

HTML:

Module 1: Introduction to Web Development

1. What does HTML stand for?

- a) Hyperlinks and Text Markup Language
- b) Home Tool Markup Language
- c) HyperText Markup Language
- d) HyperText Machine Language

Answer: c) HyperText Markup Language

2. Which tag is used to define the root of an HTML document?

- a) <head>
- b) <html>
- c) <body>
- d) <root>

Answer: b) <html>

3. What is the purpose of the <head> tag in HTML?

- a) To display content on the webpage
- b) To define metadata and links to external resources
- c) To create a header section
- d) To define the main content of the page

Answer: b) To define metadata and links to external resources

4. Which tag is used to create a hyperlink in HTML?

- a) <link>
- b) <a>
- c) <href>
- d) <hyperlink>

Answer: b) <a>

5. What is the correct syntax for adding a comment in HTML?

- a) <!-- This is a comment -->
- b) // This is a comment
- c) /* This is a comment */
- d) <comment> This is a comment </comment>

Answer: a) <!-- This is a comment -->

Module 2: HTML Fundamentals

1. Which tag is used to define a paragraph in HTML?

- a) <para>
- b) <p>
- c) <paragraph>
- d) <text>

Answer: b) <p>

2. What is the correct HTML for creating a numbered list?

- a)
- b)
- c)
- d) <list>

Answer: b)

3. **Which attribute is used to specify the source of an image in HTML?**

- a) src
- b) link
- c) href
- d) source

Answer: a) src

4. **What is the purpose of the <table> tag in HTML?**

- a) To create a form
- b) To display data in a tabular format
- c) To create a list
- d) To define a section of the page

Answer: b) To display data in a tabular format

5. **Which tag is used to create a dropdown list in HTML?**

- a) <input>
- b) <select>
- c) <dropdown>
- d) <option>

Answer: b) <select>

Module 3: HTML Semantic Elements

1. **Which tag is used to define the header of a section in HTML?**

- a) <header>
- b) <head>
- c) <section>
- d) <h1>

Answer: a) <header>

2. **What is the purpose of the <nav> tag in HTML?**

- a) To define navigation links
- b) To create a new section
- c) To define the main content
- d) To create a footer

Answer: a) To define navigation links

3. **Which tag is used to define the main content of a document?**

- a) <main>
- b) <content>
- c) <body>
- d) <section>

Answer: a) <main>

4. **What is the purpose of the <footer> tag in HTML?**

- a) To define the header of a document
- b) To define the footer of a document or section
- c) To create a form
- d) To define a list

Answer: b) To define the footer of a document or section

5. **Which tag is used to define an independent, self-contained content block?**

- a) <section>

- b) <article>
 - c) <div>
 - d) <block>
- Answer:** b) <article>

Module 4: HTML Forms and Input Elements

1. **Which attribute is used to specify the type of input in an <input> tag?**
 - a) type
 - b) name
 - c) value
 - d) id

Answer: a) type
2. **What is the purpose of the placeholder attribute in an <input> tag?**
 - a) To define the default value
 - b) To provide a hint to the user
 - c) To validate the input
 - d) To specify the input type

Answer: b) To provide a hint to the user
3. **Which input type is used to create a checkbox in HTML?**
 - a) text
 - b) radio
 - c) checkbox
 - d) button

Answer: c) checkbox
4. **What is the purpose of the <label> tag in HTML?**
 - a) To define a form
 - b) To associate a text label with an input element
 - c) To create a button
 - d) To define a table

Answer: b) To associate a text label with an input element
5. **Which attribute is used to make an input field required in HTML?**
 - a) required
 - b) validate
 - c) mandatory
 - d) must

Answer: a) required

Module 5: HTML Multimedia

1. **Which tag is used to embed a video in HTML?**
 - a) <video>
 - b) <media>
 - c) <embed>
 - d) <movie>

Answer: a) <video>

2. **What is the purpose of the controls attribute in the <video> tag?**

- a) To autoplay the video
- b) To display video controls (play, pause, etc.)
- c) To loop the video
- d) To mute the video

Answer: b) To display video controls (play, pause, etc.)

