

Q : 1

**What are the tags added in HTML-5?**

The commonly used new HTML5 tags are <figure>, <article>, <header>, <main>,<footer>, <nav>, and <section>.

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| --- | --- |
| **Tags (Elements)** | **Description** |
| **<article>** | Represents an independent piece of content of a document, such as a blog entry or newspaper article |
| **<aside >** | Represents a piece of content that is only slightly related to the rest of the page. |
| **<audio>** | Defines an audio file. |
| **<canvas>** | This is used for rendering dynamic bitmap graphics on the fly, such as graphs or games. |
| <command> | Represents a command the user can invoke. |
| <datalist> | Together with the a new list attribute for input can be used to make comboboxes |
| <details> | Represents additional information or controls which the user can obtain on demand |
| <embed> | Defines external interactive content or plugin. |
| <figure> | Represents a piece of self-contained flow content, typically referenced as a single unit from the main flow of the document. |
| **<footer>** | Represents a footer for a section and can contain information about the author, copyright information, et cetera. |
| **<header>** | Represents a group of introductory or navigational aids. |
| <hgroup> | Represents the header of a section. |
| <keygen> | Represents control for key pair generation. |
| <mark> | Represents a run of text in one document marked or highlighted for reference purposes, due to its relevance in another context. |
| <meter> | Represents a measurement, such as disk usage. |
| <nav> | Represents a section of the document intended for navigation. |
| <output> | Represents some type of output, such as from a calculation done through scripting. |
| <progress> | Represents a completion of a task, such as downloading or when performing a series of expensive operations. |
| <ruby> | Together with <rt> and <rp> allow for marking up ruby annotations. |
| <section> | Represents a generic document or application section |
| <time> | Represents a date and/or time. |
| **<video>** | Defines a video file. |
| <wbr> | Represents a line break opportunity. |

Q : 2

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

Ans :

Add <audio> and <video> elements to the page make them display the default browser controls.

Give both of them <source> elements so that browsers will find the audio format they support best and load it.

These should include type attributes.

To embed audio in HTML, we use the <audio> tag. Before HTML5, audio cannot be added to web pages in the Internet Explorer era. To play audio, we used web plugins like Flash. After the release of HTML5, it is possible. This tag supports Chrome, Firefox, Safari, Opera, and Edge in three audio formats – MP3, WAV, OGG. Only Safari browser doesn’t support OGG audio format.

<audio>

<source src="file\_name" type="audio\_file\_type">

</audio>

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

<video>

<source src="file\_name" type="video\_file\_type">

</video>

Q : 3

**Semantic elements in HTML5?**

Ans :

A semantic element clearly describes its meaning to both the browser and the developer.

Examples of non-semantic elements: <div> and <span> - Tells nothing about its content.

Examples of semantic elements: <form>, <table>, and <article> - Clearly defines its content.

There are some semantic tags :

* <article>
* <aside>
* <details>
* <figcaption>
* <figure>
* <footer>
* <header>
* <main>
* <mark>
* <nav>
* <section>
* <summary>
* <time>



Q : 4

**Canvas and SVG Tags.**

Ans :

SVG Scalable Vector Graphics (SVG) and Canvas are HTML5 APIs for rendering vector and raster graphics, respectively. SVG is used to create vector-based graphics,

whereas Canvas can render both vector and raster graphics.

Canvas is better for quickly rendering graphics and animations with less control than SVG.

The is difference between SVG and Canvas.

| **SVG** | **Canvas** |
| --- | --- |
| SVG uses geometric shapes to render graphics | Canvas uses pixels |
| Vector based (composed of shapes) | Raster based (composed of pixel) |
| SVG has better scalability. So it can be printed with high quality at any resolution. | Canvas has poor scalability. Hence it is not suitable for printing on higher resolution. |
| SVG gives better performance with smaller number of objects or larger surface. | Canvas gives better performance with smaller surface or larger number of objects. |
| SVG can be modified through script and CSS. | Canvas can be modified through script only. |
| Multiple graphical elements, which become the part of the page’s DOM tree. | Single element similar to <img> in behavior. Canvas diagram can be saved to PNG or JPG format. |