**Web Designing Assignment**

**Module – 3 HTML5**

**(Q1) What are the new tags added in HTML5?**

**Answer:**

* Following is the list of the newly added tags in HTML5.
* article
* aside
* audio
* canvas
* command
* datalist
* details
* embed
* figcaption
* figure
* footer
* header
* hgroup
* keygen
* mark
* math
* meter
* nav
* output
* progress
* rp
* rt
* ruby
* section
* source
* summary
* svg
* track
* video
* time
* wbr

**(Q2) How to embed audio and video in a webpage?**

**Answer:**

* In 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.

**(Q3) Semantic element in HTML5?**

**Answer:**

* Semantic elements have meaningful names which tells about type of content. It clearly describes its meaning to both the browser and the developer. For example, header, footer, table etc. HTML5 introduces many semantic elements as mentioned below which make the code easier to write and understand for the developer as well as instructs the browser on how to treat them.
* article
* aside
* details
* figcaption
* figure
* footer
* header
* main
* mark
* nav
* section
* summary
* time

**(Q4) Canvas and SVG tags?**

**Answer:**

* **SVG:**

The Scalable Vector Graphics (SVG) is an XML-based image format that is used to define two-dimensional vector-based graphics for the web. Unlike raster image. (ex. jpg., .gif, .png, etc.), a vector image can be scaled up or down to any extent without losing the image quality.

An SVG image is drawn out using a series of statements that follow the XML schema – that means SVG images can be treated and edited with any text editor, such as Notepad. There are several other advantages of using SVG over other image formats like jpeg, gif, png etc.

* **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.

* **Difference between SVG and Canvas:**

|  |  |
| --- | --- |
| **SVG** | **Canvas** |
| Vector based (composed of shapes) | Raster based (composed of pixel) |
| 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. |
| Multiple graphical elements, which become the part of the page’s DOM tree. | Single element similar to <img> in behavior. Canvas diagram can be saved to .png or .jpg format. |