Assignment 2

Q1. List out the features of HTML 5?

Ans.

1. **Intro of <u>audio</u> and <u>video</u>:**

   Audio and Video tags are the two major addition to HTML5

2. <u>**Vector Graphics**</u>**:**
   This is a new addition to the revised version which has hugely   impacted the use of Adobe Flash in websites.

3. <u>**Header**</u> **and** <u>**Footer:**</u>
   With these new tags, there is no longer a need to identify the two elements with a <div> tag.

4. <u>**Figure**</u> **and** <u>**Figcaption**</u>**:**

5. <u>**Placeholder Attribute:**</u>

Q.2. What are HTML Entities/ list out 5 commonly used HTML entities?

Ans. An HTML entity is a piece of text ("string") that begins with an ampersand (&) and ends with a semicolon (;). Entities are frequently used to display reserved characters (which would otherwise be interpreted as HTML code), and invisible characters (like non-breaking spaces).

- Non breaking space &ndsp
- Less than &lt
- Greater than &gt
- Copyright @copy
- Pound @pound

Q3.What is Web accessibility? List some of the assistive devices which play a major role in providing accessibility?

Ans. **Accessibility** in web development means enabling as many people as possible to use websites, even when those people's abilities are limited in some way.

There are some assistive devices which play a major role in providing accessibility.

1. Screen Reader : A screen reader is a software that reads out loud the content of a web page to individuals who are visually impaired. It can also interpret and communicate information about graphics, multimedia, and other elements on the page.

2. Voice recognition software: Voice recognition software enables users to navigate web pages and input text using voice commands. This technology is particularly useful for

individuals with mobility impairments or those who have difficulty using a keyboard or mouse.

3. Keyboard alternatives: Keyboard alternatives such as sip-and-puff devices, head-tracking devices, and eye-tracking devices allow individuals with physical disabilities to navigate and interact with web pages without the use of a traditional keyboard or mouse.

Q.4 List any 3 ways which helps us in improving accessibility of HTML.

Ans: Here are some of the ways which helps us in mproving accessibility of HTML.

1. Text content

Having well-structured content that includes headings, paragraphs, and lists is one of the most helpful accessibility features for users who rely on screen readers.

2. Page layouts

Although it is possible to design a layout using nested <div> elements, it is preferable to utilise proper sectioning elements to encapsulate your main navigation (<nav>), footer (<footer>), repeated content units (<article>), and other relevant content.

3. UI controls

When referring to UI controls, these are the essential elements of web documents that users engage with, such as buttons, links, and form controls.

Q5. List any 5 semantic tags in HTML along with thier descriptions.

Ans: Here are some of the commonly used semantic tags in HTML along with thier descriptions.

1. <header> - Represents the introductory content of a page or section and typically includes a logo, navigation menu, and other elements that are repeated across multiple pages.

2. <nav> - Defines a section of the page that contains navigation links, such as menus and lists of links to other pages or parts of the same page.

3. <main> - Identifies the main content of a web page. It should only be used once per page and should not contain any content that is repeated across multiple pages.

4. <article> - Defines a self-contained section of content on a web page, such as a blog post, news article, or product review.

5. <footer> - Represents the footer or bottom section of a web page, typically containing copyright information, contact details, and links to relevant pages or resources.

Q6. What are the benefits of using semantic tags in our webpage.

Ans: The benefits of using semantic tags in our webpage. are:

1. By using Semantic tags in our code, we can provide additional information about that document by defining the layout and sections of the webpage.

2. Semantic elements are of great help to people using screen readers. The additional information provided by semantic tags helps screen readers understand the content better and help them to determine the different sections within a page more efficiently.

3. HTML Semantic tags help the browser determine the purpose of the page and its content. Semantic tags also help

in Search Engine Optimization as they help browsers interpret the content more easily by making content more adaptive.

7. Write a short note on tab index.

Ans: Basically, the tabindex attribute is primarily intended to allow tabbable elements to have a custom tab order (specified in positive numerical order), instead of just being tabbed through in their default source order.

There are two additional options available for tabindex:

1. tabindex="0" - this option allows elements that are not usually able to be focused via the keyboard to become focusable. This value of tabindex is particularly beneficial.

2. tabindex="-1" - this option enables elements that are not typically focusable to receive focus programmatically, such as through JavaScript, or as the target of links.