3. **Which tag is used to embed audio in HTML?**

- a) <audio>
- b) <sound>
- c) <music>
- d) <mp3>

Answer: a) <audio>

4. **What is the purpose of the alt attribute in the tag?**

- a) To specify the image source
- b) To provide alternative text for the image
- c) To define the image size
- d) To add a caption to the image

Answer: b) To provide alternative text for the image

5. **Which tag is used to embed an external webpage in HTML?**

- a) <iframe>
- b) <embed>
- c) <object>
- d) <external>

Answer: a) <iframe>

Module 6: HTML Accessibility

1. **What is the purpose of the alt attribute in an tag?**

- a) To specify the image source
- b) To provide alternative text for screen readers
- c) To define the image size
- d) To add a caption to the image

Answer: b) To provide alternative text for screen readers

2. **Which attribute is used to associate a <label> with an input element?**

- a) for
- b) id
- c) name
- d) value

Answer: a) for

3. **What is the purpose of ARIA roles in HTML?**

- a) To improve SEO
- b) To enhance accessibility for screen readers
- c) To add animations to elements
- d) To validate forms

Answer: b) To enhance accessibility for screen readers

4. **Which tag is used to define a table header in HTML?**

- a) <th>
- b) <td>
- c) <tr>

d) <thead>

Answer: a) <th>

5. What is the purpose of the aria-label attribute?

- a) To define a label for an element
- b) To provide additional context for screen readers
- c) To validate form inputs
- d) To create a tooltip

Answer: b) To provide additional context for screen readers

Module 7: HTML Meta Tags and SEO

1. Which tag is used to define metadata in HTML?

- a) <meta>
- b) <data>
- c) <info>
- d) <head>

Answer: a) <meta>

2. What is the purpose of the title tag in HTML?

- a) To define the main heading of the page
- b) To specify the title displayed in the browser tab
- c) To create a tooltip
- d) To define a section title

Answer: b) To specify the title displayed in the browser tab

3. Which attribute is used to specify the character encoding in HTML?

- a) charset
- b) encoding
- c) type
- d) content

Answer: a) charset

4. What is the purpose of the description meta tag?

- a) To define the page title
- b) To provide a summary of the page content for search engines
- c) To specify the author of the page
- d) To define the page keywords

Answer: b) To provide a summary of the page content for search engines

5. Which tag is used to link an external CSS file in HTML?

- a) <style>
- b) <link>
- c) <css>
- d) <script>

Answer: b) <link>

Module 8: HTML5 Features

1. Which tag is used to draw graphics in HTML5?

- a) <canvas>
- b) <svg>

c) <graphics>

d) <draw>

Answer: a) <canvas>

2. **What is the purpose of the <figure> tag in HTML5?**

a) To define a section of the page

b) To group media content with a caption

c) To create a form

d) To define a list

Answer: b) To group media content with a caption

3. **Which tag is used to define a progress bar in HTML5?**

a) <progress>

b) <bar>

c) <meter>

d) <range>

Answer: a) <progress>

4. **What is the purpose of the <datalist> tag in HTML5?**

a) To create a dropdown list

b) To provide predefined options for an input field

c) To define a list of data

d) To create a table

Answer: b) To provide predefined options for an input field

5. **Which tag is used to define a date picker in HTML5?**

a) <input type="date">

b) <input type="calendar">

c) <input type="time">

d) <input type="datetime">

Answer: a) <input type="date">

Module 9: HTML Forms Advanced

1. **Which attribute is used to specify the maximum value for an input field?**

a) max

b) maximum

c) limit

d) value

Answer: a) max

2. **What is the purpose of the pattern attribute in an <input> tag?**

a) To define a placeholder

b) To specify a regular expression for validation

c) To define the input type

d) To set the default value

Answer: b) To specify a regular expression for validation

3. **Which input type is used to create a color picker in HTML5?**

a) color

b) picker

c) rgb

d) hex

Answer: a) color

4. **What is the purpose of the autocomplete attribute in a form?**

a) To disable browser autofill

b) To enable browser autofill

c) To validate the form

d) To define the form action

Answer: b) To enable browser autofill

5. **Which attribute is used to specify the minimum length of an input field?**

a) minlength

b) min

c) length

d) size

Answer: a) minlength

Module 10: HTML Multimedia Advanced

1. **Which tag is used to embed a YouTube video in HTML?**

a) <video>

b) <iframe>

c) <embed>

d) <youtube>

Answer: b) <iframe>

2. **What is the purpose of the poster attribute in the <video> tag?**

a) To specify the video source

b) To define a thumbnail image for the video

c) To add a caption to the video

d) To control video playback

Answer: b) To define a thumbnail image for the video

3. **Which tag is used to define subtitles for a video in HTML5?**

a) <caption>

b) <subtitle>

c) <track>

d) <text>

Answer: c) <track>

4. **What is the purpose of the loop attribute in the <audio> tag?**

a) To play the audio in a loop

b) To pause the audio

c) To mute the audio

d) To control audio playback

Answer: a) To play the audio in a loop

5. **Which attribute is used to specify the media type in the <source> tag?**

a) type

b) media

c) src

d) format

Answer: a) type

CSS:

