

Web Technologies

Assignment No. 02 [CLO-2]

Total Marks: 10

Instructions:

The assignment must be completed handwritten. It is important to present your work neatly, using appropriate headings and subheadings where necessary. Ensure that each question is answered in detail, and provide explanations or examples where required.

Q1. Identify the errors from the following codes

i	<pre><div class="col-md-4 col-lg-3"> <p>This is a column</p> </div></pre>
ii	<pre><?php if (\$_POST['name']) { echo "Hello, " . \$_POST['name']; } ?></pre>
iii	<pre>db.users.find({ name: "John"});</pre>
iv	<pre>function addNumbers(a, b) { return a + b; } addNumbers(2, "5");</pre>
v	<pre><?php \$age = 25; if (\$age == "25") { echo "Age is 25"; } ?></pre>
vi	<pre>var num1 = "10"; var num2 = 5; var sum = num1 + num2; console.log(sum);</pre>
vii	<pre><!DOCTYPE html> <html> <head> <style> .container { display: block; width: 100%; } </style> </head> <body> <div class="container"></pre>

	<pre> <p>Welcome to the page!</p> </div> </body> </html> </pre>
viii	<pre> <html> <head> <title>Test Page</title> </head> <body> <div>Welcome to the page! </body> </html> </pre>
ix	<pre> function multiplyNumbers(a, b) { return a * b; } console.log(multiplyNumbers(5)); // What will this output? </pre>
x	<pre> <form action="submit.php" method="post"> <label for="name">Name:</label> <input type="text" id="name" name="name"> <button type="submit">Submit</button> </form> </pre>

Q2. Explain the following questions

- i. Explain the concept of responsive web design in Bootstrap. How does Bootstrap help in creating responsive websites?
- ii. Describe the different Bootstrap components (e.g., Navbar, Carousel, Cards) and their use cases in website design.
- iii. What are the benefits of using Bootstrap in web development? How does it compare to creating custom CSS from scratch?
- iv. What is PHP, and how does it work as a server-side scripting language?
- v. Describe how PHP handles form data sent via the GET and POST methods.
- vi. Explain how PHP can be used for database interaction. Describe the basic steps involved in connecting to a MySQL database and performing CRUD operations.
- vii. What is MongoDB, and how is it different from traditional relational databases like MySQL?
- viii. Explain the CRUD operations in MongoDB. Provide examples of each operation (Create, Read, Update, Delete).
- ix. What are documents and collections in MongoDB? How do they differ from tables and rows in relational databases?
- x. What are some advantages and disadvantages of using MongoDB over a relational database management system (RDBMS)?