

## Web Technology Lab – Viva Questions with Answers

### Experiment 1:

**Q:** What is `<!DOCTYPE html>` used for?

**A:** It declares the document type and version of HTML (HTML5).

**Q:** Difference between `<b>` and `<strong>`?

**A:** `<b>` makes text bold visually, `<strong>` adds semantic importance.

**Q:** Which tag preserves spaces and line breaks?

**A:** `<pre>` tag.

**Q:** How many heading levels exist in HTML?

**A:** Six (`<h1>` to `<h6>`).

**Q:** Purpose of `<blockquote>`?

**A:** Used to represent quoted text.

### Experiment 2:

**Q:** Difference between `rowspan` and `colspan`?

**A:** `rowspan` merges rows, `colspan` merges columns.

**Q:** Purpose of `<thead>`, `<tbody>`, `<tfoot>`?

**A:** They define table header, body, and footer sections.

**Q:** Which tag is used for table header cells?

**A:** `<th>`.

**Q:** How do you highlight specific cells?

**A:** By applying CSS classes.

**Q:** Which attribute collapses table borders?

**A:** `border-collapse: collapse;` in CSS.

### Experiment 3:

**Q:** Difference between ID and Class selector?

**A:** ID (`#id`) is unique, Class (`.class`) can be reused.

**Q:** What does `h2 + p` mean?

**A:** Styles the paragraph immediately after an `<h2>`.

**Q:** Difference between pseudo-class and pseudo-element?

**A:** Pseudo-class targets states (:hover), pseudo-element targets parts (::first-letter).

**Q:** Example of attribute selector?

**A:** p[lang] { ... }.

**Q:** What does :hover do?

**A:** Applies style when the user hovers over an element.

#### **Experiment 4:**

**Q:** Which tag creates a form?

**A:** <form>.

**Q:** Difference between radio and checkbox?

**A:** Radio allows one choice, checkbox allows multiple.

**Q:** Purpose of required attribute?

**A:** Ensures the field must be filled before submission.

**Q:** Which input type validates email?

**A:** <input type="email">.

**Q:** Which tag is used for dropdown selection?

**A:** <select>.

#### **Experiment 5:**

**Q:** Purpose of <header> and <footer>?

**A:** Define top and bottom sections of a page.

**Q:** Difference between <section> and <article>?

**A:** <section> groups related content, <article> is self-contained content.

**Q:** Purpose of <aside>?

**A:** Represents side content like ads or sidebars.

**Q:** Purpose of <figure> and <figcaption>?

**A:** <figure> holds media, <figcaption> describes it.

**Q:** Why use semantic tags?

**A:** They improve readability and SEO.

### Experiment 6:

**Q:** Which tag includes JavaScript?

**A:** <script>.

**Q:** Difference between == and ===?

**A:** == compares values, === compares values and types.

**Q:** Purpose of parseInt()?

**A:** Converts string to integer.

**Q:** Which operator is used for modulus?

**A:** %.

**Q:** How do you display output in JS?

**A:** Using alert(), [console.log\(\)](#), or [document.write\(\)](#).

### Experiment 7:

**Q:** What does JSON stand for?

**A:** JavaScript Object Notation.

**Q:** Which method converts JSON string to object?

**A:** [JSON.parse\(\)](#).

**Q:** Which method converts object to JSON string?

**A:** [JSON.stringify\(\)](#).

**Q:** Can JSON support arrays?

**A:** Yes.

**Q:** Why is JSON widely used?

**A:** It is lightweight and language-independent.

### Experiment 8:

**Q:** Which tag embeds PHP in HTML?

**A:** <?php ... ?>.

**Q:** Difference between echo and print?

**A:** Both output text, but echo is faster and can take multiple arguments.

**Q:** Purpose of mysqli\_connect()?

**A:** Connects PHP to MySQL database.

**Q:** What is \$\_POST used for?

**A:** To collect form data sent via POST method.

**Q:** What does ORDER BY do in SQL?

**A:** Sorts query results.

### **Experiment 9:**

**Q:** What is jQuery?

**A:** A JavaScript library for easier DOM manipulation.

**Q:** How do you select an element in jQuery?

**A:** Using \$(selector).

**Q:** Purpose of append()?

**A:** Adds content inside selected elements.

**Q:** Which function is used for animation?

**A:** .animate().

**Q:** Symbol used to access jQuery?

**A:** \$.

### **Experiment 10:**

**Q:** What does AJAX stand for?

**A:** Asynchronous JavaScript and XML.

**Q:** Which object is used for AJAX in JS?

**A:** XMLHttpRequest.

**Q:** What does readyState=4 mean?

**A:** Request finished and response is ready.

**Q:** What does status=200 mean?

**A:** Request successful.

**Q:** Can AJAX work with JSON?

**A:** Yes, commonly used with JSON.