

1. JavaScript code to prompt two numbers, add them, and display the result (4 marks)

```
let num1 = parseFloat(prompt("Enter the first number:"));  
let num2 = parseFloat(prompt("Enter the second number:"));  
  
let sum = num1 + num2;  
  
alert("The sum of the two numbers is: " + sum);
```

2. JavaScript code to display the message “Welcome to the website” (2 marks)

```
document.write("Welcome to the website");
```

OR:

```
alert("Welcome to the website");
```

3. Define Event handlers in JavaScript (2 marks)

Event handlers are **functions or pieces of code that are executed in response to user actions or browser events.**

Examples of events include clicking a button, loading a page, moving the mouse, or typing on the keyboard.

4. Four main uses of Event handlers in JavaScript (4 marks)

Capturing user interactions

To detect actions like clicks, mouse movement, keystrokes, etc.

Validating form inputs

Checking if user-entered data is correct before submitting a form.

Changing page content dynamically

Updating text, images, or layout based on an event.

Controlling multimedia or animations

Playing/pausing videos, triggering animations on scroll or click.

5. Difference between == and === operators in PHP, with examples (2 marks)

== (Equal operator)

Compares **values only** (does NOT check data type).

```
5 == "5"; // true because values are equal
```

=== (Identical operator)

Compares **both value AND data type**.

```
5 === "5"; // false because one is integer and the other is string
```

6. Four reasons why PHP is popular (4 marks)

Easy to learn and use

Simple syntax suitable for beginners.

Excellent for web development

Built-in support for handling forms, sessions, and server tasks.

Wide community support

Many tutorials, libraries, and frameworks (Laravel, CodeIgniter).

Works well with databases

Especially MySQL, making it ideal for dynamic websites.

7. Explain the conditional operator in PHP with an example (2 marks)

The conditional operator (?:) is a short form of an **if...else** statement.

Syntax:

```
condition ? value_if_true : value_if_false;
```

Example:

```
$age = 18;  
$message = ($age >= 18) ? "Adult" : "Minor";  
echo $message; This outputs "Adult" because the condition is true.
```