

# Internal Assessment (Assignment)

**Course Code:** OMC101

**Last Date of Submission:** 15-Jan-2024

**Course Title:** Full Stack Development

**Assignment Marks:** 30

**Assignment No.:** 2

**Note:**

1. The assignment has two parts: **A** and **B**.
2. Part A has ten MCQs carrying one mark each. Answer **ALL** ten MCQs.
3. Part B has eight descriptive questions carrying four marks each. Attempt **any FIVE** questions out of eight.
4. Assignment should be submitted in hand-written form only.

## Part A

(10 × 1 = 10 Marks)

Answer **all** questions from Q. No. **A1** to **A10**

Q. No.	Question Statement	Course Outcome
<b>A1</b>	The external JavaScript can be embedded in an XHTML document by using the ____ attribute in the <script> tag.	CO-2
Answer Choices:	a. Href b. src c. type d. alt	
<b>A2</b>	The _____ method is used to delete an element from the end of an array in JavaScript.	CO-2
Answer Choices:	a. shift() b. unshift() c. push() d. pop()	
<b>A3</b>	In JavaScript, variables declared within a function are _____.	CO-2
Answer Choices:	a. locally scoped and are not accessible outside the function unless explicitly returned. b. global and can be used anywhere c. used inside as well as outside the function d. easily accessible outside the function	

<b>A4</b>	The _____ is an application programming interface(API) for web documents that defines an interface between XHTML documents and application programs.	CO-2
Answer Choices:	<ul style="list-style-type: none"> <li>a. Cascading style sheets (CSS)</li> <li>b. Document Object Model (DOM)</li> <li>c. Extension Markup Language (XML)</li> <li>d. None of the above</li> </ul>	
<b>A5</b>	The ____ method of the following is not valid method in JavaScript for accessing elements.	CO-2
Answer Choices:	<ul style="list-style-type: none"> <li>a. document.getElementById</li> <li>b. document.getElementById</li> <li>c. document.getElementsByTagName</li> <li>d. document.getElementsByTagNameName</li> </ul>	
<b>A6</b>	_____ is the correct way to start a PHP code block.	CO-3
Answer Choices:	<ul style="list-style-type: none"> <li>a. &lt;php</li> <li>b. &lt;?php</li> <li>c. &lt;php?</li> <li>d. &lt;%php</li> </ul>	
<b>A7</b>	_____ of the following method is used to output text to the browser in PHP.	CO-3
Answer Choices:	<ul style="list-style-type: none"> <li>a. cout()</li> <li>b. document.write()</li> <li>c. echo()</li> <li>d. display()</li> </ul>	
<b>A8</b>	_____ are mechanisms in PHP used to manage and persist user data across multiple pages or visits.	CO-3
Answer Choices:	<ul style="list-style-type: none"> <li>a. Cookies and Session</li> <li>b. Events and Event handlers</li> <li>c. GET and POST methods</li> <li>d. None of the above</li> </ul>	
<b>A9</b>	_____ of the following is NOT a component of the MERN stack.	CO-4
Answer Choices:	<ul style="list-style-type: none"> <li>a. ReactJS</li> <li>b. Express</li> <li>c. AngularJS</li> <li>d. MongoDB</li> </ul>	

<b>A10</b>	ReactJS uses _____ to efficiently update the user interface in web applications	CO-4
Answer Choices:	a. Original DOM b. Shadow DOM c. Virtual DOM d. XHTML templates	

**Part B** **(5 × 4 = 20 Marks)**

Attempt **ANY FIVE** questions from Q. No. **B1 to B8**.

<b>Q. No.</b>	<b>Question</b>	<b>Course Outcome</b>
<b>B1</b>	a. Explain the different ways of embedding JavaScript in XHTML documents with suitable examples [ 1 mark] b. Explain the various screen output and Keyboard input methods used in JavaScript with examples for each. [1 mark] c. Explain how arrays can be sorted in ascending and descending order by using the compare function in JavaScript with a suitable example. [2 marks]	CO-2
<b>B2</b>	a. With suitable examples, explain any five JavaScript String methods. [1 mark] b. Demonstrate the following array methods in JavaScript using suitable examples for each: [ 1 mark] <ul style="list-style-type: none"> <li>• join()</li> <li>• slice()</li> <li>• concat()</li> <li>• reverse()</li> </ul> c. Write a JavaScript function called "isprime" that takes an integer as input and returns true if the number is prime (only divisible by 1 and itself), and false otherwise. [2 mark]	CO-2
<b>B3</b>	a. Describe the use of various loops in JavaScript with suitable examples for each. [ 1 mark] b. Explain pattern matching in JavaScript. Explain the various methods used for pattern matching in JavaScript with suitable examples. [1 mark] c. Write an external JavaScript function for validating your enrollment number at Graphic Era University using pattern matching in JavaScript. Embed the script in an XHTML document and write the appropriate code. [2 mark]	CO-2

<b>B4</b>	<p>a. What is DOM? Explain with a neat diagram, the DOM tree structure with the corresponding XHTML document. [1 mark]</p> <p>b. Explain the different ways of accessing elements in JavaScript with a suitable example for each. [1 mark]</p> <p>c. What is an event and an event handler? Explain event handling in JavaScript with suitable examples for: [ 2 marks ]</p> <ul style="list-style-type: none"> <li>• handling events from button elements</li> <li>• handling events from textboxes</li> </ul>	CO-2
<b>B5</b>	<p>a. Explain any five String methods in PHP using suitable examples. [1 mark]</p> <p>b. How are arrays created in PHP? Explain at least 10 methods used with arrays in PHP with suitable examples. [ 1 mark ]</p> <p>c. Explain with a diagram the logical internal structure of arrays in PHP. How are arrays in PHP accessed sequentially? Explain various methods used for sequential access of arrays in PHP with a suitable example. [ 2 marks ]</p>	CO-3
<b>B6</b>	<p>a. What is a cookie? Where are cookies stored? How are cookies created, retrieved, and deleted in PHP explain with suitable examples. [Write the appropriate code for the same] [ 2 marks]</p> <p>b. What is session? Where is session information stored? Describe the use of sessions in PHP. With suitable examples explain how session variables are used in web pages in PHP. [2 marks]</p>	CO-3
<b>B7</b>	<p>a. Write an XHTML document to create a login form with the following – [2 marks]</p> <ul style="list-style-type: none"> <li>• A text box to collect the user's name</li> <li>• A text box to collect the password</li> <li>• A submit and reset button</li> </ul> <p>Give appropriate labels for the same</p> <p>Write a PHP program that collect the form data sent using POST method and displays the username along with a greeting message.</p> <p>b. Write a PHP program to collect student registration information (Enrolment_No, student_name, gender, age, college_name) for an event and store in MySQL database. Also, retrieve all the data and display the same. [2 marks]</p>	CO-3
<b>B8</b>	<p>a. What are MERN components? Discuss in brief. [2 marks]</p> <p>b. What is ReactJS? List and explain some notable features of ReactJS [2 marks]</p>	CO-4

**Course Outcomes:**

**CO-1.** Describe the use of XHTML tags, and CSS for developing presentable web pages. [L-2]

**CO-2.** Develop dynamic web pages by applying event-handling mechanisms using JavaScript.  
[L-5]

**CO-3.** Develop web pages using cookies, sessions, and databases in PHP. [L-5]

**CO-4.** Describe the concepts of MERN stack used in Full Stack Development and the features and components of ReactJS. [L-2]

--\*\*--