1. List any three text formatting tags in HTML.

Answer:

1. <b> – Makes text bold
2. <i> – Makes text italic
3. <u> – Underlines text

2. Define URL.

Answer:
URL (Uniform Resource Locator) is the web address used to locate a resource on the Internet, such as a webpage, image, or video.

3. What is a domain name?

Answer:
A domain name is the human-readable address of a website, like www.google.com. It maps to the IP address of the server.

4. What is the role of W3C?

Answer:
W3C (World Wide Web Consortium) develops web standards and protocols to ensure that web technologies work uniformly across different platforms and browsers.

5. What is the client-server model?

Answer:
In the client-server model, the **client** sends a request (like a web browser), and the **server** responds by sending the requested data (like a web page).

6. Name two text editors used for HTML coding.

Answer:

1. Notepad++
2. Visual Studio Code

7. Define wireframing and storyboarding in web design.

Answer:
Wireframing is the process of creating a basic visual layout or blueprint of a web page, showing the structure of elements like headers, buttons, and text.
Storyboarding involves planning the flow or sequence of pages/screens, often used in UX design to visualize user journeys and site navigation.

8. Describe the basic structure of an HTML document.

```
<!DOCTYPE html>
<html>
<head>
  <title>My Web Page</title>
</head>
<body>
  <h1>Welcome</h1>
  <p>This is a sample page.</p>
</body>
</html>
```

9. What is Dreamweaver and what is a Site in Dreamweaver?

Answer:
Dreamweaver is a web design tool from Adobe that provides a visual (WYSIWYG) and code-based interface for building websites.

A **Site** in Dreamweaver refers to a project folder that contains all files, resources, and settings for a website. Defining a site helps in managing links, publishing, and working with FTP.

10. What is the purpose of the <html>, <head>, and <body> tags in an HTML document?

Answer:

- <html>: This is the root element that wraps the entire HTML document. All HTML content must be enclosed within it.
- <head>: Contains metadata about the document, such as the <title>, character set, CSS links, and scripts.
- <body>: Holds the visible content of the webpage such as headings, paragraphs, images, and links.

Together, these tags define the basic structure of a web page.

11. What is the <marquee> tag? Write its attributes with an example.

Answer:
The <marquee> tag is used to display scrolling text or images on a webpage. It is **non-standard** and not recommended for modern web development.

Common attributes:

- direction – scroll direction (left, right, up, down)
- behavior – scroll style (scroll, slide, alternate)
- scrollamount – speed of scrolling
- loop – number of times the marquee scrolls

<marquee direction="left" scrollamount="5">Welcome to our website!</marquee>

12. Explain the tag and its attributes with example.

Answer:

The tag was used in older versions of HTML to change the **font style**, **size**, and **color** of text. However, it is now **deprecated** in HTML5. Modern HTML uses **CSS** for styling.

Attributes:

- color: Changes the text color
- face: Sets the font style
- size: Defines the size (1 to 7)

Example:

html

CopyEdit

This is styled text

13. Describe working for the following with example:

A) Preserving White space

In HTML, **multiple spaces and line breaks** are usually **collapsed** into a single space. If you want to **preserve the exact white spaces**, tabs, and line breaks, you can use the <pre> tag.

Example:

html

CopyEdit

<pre>

This is spaced text.

This stays exactly as written!

</pre>

B) Character entities

Description:
Character entities are used in HTML to display **reserved characters** (like <, >, &, ") or **special symbols**

< → <

> → >

& → &

" → "

© → ©

₹ → ₹ (Indian Rupee Symbol)

5 < 10 and 10 > 5

Copyright © 2025

C) Double digit fraction display

Description:
To display a **fraction like ½, ¼, ¾**, you can use **character entities** or Unicode codes.

Example using HTML entities:

html

One half = ½

One fourth = ¼

Three fourths = ¾

Example using superscript and subscript:

html

CopyEdit

One tenth = ¹⁄₁₀

14. Explain the evolution journey of Internet (Arpanet,BITNET, Cs-net, NSF net).

ARPANET (Advanced Research Projects Agency Network)

Year Started: 1969
Developed By: U.S. Department of Defense (ARPA)
Purpose:

- ARPANET was the **first packet-switching network** and the **foundation of the Internet**.
- Initially connected 4 computers at UCLA, Stanford, UC Santa Barbara, and the University of Utah.

Contribution:

- Introduced **packet switching**, which is the basic principle behind data transfer on the Internet.