Module 1: Introduction to CSS

1. **What does CSS stand for?**

- a) Computer Style Sheets
- b) Cascading Style Sheets
- c) Creative Style Sheets
- d) Colorful Style Sheets

Answer: b) Cascading Style Sheets

2. **Which tag is used to include an external CSS file in HTML?**

- a) <style>
- b) <link>
- c) <css>
- d) <script>

Answer: b) <link>

3. **Which property is used to change the text color in CSS?**

- a) font-color
- b) text-color
- c) color
- d) background-color

Answer: c) color

4. **What is the correct syntax for defining a CSS rule?**

- a) selector { property: value; }
- b) selector (property: value;)
- c) selector [property: value;]
- d) selector < property: value; >

Answer: a) selector { property: value; }

5. **Which CSS property is used to control the space between lines of text?**

- a) line-height
- b) letter-spacing
- c) text-spacing
- d) word-spacing

Answer: a) line-height

Module 2: CSS Selectors and Specificity

1. **Which selector is used to select all elements with a specific class?**

- a) #classname
- b) .classname
- c) *classname
- d) @classname

Answer: b) .classname

2. **What is the specificity value of an ID selector?**

- a) 100
- b) 10
- c) 1
- d) 1000

Answer: a) 100

3. **Which selector is used to select all <p> elements inside a <div> element?**

- a) div + p
- b) div > p
- c) div p
- d) div ~ p

Answer: c) div p

4. **Which pseudo-class is used to select the first child of an element?**

- a) :first-child
- b) :first-of-type
- c) :nth-child(1)
- d) :first

Answer: a) :first-child

5. **Which selector is used to select an element with a specific attribute?**

- a) [attribute]
- b) attribute()
- c) :attribute
- d) @attribute

Answer: a) [attribute]

Module 3: CSS Box Model

1. **Which property is used to set the padding of an element?**

- a) margin
- b) padding
- c) border
- d) spacing

Answer: b) padding

2. **What is the default value of the box-sizing property?**

- a) content-box
- b) border-box
- c) padding-box
- d) margin-box

Answer: a) content-box

3. **Which property is used to set the space between the border and the content of an element?**

- a) margin
- b) padding
- c) border
- d) outline

Answer: b) padding

4. **What is the purpose of the margin property?**

- a) To set the space inside the element
- b) To set the space outside the element
- c) To set the border of the element
- d) To set the padding of the element

Answer: b) To set the space outside the element

5. **Which property is used to set the width of an element's border?**

- a) border-width

- b) border-size
 - c) border-thickness
 - d) border-style
- Answer:** a) border-width

Module 4: CSS Layouts (Flexbox and Grid)

1. **Which property is used to define a flex container?**
 - a) display: flex;
 - b) display: grid;
 - c) display: inline-flex;
 - d) display: block;

Answer: a) display: flex;
2. **Which property is used to align items vertically in a flex container?**
 - a) align-items
 - b) justify-content
 - c) align-content
 - d) flex-direction

Answer: a) align-items
3. **Which property is used to define the number of columns in a CSS Grid?**
 - a) grid-template-rows
 - b) grid-template-columns
 - c) grid-columns
 - d) grid-rows

Answer: b) grid-template-columns
4. **Which property is used to create space between grid items?**
 - a) grid-gap
 - b) grid-spacing
 - c) grid-margin
 - d) grid-padding

Answer: a) grid-gap
5. **Which property is used to align grid items horizontally in a CSS Grid?**
 - a) align-items
 - b) justify-items
 - c) align-content
 - d) justify-content

Answer: b) justify-items

Module 5: Responsive Web Design

1. **Which CSS unit is relative to the font size of the root element?**
 - a) em
 - b) rem
 - c) px
 - d) vh

