tea Bags</li>
<li>Spices</li>
</ul>

</body>
</html>
```

Explanation:

- The <ul> tag creates an unordered list.
- Each <li> tag represents a single item.
- CSS is used for styling (optional but improves appearance). This simple webpage helps visually organize your grocery items neatly and clearly.

Q. Create an HTML document to describe a table with the following contents: The columns of the table must have the headings Pine, Maple, Oak and Fir. The rows must have the labels Average Height, Average Width, Typical Lifespan, and Leaf Type. You can make up the data cell values. (Nov 23)

Ans. **Average Height, Average Width, Typical Lifespan, and Leaf Type**. Sample data is filled in for demonstration:

```
<!DOCTYPE html>
<html>
<head>
<title>Tree Information Table</title>
<style>
  table {
    border-collapse: collapse;
    width: 80%;
    margin: 20px auto;
    font-family: Arial, sans-serif;
  }
th, td {
    border: 1px solid #333;
    padding: 10px;
    text-align: center;
  }
th {
    background-color: #b4d4b8;
  }
tr:first-childth {
    background-color: #92c7cf;
  }
  caption {
    caption-side: top;
    font-weight: bold;
    font-size: 18px;
    margin-bottom: 10px;
  }
</style>
</head>
<body>

<table>
<caption>Tree Characteristics Comparison</caption>
<tr>
<th></th>
<th>Pine</th>
<th>Maple</th>
<th>Oak</th>
<th>Fir</th>
</tr>
<tr>
<th>Average Height</th>
<td>80 ft</td>
<td>40 ft</td>
<td>70 ft</td>
<td>85 ft</td>
</tr>
<tr>
<th>Average Width</th>
<td>20 ft</td>
<td>35 ft</td>
```

```
<td>50 ft</td>
<td>25 ft</td>
</tr>
<tr>
<th>Typical Lifespan</th>
<td>100 years</td>
<td>130 years</td>
<td>200 years</td>
<td>150 years</td>
</tr>
<tr>
<th>Leaf Type</th>
<td>Needle</td>
<td>Broadleaf</td>
<td>Lobed Broadleaf</td>
<td>Needle</td>
</tr>
</table>

</body>
</html>
```

Key Features:

- Uses <table>, <tr>, <th>, and <td> tags to define the structure.
- CSS adds readability and a professional look.
- A <caption> gives a title to the table.

This table provides a clear comparison of tree types and their attributes.

Unit 4: Links and Images

Short Questions:

Q. Aligning (Nov 22)

Ans. Aligning in web designing refers to positioning elements such as text or images (left, center, right) using HTML attributes or CSS styles to improve layout and readability. For example, <p align="center">centers a paragraph on the page.

Long Questions:

Q. Create an HTML document to make hyperlinks using anchor tag. (Nov 23)

Ans.
```
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Example</title>
<style>
  body {
    font-family: Arial, sans-serif;
    margin: 30px;
  }
  a {
color: #1a73e8;
    text-decoration: none;
  }
a:hover {
    text-decoration: underline;
  }
</style>
</head>
<body>

<h2>Useful Hyperlinks Example</h2>

<p>Click the links below to visit some useful websites:</p>

<ul>
<li><a href="https://www.google.com" target="_blank">Visit Google</a></li>
<li><a href="https://www.wikipedia.org" target="_blank">Go to Wikipedia</a></li>
<li><a href="https://www.youtube.com" target="_blank">Open YouTube</a></li>
<li><a href="https://www.openai.com" target="_blank">Explore OpenAI</a></li>
<li><a href="mailto:example@email.com">Send an Email</a></li>
<li><a href="#section2">Go to Section 2 (Internal Link)</a></li>
</ul>

<hr>

<h3 id="section2">Section 2</h3>
<p>This is Section 2. Internal links help jump to specific parts of a page.</p>

</body>
</html>
```

Explanation:

- The Text creates a hyperlink.
- target="_blank" opens the link in a new tab.

- mailto: links open the default email client.
- #section2 is an internal page jump using an element's id.

This HTML structure demonstrates both external and internal links clearly and professionally.

Q. What is hyperlink? How to create a hyperlink on an image? Explain with example. (Nov 23), (Nov 24)

Ans. A **hyperlink** is a clickable element on a webpage that redirects the user to another location—either within the same document, to another webpage, or even a file or email address. Hyperlinks are created in HTML using the <a> (anchor) tag, with the href attribute specifying the destination URL.

To create a **hyperlink on an image**, the <img> tag is placed inside the <a> tag. This way, clicking the image functions just like clicking a text link.

Syntax Example:

