

Exercise

Multiple Choice Questions – Answers with Explanations

1. Which of the following tag is not a correct HTML tag?

✓ Answer: (d) <footer>

Explanation: Older versions of HTML (like HTML4) did not support <footer>. It was introduced in HTML5. If you're using older HTML versions, it's not valid.

2. What does CSS stand for?

✓ Answer: (a) Cascading Style Sheets

Explanation: CSS is used to style and design web pages, such as setting colors, fonts, layouts, etc.

3. Which of the following tag is used to create a hyperlink in HTML?

✓ Answer: (b) <a>

Explanation: The <a> tag (anchor) is used to create clickable links.

4. Which property is used to change the background color in CSS?

✓ Answer: (b) background-color

Explanation: The background-color property sets the background color of an element.

5. Which HTML attribute is used to define inline styles?

✓ Answer: (b) style

Explanation: The style attribute is used inside HTML tags to apply CSS directly.

6. Which of the following is the correct syntax for a CSS rule?

✓ Answer: (a) selector {property: value;}

Explanation: This is the standard syntax used in CSS. Example: p {color: red;}

7. In JavaScript, which markup is used for comments?

✓ Answer: (b) //

Explanation: // is used for single-line comments in JavaScript. For multi-line, /* */ is used.

8. How do you include JavaScript in an HTML document?

✓ Answer: (a) <script src="script.js"></script>

Explanation: This includes an external JavaScript file in an HTML document.

9. Which HTML tag is used to create an unordered list?

✓ Answer: (b)

Explanation: is used for unordered (bulleted) lists.

10. Which tag is used to display a horizontal line in HTML?

✓ Answer: (b) <hr>

Explanation: <hr> is used to create a horizontal rule (line) on a web page.

Short Questions – Answers

1. **Purpose of <head> tag:**
It contains metadata like title, links to CSS/JS, and other info not visible on the page.
2. **Difference between ordered and unordered list:**
Ordered list () uses numbers. Unordered list () uses bullets.
3. **How to add a comment in CSS:**
/* This is a comment */
4. **Ways to apply CSS to HTML:**
 - Inline CSS
 - Internal CSS (<style> tag in <head>)
 - External CSS (linked .css file)
5. **Including JavaScript in HTML:**
Use <script> tag like:
<script src="script.js"></script>
6. **Hyperlink syntax in HTML:**
Click here
7. **Function of <div> tag:**
It is a container used to group HTML elements and apply CSS styles to them.
8. **Linking external CSS file:**
<link rel="stylesheet" href="style.css"> (inside <head>)
9. **Use of <table> tag:**
Used to display tabular data in rows and columns.
10. **Box model in CSS:**
It describes how elements are displayed:
Content → Padding → Border → Margin

Long Questions – Answers

1. **Differences: HTML, CSS, JavaScript:**
 - **HTML** creates the structure (headings, images, paragraphs).
 - **CSS** styles the layout (colors, fonts, size).
 - **JavaScript** adds interactivity (like buttons, sliders, etc.).
2. **Setting up development environment:**
 - **Text Editor:** VS Code, Sublime Text
 - **Browser:** Chrome, Firefox
 - **Software:** Web server (optional)
 - **Tools:** Developer tools (Inspect element), extensions (Live Server)

3. Basic HTML Page Example:

```
<!DOCTYPE html>
<html>
<head>
  <title>My Web Page</title>
</head>
<body>
  <h1>Welcome</h1>
  <p>This is a paragraph.</p>
  
  <a href="https://example.com">Visit Site</a>
</body>
</html>
```

4. Styling a table using CSS:

```
<style>
table {
  border: 2px solid black;
  border-collapse: collapse;
  width: 50%;
}
th, td {
  border: 1px solid gray;
  padding: 10px;
  text-align: left;
}
</style>

<table>
<tr>
  <th>Name</th>
  <th>Age</th>
</tr>
<tr>
  <td>Ali</td>
  <td>15</td>
</tr>
</table>
```

5. Different CSS Selectors:

- **Element Selector:** p {color: red;}
- **Class Selector:** .box {padding: 10px;}
- **ID Selector:** #main {margin: 0;}
- **Group Selector:** h1, h2 {font-size: 20px;}
- **Universal Selector:** * {box-sizing: border-box;}

6. Creating Responsive Web Page:

Use **media queries** and flexible units.

Example:

```
@media (max-width: 600px) {  
  body {  
    background-color: lightblue;  
  }  
}
```

7. JavaScript function for background color change:

```
<!DOCTYPE html>  
<html>  
<head>  
  <script>  
    function changeColor() {  
      document.body.style.backgroundColor = "yellow";  
    }  
  </script>  
</head>  
<body>  
  <button onclick="changeColor()">Change Background</button>  
</body>  
</html>
```

Explanation: When the button is clicked, the changeColor() function changes the background color of the page to yellow.

8. Animations and Transitions using CSS:

- **Transitions Example:**

```
button {  
  transition: background-color 0.5s ease;  
}  
button:hover {  
  background-color: red;  
}
```

- **Animations Example:**

```
@keyframes move {  
  from {left: 0;}  
  to {left: 100px;}  
}  
div {  
  position: relative;  
  animation: move 2s infinite;  
}
```
