Module- 3 HTML5 Assignment

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

1. Semantic Structural Elements:-

- <header>: Represents introductory content or a group of introductory content.
 - <footer>: Represents footer content or a group of footer content.
 - <nav>: Represents a section of navigation links.
- <aside>: Represents content that is tangentially related to the content around it.
- -< section>: Represents a thematic grouping of content, typically with a heading.
- <article>: Represents a self-contained piece of content, such as a blog post or news article.

2. Multimedia Elements:-

- <audio>: Used to embed audio content in a webpage.
- <video>: Used to embed video content in a webpage.

- <source>: Specifies multiple media resources for `<audio>` and <video> elements, allowing for fallbacks and different formats.

3. Interactive Elements:-

- <details>: Represents a disclosure widget from which the user can obtain additional information or controls.
- <summary>: Represents a summary, caption, or legend for a
 <details> element.
 - <dialog>: Represents a dialog box or window.

4. Form Elements:-

- <input>: Added new types like date, email, url, search, number, range, color etc.

5. Other Elements:-

- <canvas>: Used to draw graphics, animations, or other visual images using JavaScript.
- <figure>: Represents a group of content, such as images or diagrams, along with a caption (<figcaption>).
- <figcaption>: Represents the caption or legend for a- <figure>element.
 - <time>: Represents a specific time or a range of time.

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

(1) Embed Audio:- for embedding audio in webpage we have to use <audio> element along with source

Ex.

<audio>

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

Your browser does not support the audio element.

</audio>

(2)<u>Embed Video:</u> for embedding video in webpage we have to use <video> element along with source

Ex.

<video width="600" height="400">

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

Your browser does not support the video element.

</video>

(3) Semantic element in HTML5?

Ans.

Semantic elements in HTML5 are tags that provide meaning to the content they contain, making it more understandable to both browsers and humans.

Ex.

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- <nav>: Represents a section of navigation links.
- <aside>: Represents content that is tangentially related to the content around it.
- <section>: Represents a thematic grouping of content, typically with a heading.
- <article>: Represents a self-contained piece of content, such as a blog post or news article.
- <summary>: Represents a summary, caption, or legend for a <details>
 element. Etc.

(4) Canvas and SVG tags

Ans.

(1)<u>SVG:-</u> The HTML SVG is an acronym which stands for Scalable Vector Graphics. HTML SVG is a modularized language which is used to describe graphics in XML. It describe two-dimensional vector and mixed vector/raster graphics in XML. SVG is mostly used for vector type diagrams like pie charts, 2-Dimensional graphs in an X,Y coordinate system etc.

(2)Canvas:- The HTML canvas element provides HTML a bitmapped surface to work with. It is used to draw graphics on the web page. The HTML 5 tag is used to draw graphics using scripting language like JavaScript. The element is only a container for graphics, you must need a scripting language to draw the graphics. The element allows for dynamic and scriptable rendering of 2D shapes and bitmap images.

	Canvas	svg
Operation object	Based on the pixel (dynamic bitmap)	Based on the graphic elements
Element	A single HTML element	Graphic elements (Rect, Path, Line)
Drive	Only script driven	Support script and CSS
Event interaction	User interaction to the pixel (x, y)	User interaction elements (rect, path)
Performance	Suitable for small area, big data applications	Suitable for large area, a small number of scenarios