```
<a href="https://www.wikipedia.org">
<imgsrc="wikipedia-logo.png" alt="Wikipedia" width="150">
</a>
```

Explanation:

- <a href="URL">: Begins the hyperlink.
- <imgsrc="image-path">: Displays the image.
- alt: Provides alternate text if the image fails to load.
- width: Adjusts image size.
- The image acts as a clickable link to the destination provided in href.

This method is commonly used in banners, logos, buttons, and other graphical links on websites. Using an image as a hyperlink improves visual appeal and user engagement, especially for navigation and branding purposes.

Unit 5: Cascading Style Sheets (CSS)

Short Questions:

Q. What is an external style sheet? (Nov 23)

Ans. An external style sheet is a separate .css file that contains styling rules for an HTML document. It is linked using the <link> tag in the <head> section, allowing consistent styling across multiple web pages.

Long Questions:

Q. What is the purpose of cascading style sheets? Explain in detail. (Nov 23)x2

Ans. Cascading Style Sheets (CSS) is a styling language used to control the visual appearance and layout of HTML elements on a web page. The primary purpose of CSS is to **separate content from presentation**, allowing developers to write cleaner HTML and apply consistent design rules across multiple web pages.

CSS enables designers to define styles such as **fonts, colors, margins, padding, borders, positioning, alignment**, and **animation effects**. Instead of styling each HTML tag individually, a single CSS rule can be applied to multiple elements, making design updates efficient and scalable.

One of the key features of CSS is its **cascading nature**, meaning styles are applied in a specific order of priority: browser default styles, external style sheets, internal styles, and inline styles — with the last one taking highest precedence unless overridden.

CSS also supports **media queries**, which allow responsive designs by adjusting layouts based on screen size or device type, making websites mobile-friendly.

In summary, CSS enhances the **aesthetics, usability, maintainability**, and **performance** of web pages. It is a core technology alongside HTML and JavaScript in front-end web development and plays a crucial role in creating visually engaging and user-friendly websites.

Q. What is CSS? How to use internal and external style sheets? Explain with example. (Nov 24)

Ans. CSS (Cascading Style Sheets) is a stylesheet language used to describe the visual presentation of HTML documents. It controls how elements appear on a web page, such as colors, fonts, layouts, and spacing. By separating content from design, CSS makes web development cleaner, more efficient, and easier to maintain.

There are three main ways to apply CSS: inline, internal, and external. Internal and external stylesheets are preferred for better structure and reusability.

Internal Style Sheet

An internal stylesheet is written within the <style> tag inside the <head> section of an HTML document.

Example:

```
<!DOCTYPE html>
    <html>
    <head>
    <style>
       body { background-color: lightblue; }
       h1 { color: navy; }
    </style>
    </head>
    <body>
    <h1>Hello World</h1>
    </body>
    </html>
```

External Style Sheet

An external stylesheet is written in a separate .css file and linked to the HTML using the <link> tag.

Example (HTML):

```
    <head>
    <link rel="stylesheet" href="style.css">
```

</head>
style.css
body { background-color: lightblue; }
h1 { color: navy; }
External stylesheets promote consistency and easier maintenance across multiple pages.

Unit 6: Creating a Basic Web Page
Long Questions:

Q. How to create web pages using HTML tags?(Nov 22)

Ans. Creating a web page using **HTML (HyperText Markup Language)** involves writing structured code that defines the content and layout of the page. HTML uses **tags** to mark elements such as headings, paragraphs, images, links, and more. Every HTML document starts with the <!DOCTYPE html> declaration, followed by the <html> element that wraps all other content.

The <head> section contains metadata, the title of the page (<title>), links to stylesheets, and scripts. The <body> tag includes the visible content like text (<h1> to <h6> for headings, <p> for paragraphs), images (<img>), hyperlinks (<a>), lists (<ul>, <ol>, <li>), tables (<table>, <tr>, <td>), forms (<form>, <input>, etc.), and more.

Here's a simple example of an HTML page:

```
<!DOCTYPE html>

<html>

<head>

<title>My First Web Page</title>

</head>

<body>

<h1>Welcome!</h1>

<p>This is my first HTML web page.</p>

<a href="https://www.example.com">Visit Example</a>

</body>

</html>
```

You can create this file in any text editor, save it with a .html extension, and open it in a web browser to see the result. HTML forms the **foundation of every website**, making it essential for web development.

Unit 7: Typography

Short Questions:

Q. Font selection (Nov 22)

Ans. Font selection in web designing involves choosing appropriate typefaces (like Arial, Times New Roman, etc.) to enhance readability and visual appeal. It is done using the CSS font-family property.

Long Questions:

Q. How to change font in HTML? (Nov 23), (Nov 23)

Ans. In HTML, changing the font of text is done using **CSS (Cascading Style Sheets)**. You can change the font using the font-family property either **inline**, **internally** within a <style> tag, or through an **external stylesheet**.

1. Using Inline CSS

You can directly change the font for an element using the style attribute.

