**Module (HTML5) – 3**

**• What are the new tags added in HTML5?**

HTML5 introduced many new tags that will benefit many developers. These tags are generally supported by all major browsers. These tags to many aspects such as graphics, media, and forms.

Graphics Tags

HTML Tag Description

<canvas> Allows drawing graphics and animations with scripting.

<svg> Used for scalable vector graphics.

HTML5 Media Tags

HTML Tag Description

<audio> Defines sound content.

<embed> Defines a container for external media or files.

<source> Specifies multiple media resources for media elements.

<track> Defines text tracks for audio and video files.

<video> Defines video content within an HTML document.

HTML5 Form Tags

HTML Tag Description

<datalist> Represents a predefined list for input options.

<output> Used as a container to display calculation results or user action outcomes.

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

To embed audio and video we use following syntax

<audio>

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

</audio>

<video>

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

</video>

**• Semantic element in HTML5?**

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.

**• Canvas and SVG tags**

**SVG**

SVG uses geometric shapes to render graphics

Vector based (composed of shapes)

SVG has better scalability. So it can be printed with high quality at any resolution.

SVG gives better performance with smaller number of objects or larger surface.

SVG can be modified through script and CSS.

Multiple graphical elements, which become the part of the page’s DOM tree**.**

**Canvas**

Canvas uses pixels

Raster based (composed of pixel)

Canvas has poor scalability. Hence it is not suitable for printing on higher resolution

Canvas gives better performance with smaller surface or larger number of objects.

Canvas can be modified through script onlySingle element similar to <img> in behavior.

Canvas diagram can be saved to PNG or JPG format.Multiple graphical elements, which become the part of the page’s DOM tree.