**Module (HTML5) – 3**

* **What are the new tags added in HTML5?**

**Semantic Elements:**

**<article>:** Represents an independent piece of content, such as a blog post or news article.

**<aside>:** Represents content related to the main content, such as a sidebar.

**<details>:** Represents additional information that can be toggled open and closed.

**<figcaption>:** Represents a caption for a <figure>.

**<figure>:** Represents a figure, such as an image, diagram, or illustration.

**<footer>:** Represents the footer of a page or section.

**<header>:** Represents the header of a page or section.

**<main>:** Represents the main content of a page.

**<mark>:** Represents highlighted or marked text.

**<nav>:** Represents navigation links.

**<section>:** Represents a section of content.

**<summary>:** Represents a summary of the contents of a <details> element.

**<time>:** Represents a specific time or date.

**Form Elements:**

**<datalist>:** Represents a list of options for input controls.

**<output>:** Represents the output of a calculation or user action.

**<progress>:** Represents the completion progress of a task.

**<meter>:** Represents a measurement within a defined range.

**Multimedia Elements:**

**<audio>:** Represents audio content, such as music or sound effects.

**<video>:** Represents video content.

**Graphics and Drawing:**

**<canvas>:** Represents a drawing area where you can draw 2D graphics using JavaScript.

**<svg>:** Represents scalable vector graphics.

**Other New Elements:**

**<template>:** Represents a template fragment that can be cloned and reused in your code.

**<bdi>:** Represents bi-directional text isolation, allowing the isolation of text to keep its directionality.

* **How to embed audio and video in a webpage?**

In HTML5, you can embed audio and video content directly into your web page using the <audio> and <video> tags, respectively. These tags make it simple to add multimedia content to your website without needing additional plugins.

**Embedding Audio:**

To embed audio content, use the <audio> tag. This tag supports multiple audio file formats and allows you to specify multiple source files for compatibility across different browsers. Here's an example:

<audio controls>

<source src="audio-file.mp3" type="audio/mpeg">

<source src="audio-file.ogg" type="audio/ogg">

</audio>

**Embedding Video:**

To embed video content, use the <video> tag. This tag supports multiple video file formats and allows you to specify multiple source files for compatibility across different browsers. Here's an example:

<video controls width="640" height="360">

<source src="video-file.mp4" type="video/mp4">

<source src="video-file.webm" type="video/webm">

<source src="video-file.ogg" type="video/ogg">

</video>

* **Semantic element in HTML5?**

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* **Canvas and SVG tags**

**<canvas>:**

The <canvas> element provides a drawing area where you can draw 2D graphics using JavaScript. It is a blank slate that you can draw on using various methods and properties provided by the CanvasRenderingContext2D object.

Example:

<canvas id="myCanvas" width="400" height="400" style="border:1px solid black;"></canvas>

**<svg>:**

Description: The <svg> element stands for Scalable Vector Graphics and is used to define vector-based graphics in XML format. SVG graphics can be manipulated using CSS and JavaScript.

Example:

<svg width="400" height="400" style="border:1px solid black;">

<rect x="10" y="10" width="100" height="50" fill="red" />

<circle cx="200" cy="200" r="50" fill="blue" />

</svg>