1) What are the new tags added in HTML5?

Ans- **Semantic Elements**

These tags help define the structure of a web page and its sections more clearly:

1. `<article>`: Represents a self-contained piece of content, such as a blog post or news article.
2. `<aside>`: Represents content that is tangentially related to the content around it, often used for sidebars.
3. `<details>`: Creates a disclosure widget that users can open and close to reveal additional information.
4. `<figcaption>`: Provides a caption for a `<figure>` element.
5. `<figure>`: Represents self-contained content, often with a caption, such as illustrations, diagrams, photos, code listings, etc.
6. `<footer>`: Defines the footer for a section or page.
7. `<header>`: Defines the header for a section or page.
8. `<main>`: Represents the main content of a document.
9. `<mark>`: Highlights text for reference purposes, such as a search term.
10. `<nav>`: Represents a section of navigation links.
11. `<section>`: Represents a standalone section, which doesn't have a more specific semantic element to represent it.

Form Elements

New elements and attributes to enhance forms:

1. `<datalist>`: Contains a set of `<option>` elements that can be used to provide an autocomplete feature for an `<input>` element.
2. `<output>`: Represents the result of a calculation or user action.
3. `<progress>`: Represents the completion progress of a task.
4. `<meter>`: Represents a scalar measurement within a known range, or a fractional value.
5. `<time>`: Represents a specific period in time

Interactive Elements

Elements designed to enhance interactivity and media control:

1. `<audio>`: Embeds sound content in documents.
2. `<video>`: Embeds video content in documents.
3. `<source>`: Specifies multiple media resources for `<audio>` and `<video>`.
4. `<track>`: Defines text tracks for `<video>` and `<audio>` elements, such as subtitles.
5. `<embed>`: Embeds external content at a specified point in the document.
6. `<canvas>`: Provides a drawable region where scripts can render graphics on the fly.
7. `<svg>`: Embeds Scalable Vector Graphics content.

Other Elements

Miscellaneous elements for various purposes:

1. `<command>`: Defines a command that a user can invoke. Not widely supported.
2. `<summary>`: Specifies a summary, caption, or legend for a `<details>` element.
3. `<wbr>`: Represents a word break opportunity.

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

Ans- # Embedding Audio

- To embed audio, you use the `<audio>` element. You can include multiple sources within the `<audio>` element to ensure compatibility with different browsers. Here's an example:

  `<audio src="images/Khalasi(PagalWorld.com.pe).mp3" controls muted></audio>`

Embedding Video

- To embed video, you use the `<video>` element in a similar manner. Here's an example:

  `<video src="images/Math Exam _ Funny meme _ Tom and Jerry _ Edits MukeshG.mp4" controls></video>`

3) Semantic element in HTML5?

Semantic elements have meaningful names that tell about the type of content. 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 instruct the browser on how to treat them.

- o <article>
- o <aside>
- o <details>
- o <figcaption>
- o <figure>
- o <footer>
- o <header>
- o <main>
- o <mark>
- o <nav>
- o <section>

4) Canvas and SVG tags

Canvas (`<canvas>`):

- **Description**: The `<canvas>` element provides a blank drawing area where you can create graphics using JavaScript.

SVG (`<svg>`):

- **Description**: SVG (Scalable Vector Graphics) defines vector-based graphics using XML. It's suitable for creating logos, icons, and scalable graphics.