Answer: b) rem

2. **What is the purpose of the viewport meta tag?**

- a) To define the page title
- b) To control the layout on mobile browsers
- c) To specify the character encoding
- d) To define the page description

Answer: b) To control the layout on mobile browsers

3. **Which CSS property is used to create a responsive image?**

- a) max-width
- b) min-width
- c) width
- d) height

Answer: a) max-width

4. **Which media query is used to target devices with a maximum width of 768px?**

- a) @media (max-width: 768px)
- b) @media (min-width: 768px)
- c) @media (width: 768px)
- d) @media (device-width: 768px)

Answer: a) @media (max-width: 768px)

5. **Which CSS property is used to create a fluid layout?**

- a) flex
- b) grid
- c) percentage
- d) float

Answer: c) percentage

Module 6: Advanced CSS (Transitions, Animations, and Transforms)

1. **Which property is used to define a transition in CSS?**

- a) transition
- b) animation
- c) transform
- d) translate

Answer: a) transition

2. **Which property is used to define the duration of a transition?**

- a) transition-duration
- b) transition-timing
- c) transition-delay
- d) transition-property

Answer: a) transition-duration

3. **Which CSS property is used to rotate an element?**

- a) rotate()
- b) transform: rotate()
- c) transform: translate()
- d) transform: scale()

Answer: b) transform: rotate()

4. **Which property is used to define a keyframe animation in CSS?**

- a) @keyframes
- b) @animation
- c) @transition

d) @transform

Answer: a) @keyframes

5. **Which timing function is used to create a smooth start and end to an animation?**

a) linear

b) ease-in

c) ease-out

d) ease-in-out

Answer: d) ease-in-out

Module 7: CSS Preprocessors (SASS/SCSS)

1. **What does SASS stand for?**

a) Syntactically Awesome Style Sheets

b) Simple Accessible Style Sheets

c) Structured Advanced Style Sheets

d) Systematically Applied Style Sheets

Answer: a) Syntactically Awesome Style Sheets

2. **Which symbol is used to define a variable in SASS?**

a) \$

b) @

c) #

d) %

Answer: a) \$

3. **Which directive is used to include one SASS file into another?**

a) @import

b) @include

c) @extend

d) @use

Answer: a) @import

4. **What is the purpose of the @mixin directive in SASS?**

a) To define reusable styles

b) To create a loop

c) To define a variable

d) To import a file

Answer: a) To define reusable styles

5. **Which directive is used to inherit styles from another selector in SASS?**

a) @extend

b) @include

c) @mixin

d) @import

Answer: a) @extend

Module 8: CSS Frameworks (Bootstrap and Tailwind CSS)

1. **Which class is used to create a container in Bootstrap?**

a) .container

b) .box

c) .wrapper

d) .grid

Answer: a) .container

2. **Which utility class is used to add padding in Tailwind CSS?**

a) p-4

b) m-4

c) pt-4

d) pl-4

Answer: a) p-4

3. **Which Bootstrap class is used to create a responsive grid layout?**

a) .grid

b) .row

c) .col

d) .flex

Answer: b) .row

4. **Which Tailwind CSS utility is used to center text horizontally?**

a) text-center

b) text-left

c) text-right

d) text-justify

Answer: a) text-center

5. **Which Bootstrap class is used to create a button?**

a) .btn

b) .button

c) .link

d) .click

Answer: a) .btn

Module 9: CSS Accessibility and Best Practices

1. **Which property is used to hide an element visually but keep it accessible to screen readers?**

a) display: none;

b) visibility: hidden;

c) opacity: 0;

d) clip-path: inset(100%);

Answer: d) clip-path: inset(100%);

2. **Which CSS property is used to improve readability for users with visual impairments?**

a) font-size

b) line-height

c) color-contrast

d) text-shadow

Answer: b) line-height

3. **Which CSS property is used to ensure text is readable on all backgrounds?**

a) color

b) background-color

c) opacity

d) contrast

Answer: a) color

4. **Which CSS property is used to create a focus indicator for keyboard navigation?**

a) outline

b) border

c) box-shadow

d) focus

Answer: a) outline

5. **Which CSS property is used to ensure images are accessible to screen readers?**

