**Module (HTML5)**

1. What are the new tags added in HTML5?

Ans :-

* <article>

The <article> tag is one of the new sectioning elements in HTML5. The HTML <article> tag is used to represent an article. More specifically, the content within the <article> tag is independent of the other content of the site.

* <aside>

The <aside> tag is used to describe the main object of the web page in a shorter way like a highlighter. It basically identifies the content that is related to the primary content of the web page but does not constitute the main intent of the primary page. The <aside> tag contains mainly author information, links, related content, and so on.

* <audio>

The <audio> tag is used to insert an audio into an HTML webpage.

* <canvas>

The <canvas> tag in HTML is used to draw graphics on a web page using JavaScript. It can be used to draw paths, boxes, texts, gradients, and add images. By default, it does not contain borders and text.

* <command>

The <command> tag define a command button, invoke as per user action. The <command> tag button is used in a special type of operation. The <command> tag is supported only by Internet Explorer.

* <datalist>

The <datalist> tag is used to provide autocomplete feature in the HTML files. It can be used with an input tag so that users can easily fill the data in the forms using select the data.

* <nav>

The <nav> tag is used for declaring the navigational section in HTML documents. Websites typically have sections dedicated to navigational links, which enables users to navigate the site. These links can be placed inside a nav tag. In other words, the nav element represents a section of the page whose purpose is to provide navigational links, either in the current document or to another document. The links in the nav element may point to other web pages or to different sections of the same webpage. It is a semantic element. Common examples of the nav elements are menus, tables, contents, and indexes.

* <video>

The <video> tag is used to embed video content in a document, such as a movie clip or other video streams.

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

Ans :-

The HTML5 <audio> and <video> tags make it simple to add media to a website. You need to set src attribute to identify the media source and include a controls attribute so the user can play and pause the media.

Example –

<!DOCTYPE HTML>

<html>

<body>

<audio controls autoplay>

<source src = "/html5/audio.ogg" type = "audio/ogg" />

<source src = "/html5/audio.wav" type = "audio/wav" />

Your browser does not support the <audio> element.

</audio>

</body>

</html>

<!DOCTYPE HTML>

<html>

<body>

<video width = "300" height = "200" controls autoplay>

<source src = "/html5/foo.ogg" type ="video/ogg" />

<source src = "/html5/foo.mp4" type = "video/mp4" />

Your browser does not support the <video> element.

</video>

</body>

</html>

3. Semantic element in HTML5?

Ans :-

Semantic HTML elements are those that clearly describe their meaning in a human- and machine-readable way. Semantic elements are as below.

<article>

<aside>

<details>

<figcaption>

<figure>

<footer>

<header>

<main>

<mark>

<nav>

<section>

<summary>

<time>

4. Canvas and SVG tags

Ans :-

The HTML <svg> element is a container for SVG graphics. SVG stands for Scalable Vector Graphics. SVG and useful for defining graphics such as boxes, circles, text, etc. SVG stands for Scalable Vector Graphics and is a language for describing 2D-graphics and graphical applications in XML and the XML is then rendered by an SVG viewer. Most of the web browsers can display SVG just like they can display PNG, GIF, and JPG.

The HTML <canvas> element is used to draw graphics, via JavaScript. The<canvas> element is a container for graphics.

| **SVG** | **HTML Canvas** |
| --- | --- |
| 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 |
| SVG is vector based and composed of shapes. | Canvas is raster based and composed of pixel. |