1. What are the new tags added in HTML5?

* Ans: The following tags (elements) have been introduced in HTML5 −

1.<article>

2.<aside>

3.<audio>

4.<canvas>

5.<command>

6.<datalist>

7.<details>

8.<embed>

9.<figure>

10.<footer>

11.<header>

12.<mark>

13.<nav>

14.<progress>

15.<section>

16.<video>

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

* Ans:

(1)Add an HTML5 media player to your webpage using the <audio> or <video> tag.

(2)Specify the source of your media file using the src attribute.

(3)Add any additional attributes, such as controls, to customize the player's behavior.

* Audio: Here’s an example of how to embed an MP3 file using the <audio> tag:

<audio>

<source src="audiofile.mp3" controls >

</audio>

* Video: Here's an example of how to embed an MP4 video file using the <video> tag:

<video src="img/video.mp4" controls loop></video>

(3) Semantic element in HTML5?

* Ans:

Semantic elements are HTML5 elements that have a specific meaning and purpose beyond their purely visual appearance. They help to structure a webpage's content and provide additional information about the page's content to search engines, screen readers, and other web technologies.

Some examples of HTML5 semantic elements include:

* <header>: Defines a header section for a webpage or a section within a webpage.
* <nav>: Defines a navigation section that contains links to other pages or sections within the same page.
* <main>: Defines the main content of a webpage.
* <section>: Defines a section of content within a webpage.
* <article>: Defines an independent piece of content, such as a blog post or news article.
* <aside>: Defines content that is related to the main content but not necessarily part of it, such as a sidebar or call-out box.
* <footer>: Defines a footer section for a webpage or a section within a webpage.

Using semantic elements in your HTML code can make your webpage more accessible and easier to understand for both users and machines.

They can also help with search engine optimization (SEO) by providing additional context to search engines about your webpage's content.

(4) Canvas and SVG tags.

* Ans:
* Canvas:

The HTML element is used to draw graphics on the fly, via scripting (usually JavaScript). The element is only a container for graphics. You must use a script to actually draw the graphics. Canvas has several methods for drawing paths, boxes, circles, text, and adding images.

Canvas can be modified through script only.

Canvas diagram can be saved to PNG or JPG format.

EX:

<canvas id="Canvas" width="100" height="100"

style="border:1px solid black;">

</canvas>

<script>

var c = document.getElementById('Canvas');

var ctx = c.getContext('2d');

ctx.fillStyle = 'green';

ctx.fillRect(0, 0, 100, 100);

</script>

* SVG:

The Scalable Vector Graphics (SVG).

That is used to define two-dimensional vector-based graphics for the web.

EX:

<svg width="100" height="70">

<circle cx="50" cy="50" r="40" fill="red" />

</svg>