a) alt

b) title

c) aria-label

d) src

Answer: a) alt

Module 10: CSS Performance Optimization

1. **Which technique is used to reduce the size of CSS files?**

a) Minification

b) Compression

c) Concatenation

d) All of the above

Answer: d) All of the above

2. **Which CSS property can cause performance issues when overused?**

a) box-shadow

b) color

c) font-size

d) padding

Answer: a) box-shadow

3. **Which tool is used to analyze CSS performance?**

a) Lighthouse

b) Chrome DevTools

c) WebPageTest

d) All of the above

Answer: d) All of the above

4. **Which CSS property is used to reduce render-blocking resources?**

a) async

b) defer

c) media

d) preload

Answer: c) media

5. **Which technique is used to load CSS only when needed?**

a) Lazy loading

b) Critical CSS

c) Inline CSS

d) External CSS

Answer: b) Critical CSS

JAVASCRIPT Basics:

Module 1: Introduction to JavaScript

1. What is JavaScript primarily used for?

- a) Styling web pages
- b) Adding interactivity to web pages
- c) Structuring web pages
- d) Hosting web pages

Answer: b) Adding interactivity to web pages

2. Which tag is used to include JavaScript in an HTML file?

- a) <script>
- b) <js>
- c) <javascript>
- d) <link>

Answer: a) <script>

3. What is the correct way to write a JavaScript comment?

- a) <!-- This is a comment -->
- b) // This is a comment
- c) /* This is a comment */
- d) Both b and c

Answer: d) Both b and c

4. Which keyword is used to declare a variable in JavaScript?

- a) var
- b) let
- c) const
- d) All of the above

Answer: d) All of the above

5. What is the output of console.log(typeof 42);?

- a) number
- b) string
- c) boolean
- d) undefined

Answer: a) number

Module 2: Variables and Data Types

1. Which of the following is NOT a JavaScript data type?

- a) number
- b) string
- c) boolean
- d) float

Answer: d) float

2. What is the result of console.log(10 + "10");?

- a) 20
- b) 1010
- c) "20"
- d) NaN

Answer: b) 1010

3. Which keyword is used to declare a constant variable in JavaScript?

- a) var
- b) let
- c) const
- d) static

Answer: c) const

4. What is the output of console.log(typeof null);?

- a) null
- b) object
- c) undefined
- d) number

Answer: b) object

5. Which of the following is a valid way to declare a string in JavaScript?

- a) let str = "Hello";
- b) let str = 'Hello';
- c) let str = `Hello`;`
- d) All of the above

Answer: d) All of the above

Module 3: Operators and Expressions

1. What is the result of console.log(5 == "5");?

- a) true
- b) false
- c) NaN
- d) undefined

Answer: a) true

2. Which operator is used to check both value and type equality in JavaScript?

- a) ==
- b) ===
- c) =
- d) !=

Answer: b) ===

3. What is the output of console.log(10 % 3);?

- a) 1
- b) 3
- c) 0
- d) 10

Answer: a) 1

4. Which operator is used to concatenate strings in JavaScript?

- a) +
- b) &
- c) concat()
- d) Both a and c

Answer: d) Both a and c

5. What is the result of console.log(!true);?

- a) true

- b) false
 - c) undefined
 - d) NaN
- Answer: b) false

Module 4: Control Structures (Conditionals and Loops)

1. Which statement is used to execute a block of code if a condition is true?

- a) if
- b) else
- c) switch
- d) for

Answer: a) if

2. What is the output of the following code?

```
let x = 10;  
if (x > 5) {  
  console.log("x is greater than 5");  
} else {  
  console.log("x is less than or equal to 5");  
}
```

- a) x is greater than 5
- b) x is less than or equal to 5
- c) undefined
- d) NaN

Answer: a) x is greater than 5

3. Which loop is used to iterate over the properties of an object?

- a) for
- b) while
- c) do...while
- d) for...in

Answer: d) for...in

4. What is the output of the following code?

```
for (let i = 0; i < 3; i++) {  
  console.log(i);  
}
```

- a) 0 1 2
- b) 1 2 3
- c) 0 1 2 3
- d) 3 2 1

Answer: a) 0 1 2

5. Which statement is used to terminate a loop in JavaScript?

- a) break
- b) continue

- c) return
 - d) exit
- Answer: a) break

Module 5: Functions

1. What is the correct way to define a function in JavaScript?

- a) function myFunction() {}
- b) let myFunction = function() {}
- c) let myFunction = () => {}
- d) All of the above

