Q1.What is SEO and explain the importance of SEO)

SEO (Search Engine Optimization) is the practice of optimizing a website to improve its visibility and ranking on search engines like Google, Bing, and Yahoo. The goal of SEO is to attract organic (non-paid) traffic by making the website more relevant and appealing to search engine algorithms and users.

Importance of search engine optimization and placement comes in. Search engine optimization applies not only to online content, but to websites or web pages in their entirety. It generally refers to a strategic process in which an SEO specialist takes appropriate steps to improve site visibility in search results produced by search engines such as *Google* and *Bing*.

Q3.What are the Benefits of Using meta tag5

Improved SEO:

- The `<meta name="description">` tag provides search engines with a summary of the page's content, improving click-through rates when the page appears in search results.
- The `<meta name="keywords">` tag (though less used now) can help with keyword-based indexing.

Content Responsiveness:

- The `<meta name="viewport">` tag ensures the page is optimized for mobile and responsive design, enhancing the user experience across devices.

Author Information:

- The `<meta name="author">` tag helps identify the creator of the content, which can improve credibility and attribution.

Search Engine Directives:

- The `<meta name="robots">` tag tells search engines how to crawl and index the page (e.g., whether to index the page or follow its links).

Browser Compatibility:

- The `<meta charset="UTF-8">` tag ensures proper encoding of the content, avoiding rendering issues across different browsers.

Social Media Optimization:

- While not shown in your current document, meta tags like Open Graph (`og:title`, `og:description`, etc.) improve how the page appears when shared on social media platforms.

Q5.Define Favicon and give an illustrative example.

A **favicon** (short for "favorite icon") is a small, 16x16 pixel icon displayed in a web browser's tab, bookmark, or address bar. It serves as a visual representation of a website, improving brand recognition and user experience.

EX - <!DOCTYPE html>

<html lang="en">

<head>

   <meta charset="UTF-8">

   <meta name="viewport" content="width=device-width, initial-scale=1.0">

   <title>Example with Favicon</title>

   <link rel="icon" href="favicon.ico" type="image/x-icon">

</head>

<body>

   <h1>Welcome to My Website</h1>

   <p>This is an example of a webpage with a favicon.</p>

</body>

</html>