BITNET (Because It's Time Network)

Year Started: 1981
Purpose:

- BITNET was created to connect **academic institutions** for **email** and **file transfer**.
- Primarily used by **universities in the U.S.**.

Contribution:

- Provided services like **email** and **LISTSERV** (early mailing list management).
- It helped to **popularize electronic communication** in academia.

CSNET (Computer Science Network)

Year Started: 1981
Developed By: National Science Foundation (NSF), in collaboration with universities
Purpose:

- Built to extend network access to **university computer science departments** not connected to ARPANET.

Contribution:

- Provided email and networking services to a wider academic community.
- Bridged the gap between ARPANET and universities with limited resources.

NSFNET (National Science Foundation Network)

Year Started: 1985
Purpose:

- Replaced ARPANET as the main **backbone of the Internet**.
- Connected **supercomputing centers** and supported high-speed academic networking.

Contribution:

- Became the **core of the early Internet**.
- Enabled the **transition to the modern Internet** by linking various regional networks.
- Was decommissioned in 1995, giving way to commercial ISPs and the open Internet.

15. Explain Web Development Life Cycle in detail.

1) Planning: Identifying goals or purpose of website.

2) Analysis: Decision about the website content and functionality.

3) Design and Development: organise the web content.

4) Testing: Review of web page content, functionality and usability.

5) Implementation and Maintenance: Publishing of web pages to web server

16. Explain HTML colors with an example.

In HTML, colors are used to style the text, background, borders, and other elements on a web page. Colors can be defined using:

1. Color names (e.g., red, green, blue)
2. Hexadecimal values (e.g., #FF0000 for red)
3. RGB values (e.g., rgb(255, 0, 0))
4. HSL values (e.g., hsl(0, 100%, 50%))

Example :

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Colors Example</title>
</head>
<body>
<h2 style="color: red;">This text is red (color name)</h2>

<p style="color: #00FF00;">This text is green (hex code)</p>

<p style="color: rgb(0, 0, 255);">This text is blue (RGB)</p>

<p style="background-color: yellow; color: black;">
  Yellow background with black text
</p>
</body>
</html>
```

17. Differentiate between wire-framing and story boarding.

Feature	Wireframing	Storyboarding
Definition	A visual layout or blueprint of a single web page	A sequence of frames or scenes showing user flow
Purpose	Shows structure, placement of elements (text, image, buttons)	Shows the navigation flow or interaction steps between pages
Focus Area	Page-level layout and content structure	Overall user journey and website flow
Used By	Designers and developers	Designers, UX teams, and stakeholders
Output Format	Static layout (low-fidelity sketch or digital design)	A series of sketches, screens, or slides (like a comic strip)
Example Use Case	Planning the home page design layout	Visualizing how a user signs up and moves through a website

18. Web Browser and Web Server – Explained with Example

Web Browser:

Definition:
A web browser is a software application that allows users to access, retrieve, and display content from the World Wide Web (WWW).

Examples:
Google Chrome, Mozilla Firefox, Microsoft Edge, Safari.

Functions:

- Sends a request to a web server using HTTP/HTTPS.
- Displays HTML web pages to the user.

Web Server:

Definition:
A web server is a software or hardware system that stores, processes, and delivers web pages to clients (browsers) via HTTP/HTTPS.

Examples:
Apache, Nginx, Microsoft IIS.

Functions:

- Accepts HTTP requests from browsers.
- Sends the correct HTML/CSS/JS files in response.

- Hosts websites and web apps.

Example:
When a browser requests www.example.com, the server where example.com is hosted responds with the homepage file (e.g., index.html).

19. Define Internet. Explain IP Address and DNS Conversion with Diagram

Definition:
The **Internet** is a global network of computers that allows users to share information and access services like websites, email, file transfer, etc. It connects millions of private, public, academic, business, and government networks.

P Address (Internet Protocol Address):

- It is a **unique numerical label** assigned to each device connected to the Internet.
- It identifies both the **host** and its **location** on the network.
- IP addresses are of two types:
  - **IPv4** (e.g., 192.168.1.1)
  - **IPv6** (e.g., 2001:0db8:85a3:0000:0000:8a2e:0370:7334)

20. DNS (Domain Name System):

- DNS is like the **"phonebook" of the Internet**.
- It translates **domain names** (like www.google.com) into **IP addresses** (like 142.250.183.206).
- This lets users use readable names instead of remembering numeric IPs.

  `www.amazon.in` → DNS converts it → `65.8.186.116` → Browser sends request to this IP