```
<p style="font-family: Arial, sans-serif;">This is a paragraph in Arial font.</p>
```

2. Using Internal CSS

Add a <style> tag inside the <head> section to apply the font across the document.

```
<!DOCTYPE html>
<html>
<head>
<style>
   body {
     font-family: 'Georgia', serif;
   }
</style>
</head>
<body>
<p>This text is in Georgia font.</p>
</body>
</html>
```

3. Using External CSS

In an external .css file:

```
body {
  font-family: Verdana, sans-serif;
}
```

Then link it to your HTML:

```
<link rel="stylesheet" href="style.css">
```

Additional Notes:

- Always include a fallback font like sans-serif, serif, or monospace in case the primary font isn't supported.
- You can also use **Google Fonts** to import custom fonts using @import or <link>.

Fonts enhance the visual appeal and readability of web content.

Q. Highlight the importance of composition. (Nov 22)

Ans. Composition is the arrangement of visual elements—such as lines, shapes, colors, textures, and space—in a way that creates balance, harmony, and meaning in a design or artwork. It plays a crucial role in how effectively a message is communicated to the viewer. A well-composed piece ensures that the viewer's attention is guided naturally and purposefully across the visual field, highlighting key elements and maintaining interest.

In graphic design, photography, painting, or even web design, good composition helps maintain visual clarity and aesthetic appeal. It brings **order to chaos**, organizing complex ideas into digestible visual formats. Techniques like **rule of thirds, symmetry, contrast, focal point**, and **balance** are commonly used to enhance composition.

Strong composition not only improves visual appeal but also improves communication. It allows the creator to **emphasize important information**, create a visual hierarchy, and evoke emotions. In advertising, for example, effective composition can direct the viewer's eye to a brand name or call-to-action instantly.

Poor composition, on the other hand, leads to confusion, clutter, and visual discomfort. Therefore, mastering the principles of composition is essential for any designer or artist seeking to create powerful, engaging, and meaningful visuals.

Q. Discuss the process of composition. (Nov 22)

Ans. The process of composition involves thoughtfully arranging visual elements within a space to create a coherent, engaging, and meaningful design or artwork. It is a systematic approach used in fields like graphic design, painting, photography, and layout design to communicate ideas effectively and guide the viewer's attention.

The process begins with **planning and conceptualization**—understanding the purpose, audience, and message of the composition. The designer then identifies the key elements to include, such as text, images, shapes, or colors.

Next, the **placement of a focal point or center of interest** is established to ensure the viewer's eye is naturally drawn to the most important part. Following this, the artist or designer applies **principles of composition** like balance (symmetrical or asymmetrical), contrast, rhythm, unity, emphasis, proportion, and harmony to organize the elements in a visually appealing way.

Sketching or drafting is often part of the process, allowing experimentation with layout and flow before finalizing. **Feedback and revision** also play a vital role in refining the composition.

Throughout the process, the goal is to achieve a **visually balanced and purposeful design** that clearly communicates the intended message while maintaining aesthetic quality and audience engagement.

Unit 8: Text Rollovers

Short Questions:

Q. Text (Nov 22)

Ans. Text in web designing includes headings, paragraphs, and other written content formatted using HTML tags like <h1>, <p>, and styled using CSS for appearance and alignment.

Q. How do you create rollover text in HTML? (Nov 23)

Ans. Rollover text in HTML can be created using the title attribute, which displays a tooltip when the user hovers over an element, e.g., Link.

Long Questions:

Q. Explain text rollover techniques and applications. (Nov 24)

Ans. Text rollover refers to a visual effect that occurs when the user hovers their cursor over a piece of text on a webpage, causing it to change in appearance. This technique is widely used in **web design** to enhance **interactivity and user experience**. Rollovers are commonly applied to links, buttons, navigation menus, or any interactive text element.

Techniques:

Text rollovers are primarily implemented using **CSS (Cascading Style Sheets)** with the :hover pseudo-class. The effect can involve changes in **color, font style, background, underline, shadow, or animation**.

Example:

```
<style>
a {
  text-decoration: none;
color: black;
}
a:hover {
color: red;
  text-decoration: underline;
}
</style>