Answer: d) All of the above

2. What is the output of the following code?

```
function add(a, b) {  
    return a + b;  
}  
  
console.log(add(2, 3));
```

- a) 5
- b) 23
- c) undefined
- d) NaN

Answer: a) 5

3. Which keyword is used to return a value from a function?

- a) return
- b) break
- c) continue
- d) exit

Answer: a) return

4. What is the output of the following code?

```
let greet = () => "Hello";  
  
console.log(greet());
```

- a) Hello
- b) undefined
- c) NaN
- d) Error

Answer: a) Hello

5. What is the purpose of the arguments object in a function?

- a) To store all arguments passed to the function
- b) To define default arguments
- c) To return a value from the function
- d) To terminate the function

Answer: a) To store all arguments passed to the function

Module 6: Arrays and Array Methods

1. Which method is used to add an element to the end of an array?

- a) push()
- b) pop()
- c) shift()
- d) unshift()

Answer: a) push()

2. What is the output of the following code?

```
let arr = [1, 2, 3];
```

```
console.log(arr.length);
```

- a) 1
- b) 2
- c) 3
- d) undefined

Answer: c) 3

3. Which method is used to remove the last element of an array?

- a) push()
- b) pop()
- c) shift()
- d) unshift()

Answer: b) pop()

4. What is the output of the following code?

```
let arr = [1, 2, 3];
```

```
arr.splice(1, 1);
```

```
console.log(arr);
```

- a) [1, 2, 3]
- b) [1, 3]
- c) [2, 3]
- d) [1, 2]

Answer: b) [1, 3]

5. Which method is used to create a new array by applying a function to each element of an existing array?

- a) map()
- b) filter()
- c) reduce()
- d) forEach()

Answer: a) map()

Module 7: Objects and Object Methods

1. Which keyword is used to create an object in JavaScript?

- a) object
- b) new
- c) create
- d) this

Answer: b) new

2. What is the output of the following code?

```
let obj = { name: "John", age: 30 };  
console.log(obj.name);
```

- a) John
- b) 30
- c) undefined
- d) Error

Answer: a) John

3. Which method is used to add a new property to an object?

- a) add()
- b) push()
- c) Object.assign()
- d) Object.defineProperty()

Answer: d) Object.defineProperty()

4. What is the output of the following code?

```
let obj = { name: "John", age: 30 };  
console.log("name" in obj);
```

- a) true
- b) false
- c) undefined
- d) Error

Answer: a) true

5. Which method is used to delete a property from an object?

- a) delete
- b) remove
- c) pop
- d) shift

Answer: a) delete

Module 8: DOM Manipulation

1. Which method is used to select an element by its ID in JavaScript?

- a) document.querySelector()
- b) document.getElementById()
- c) document.getElementsByClassName()
- d) document.getElementsByTagName()

Answer: b) document.getElementById()

2. What is the output of the following code?

```
let element = document.createElement("div");  
console.log(element.tagName);
```

- a) DIV
- b) div
- c) undefined
- d) Error

Answer: a) DIV

3. Which method is used to add a class to an element?

- a) element.addClass()
- b) element.classList.add()
- c) element.className = "newClass"
- d) Both b and c

Answer: d) Both b and c

4. What is the output of the following code?

```
let element = document.createElement("div");  
element.textContent = "Hello";  
console.log(element.textContent);
```

- a) Hello
- b) undefined
- c) null
- d) Error

Answer: a) Hello

5. Which method is used to remove an element from the DOM?

- a) element.remove()
- b) element.delete()
- c) element.hide()
- d) element.detach()

Answer: a) element.remove()

Module 9: Events and Event Handling

1. Which method is used to attach an event listener to an element?

- a) element.addEventListener()
- b) element.attachEvent()
- c) element.onEvent()
- d) element.eventListener()

Answer: a) element.addEventListener()

2. What is the output of the following code?

```
let button = document.querySelector("button");  
button.addEventListener("click", () => console.log("Clicked"));  
button.click();
```

- a) Clicked
- b) undefined
- c) null
- d) Error

Answer: a) Clicked

3. Which event is triggered when a user presses a key on the keyboard?

- a) keydown
- b) keypress
- c) keyup

d) All of the above

Answer: d) All of the above

4. What is the output of the following code?

```
let input = document.querySelector("input");  
input.addEventListener("input", () => console.log("Input changed"));  
input.value = "Hello";
```

a) Input changed

b) undefined

c) null

d) Error

Answer: a) Input changed

5. Which method is used to remove an event listener from an element?

a) element.removeEventListener()

b) element.detachEvent()

c) element.off()

d) element.unbind()

