Module: 3

HTML-5

1. What are the new tags added in HTML5?

Ans. <video>:It Defines a video file.

<audio>: It is used to defines an audio file.

<canvas>:This is used for rendering huge bitmap graphics on the fly, such as graphs or games.

<footer>:It represents that a footer for a section and can contain many information about the author, copyright information, etc.

<header>:This tag represents a group of introductory or navigational aids.

<mark>: This tag represents a run of text in one document marked or highlighted for reference purposes, due to its relevance in another context.

<Article> : This tag Represents a piece of content of a document, such as a blog entry or newspaper article.

<aside>: It Represents a piece of content that is only moderately related to the remaining page.

<command>: Helpful to represents a command the user can refer easily.

<details>:This tag represents additional information or controls which the user can obtain on demand.

<embed>: It defines external interactive content or plugin in any webpage.

<figure>:This tag represents a piece of self-contained flow content, which is referenced as a single unit from the main flow of the document.

<meter>: This tag shows a perfect measurement, such as disk usage.

<nav>:It Represents a portion of the document intended for navigation.

<progress>:It will show a completion of a task, such as downloading or whenever performing a series of expensive operations.

<section>:Represents a generic document or application section.

<time>:Represents a date and/or time.

<wbr>:Represents a line break opportunity.

2. How to embed audio and video in a webpage?

Ans. To embed audio in HTML, we use the <audio> tag. Before HTML5, it was not possible to add sound to web pages in the Internet Explorer era. We used web plugins like Flash to play the audio. This is possible after the release of HTML5. This tag supports Chrome, Firefox, Safari, Opera and Edge in three audio formats – MP3, WAV, OGG. Only Safari browser does not support OGG audio format.

Example:

<!DOCTYPE html>

<html>

<head>

<title>Page Title</title>

</head>

<body>

<h2>Click play button to play audio</h2>

<audio src="./test.mp3" controls></audio>

</body>

</html>

To embed video in HTML, we use the <video> tag. Using source tag one can contains one or more video source at one time. It supports MP4, WebM, and Ogg in all modern browsers. Only Ogg video format doesn't support in Safari browser.

Example:

<!DOCTYPE html>

```
<html>

<head>

<title>Page Title</title>

</head>

<body>

<h2>Click play button to play video</h2>

<video src="./test.mp4" controls></video>

</body>

</html>
```

3. Semantic element in HTML5?

Ans. A Semantic element clearly defines its meaning to both the browser and the developer. Example of semantic elements are <table>, <form>, <article> defines its content very clearly.

4. Canvas and SVG tags

Ans. SVG: Scalable Vector Graphics (SVG) is an XML-based image format used to define two-dimensional vector graphics for the web. Unlike a raster image (eg .jpg, .gif, .png, etc.), a vector image can be scaled up or down at will without losing image quality.

Canvas: An HTML element used to continuously draw graphics using scripting (usually JavaScript). An element is just a container for graphics. You need to use a script to actually draw the graphics. Canvas has several methods for drawing paths, frames, circles, text,boxes, and adding images.