

## FOUNDATIONS OF WEB DEVELOPMENT

### IMPORTANT QUESTIONS

#### MODULE III

Q.No	Question	Bloom's Taxonomy Level	CO
1	Explain <b>loop implementations</b> in JavaScript with examples of for, while, and do...while loops. How does each loop handle initialization and condition checking?	Understand	1
2	Write a JavaScript program to demonstrate <b>function declaration</b> and <b>parameter passing</b> (both by value and by reference) with suitable examples and output.	Apply	2
3	Describe the <b>Document Object Model (DOM)</b> and explain its <b>hierarchical structure</b> using a labeled diagram. How are elements, attributes, and text nodes organized in this hierarchy?	Analyze	3
4	Demonstrate JavaScript <b>element selection methods</b> (getElementById, getElementsByClassName, querySelector), and show how to <b>manipulate node properties, text content, attributes, and styles</b> dynamically using DOM. Include a complete example program.	Evaluate	4

#### MODULE IV

Q.No	Question	Bloom's Taxonomy Level	CO
1	Explain the <b>structure of an HTML form</b> and describe different <b>input element types</b> with examples.	Understand	1
2	Differentiate between <b>form control components</b> such as <textarea> and <select>. Write a JavaScript example to dynamically update a <select> list.	Apply	1

3	What is <b>form validation</b> in JavaScript? Demonstrate <b>client-side validation</b> using conditional statements and event handling.	Apply	2
4	Describe the <b>JavaScript Event Model</b> . How are <b>event listeners</b> registered using <code>addEventListener()</code> ? Give an example with multiple event types.	Understand	2
5	Explain <b>event propagation</b> with the concepts of <b>capturing</b> and <b>bubbling</b> phases. Use an example to illustrate how events flow through the DOM tree.	Analyze	3
6	What is the <b>Event Object</b> in JavaScript? List its important <b>properties and methods</b> with examples.	Understand	3
7	Discuss <b>Asynchronous JavaScript</b> and explain the use of <b>callbacks</b> and <b>scheduler communication</b> (like <code>setTimeout</code> and <code>setInterval</code> ) in non-blocking execution.	Analyze	4
8	Write a program to demonstrate how to use the <b>Fetch API</b> to make an HTTP GET request, parse the <b>JSON data</b> , and display it dynamically on a webpage. Explain <b>serialization and deserialization</b> in this context.	Evaluate	4

## MODULE V

Q.No	Question	Bloom's Taxonomy Level	CO
1	Explain the <b>Bootstrap Grid System</b> . How are <b>containers</b> , <b>rows</b> , and <b>columns</b> structured to achieve responsive layouts? Provide a simple example.	Understand	1
2	Describe the use of <b>Bootstrap Container Utilities</b> and explain the difference between <code>.container</code> , <code>.container-fluid</code> , and <code>.container-{breakpoint}</code> .	Understand	1
3	Demonstrate the implementation of <b>rows and columns</b> in Bootstrap. Write code to create a <b>three-column layout</b> with responsive breakpoints.	Apply	2

4	Explain <b>Display Properties, Flex Sizing Utilities</b> , and <b>Spacing Utilities</b> in Bootstrap with examples of d-flex, flex-grow, m-3, and p-2 classes.	Apply	2
5	Discuss the <b>Bootstrap Color System</b> and its importance in UI design. How can background and text colors be customized using predefined utility classes?	Analyze	3
6	What are <b>Bootstrap UI Components</b> ? Demonstrate the creation of a <b>Navbar</b> and <b>Buttons</b> using Bootstrap classes.	Apply	3
7	Explain <b>Dynamic Elements</b> such as the <b>Carousel</b> component in Bootstrap. Write an example to create an automatic image slider with indicators and controls.	Evaluate	4
8	Describe <b>Flexbox alignment properties</b> such as align-items, align-self, and justify-content. How do they support <b>responsive design principles</b> in Bootstrap layouts?	Analyze	4