<a href="#">Hover over me</a>
```

Advanced effects can also be achieved using **JavaScript or CSS transitions** for smoother animations.

Applications:

- **Navigation Menus:** Highlight the menu item currently under the cursor.
- **Call-to-Action Buttons:** Attract user attention by changing appearance on hover.
- **Interactive Forms:** Guide users with visual cues.
- **E-commerce Sites:** Display more info or highlight offers.

Text rollovers not only make websites visually dynamic but also provide **feedback and guidance** to users, improving both aesthetics and usability.

Unit 9: Web-Related Functions of Photoshop

Short Questions:

Q. Resizing (Nov 22)

Ans. Resizing refers to changing the dimensions (height and width) of an image or element on a web page without altering its content or quality.

Q. How can you resize the image in Photoshop? (Nov 23)

Ans. In Photoshop, you can resize an image by going to **Image > Image Size**, where you can adjust dimensions in pixels, inches, or percentages.

Q. What do you mean by the term resolution? (Nov 24)

Ans. Resolution refers to the amount of detail an image holds, typically measured in pixels per inch (PPI); higher resolution means better clarity and quality.

Long Questions:

Q. Explain web-related functions of Photoshop in detail. (Nov 23)

Write note on:

a) HTML Editor

b) <head> and Body> Tags

c) WWW

d) Web Safe Colours.

e) Resizing and Slicing the Page.

Ans. Photoshop plays a key role in web design by allowing designers to create visually appealing layouts, banners, buttons, and icons. It supports image optimization for faster loading on websites, enables slicing of designs for HTML export, and helps in managing web-safe colors and responsive layouts for different screen sizes.

a) HTML Editor: An HTML Editor is a software tool used to write and edit HTML code. It can be a simple text editor like Notepad or an advanced editor like Adobe Dreamweaver or VS Code, which provides syntax highlighting, auto-completion, and live preview for web development.

b) <head> and <body> Tags: The <head> tag contains metadata, page title, links to CSS, and scripts. It doesn't display content on the web page. The <body> tag includes all visible content like text, images, and links, and it defines the main structure that appears in the browser.

c) WWW (World Wide Web): The World Wide Web is a system of interlinked hypertext documents accessed via the internet. Users can navigate web pages using browsers through URLs and hyperlinks. It relies on web technologies like HTTP, HTML, and browsers for communication.

d) Web Safe Colours: Web-safe colors are a set of 216 colors that appear consistently across all browsers and devices. They are used in web design to ensure color accuracy and consistency, especially on older displays that support only 256 colors.

e) Resizing and Slicing the Page: Resizing in Photoshop helps adjust image dimensions for faster web loading. Slicing divides a webpage layout into smaller sections (slices), allowing designers to export parts separately and build responsive web pages by converting slices into HTML with linked images.

Q. What are the various tools available in Photoshop? Explain. (Nov 24)

Ans. Adobe Photoshop offers a wide range of tools that are essential for image editing, graphic design, and web development. These tools are organized into categories based on their function and purpose.

1. **Selection Tools:** These include the **Move Tool**, **Marquee Tools** (Rectangular, Elliptical), **Lasso Tools**, and **Magic Wand Tool**. They allow users to select parts of an image for editing or transformation.

2. **Crop and Slice Tools:** The **Crop Tool** is used to trim images. The **Slice Tool** and **Slice Select Tool** are especially useful in web design for dividing images into smaller sections for exporting.
3. **Retouching Tools:** Tools like the **Spot Healing Brush**, **Clone Stamp**, **Patch Tool**, and **Red Eye Tool** help in removing imperfections and correcting image flaws.
4. **Painting and Drawing Tools:** The **Brush Tool**, **Pencil Tool**, **Eraser Tool**, and **Gradient Tool** are used for freehand drawing, coloring, and applying gradients.
5. **Text Tool:** The **Type Tool** adds and edits text layers, making it essential for both web and graphic design.
6. **Shape and Path Tools:** These include the **Pen Tool**, **Custom Shape Tool**, and **Rectangle Tool**, used for creating vector shapes and paths.

Each tool serves a specific role in designing, editing, and preparing content for print or web formats.

Q. How has web designing technology brought about a revolution? (Nov 22)

Ans. Web designing technology has transformed the way people communicate, work, shop, and access information, bringing about a digital revolution. Earlier, websites were simple, text-based pages with limited interactivity. Today, modern web designing tools and technologies such as **HTML5, CSS3, JavaScript frameworks (like React, Angular), and responsive design** have enabled the creation of dynamic, visually rich, and user-friendly websites.

This evolution has not only enhanced user experience but also increased accessibility, allowing people across the globe to connect and interact with websites using various devices, including smartphones and tablets. **Responsive web design** ensures that content adjusts seamlessly to different screen sizes, improving usability.

Moreover, web design has revolutionized **e-commerce, education, entertainment, and communication**. Websites now function as virtual stores, classrooms, and social hubs. Advanced design tools like **Adobe XD, Figma, and Photoshop** have made web prototyping and layout design more intuitive and collaborative.

With features like **animations, multimedia integration, and real-time user interaction**, websites have become more engaging than ever. Overall, web designing technologies have played a critical role in shaping the modern internet, driving innovation across industries and changing how businesses operate and people live.