Module (HTML5) -3

(Q.1) What are the new tags added in HTML5?

Ans:- HTML5 introduced several new elements (tags) to enhance the semantic structure of web documents and support modern web development practices. Some of the new tags added in HTML5 include:

1. Sectioning Elements: <header> , <nav> , <main> , <article>

2. Media Elements: <audio> , <video> , <source>.

3. Form Elements: <input type="email"> , <input type="url"> , <input type="tel">, <input type="number">,<input type="range">.

4. Interactive Elements: <details>, <summary>, <progress> , <meter>.

5. Grouping Content :<figure> , <figcaption>

6. Text-Level Semantics: <mark>, <time>.

7. Embedding Content: <embed>.

8. Semantic Elements: <header>, <nav>, <main>, <article>, <section>.

9. Canvas and SVG Elements: <canvas>, <svg>.

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

Ans:- 1.Embedding Audio: To embed an audio file, use the <audio> element. You can provide multiple sources in different formats to ensure compatibility with various browsers.

-In the example above, the controls attribute adds audio controls (play, pause, volume) to the audio player. The <source> elements specify the audio file sources in different.

2. Embedding video: To embed a video file, use the <video> element. Like with audio, you can provide multiple sources for different formats.

- In the example above, the controls attribute adds video controls, and the width attribute sets the width of the video player. The <source> elements specify the video file sources in different formats.

3. Additional Attributes: controls, auto play, loop, preload , poster.

(Q.3) Semantic element in HTML5?

Ans:- Semantic elements in HTML5 are special elements that carry meaning about the structure and content of a web page. They provide a way to describe the purpose of different parts of the web page to both browsers and developers. Semantic elements help improve the accessibility, SEO, and overall structure of the web page. Here are some commonly used semantic elements in HTML5:

1. <Header>

2. <nav>

3.<main>

4.<section>

5.<article>

6. <aside>

7. <figure>

8. <figcaption>

9. <footer>

10. <time>

11. <mark>

12. <details>

13. <summary>.

(Q.4) Canvas and SVG tags?

Ans:- Both <canvas> and SVG (<svg>) are HTML elements used for drawing graphics on web pages, but they have different approaches and use cases.

1. Canvas (<canvas>):

The <canvas> element provides a low-level, immediate-mode graphics API that allows you to draw graphics using JavaScript. It's suitable for creating dynamic and interactive graphics, animations, games, and data visualizations.

Key features of <canvas>:

* Uses JavaScript to draw graphics directly onto the canvas.
* Renders graphics as a bitmap image, which means it doesn't retain vector information.
* Best for complex and interactive graphics.
* Performance can be better for animations and real-time updates.

2. SVG (<svg>):

- -> The <svg> element is a XML-based graphics format that allows you to define graphics using vector shapes and elements. SVG graphics are scalable and resolution-independent, making them suitable for static graphics, icons, logos, and interactive graphics.

Key features of <svg>:

* Defines graphics using vector shapes, allowing them to be scaled without loss of quality.
* Graphics are retained as structured elements, making them more accessible and SEO-friendly.
* Best for static graphics and icons, as well as simpler animations and visualizations.
* Can be styled using CSS.