Answer: a) element.removeEventListener()

Module 10: Error Handling

1. Which keyword is used to handle exceptions in JavaScript?

a) try

b) catch

c) finally

d) All of the above

Answer: d) All of the above

2. What is the output of the following code?

```
try {  
    throw new Error("Something went wrong");  
} catch (error) {  
    console.log(error.message);  
}
```

a) Something went wrong

b) undefined

c) null

d) Error

Answer: a) Something went wrong

3. Which keyword is used to throw a custom error in JavaScript?

a) throw

b) catch

c) finally

d) try

Answer: a) throw

4. What is the output of the following code?

```
try {  
  console.log("Try block");  
} finally {  
  console.log("Finally block");  
}
```

- a) Try block
- b) Finally block
- c) Try block followed by Finally block
- d) Error

Answer: c) Try block followed by Finally block

5. Which method is used to create a custom error in JavaScript?

- a) new Error()
 - b) throw Error()
 - c) Error.create()
 - d) Error.throw()
- Answer: a) new Error()

Module 11: Closures and Scope

1. What is a closure in JavaScript?

- a) A function that has access to its own scope, the outer function's scope, and the global scope
- b) A function that can only access its own scope
- c) A function that can only access the global scope
- d) A function that can only access the outer function's scope

Answer: a) A function that has access to its own scope, the outer function's scope, and the global scope

2. What is the output of the following code?

```
function outer() {  
  let x = 10;  
  function inner() {  
    console.log(x);  
  }  
  return inner;  
}
```

```
let closure = outer();
```

```
closure();
```

- a) 10
- b) undefined
- c) null
- d) Error

Answer: a) 10

3. Which keyword is used to declare a block-scoped variable in JavaScript?

- a) var
- b) let
- c) const
- d) Both b and c

Answer: d) Both b and c

4. What is the output of the following code?

```
let x = 10;

function outer() {
  let x = 20;

  function inner() {
    console.log(x);
  }

  return inner;
}

let closure = outer();
closure();
```

- a) 10
- b) 20
- c) undefined
- d) Error

Answer: b) 20

5. Which of the following is NOT a use case for closures?

- a) Data encapsulation
- b) Creating private variables
- c) Memory optimization
- d) Global scope pollution

Answer: d) Global scope pollution

Module 12: Promises and Async/Await

1. What is a Promise in JavaScript?

- a) An object representing the eventual completion or failure of an asynchronous operation
- b) A function that returns a value immediately
- c) A way to handle synchronous operations
- d) A type of loop

Answer: a) An object representing the eventual completion or failure of an asynchronous operation

2. What is the output of the following code?

```
let promise = new Promise((resolve, reject) => {
  resolve("Success");
});
```



```
promise.then((message) => console.log(message));
```

- a) Success
- b) undefined
- c) null
- d) Error

Answer: a) Success

3. Which method is used to handle a rejected Promise?

- a) .then()
- b) .catch()
- c) .finally()
- d) .resolve()

Answer: b) .catch()

4. What is the output of the following code?

```
async function asyncFunc() {  
    return "Hello";  
}  
  
asyncFunc().then((message) => console.log(message));
```

- a) Hello
- b) undefined
- c) null
- d) Error

Answer: a) Hello

5. Which keyword is used to pause the execution of an async function until a Promise is resolved?

- a) await
- b) async
- c) yield
- d) return

Answer: a) await

Module 13: Prototypes and Inheritance

1. What is a prototype in JavaScript?

- a) An object from which other objects inherit properties
- b) A function that creates objects
- c) A type of loop
- d) A way to handle asynchronous operations

Answer: a) An object from which other objects inherit properties

2. What is the output of the following code?

```
function Person(name) {  
    this.name = name;  
}  
  
Person.prototype.greet = function() {  
    console.log("Hello, " + this.name);
```

```
};  
let person = new Person("John");  
person.greet();
```

- a) Hello, John
- b) undefined
- c) null
- d) Error

Answer: a) Hello, John

3. Which method is used to create an object with a specified prototype?

- a) Object.create()
- b) Object.assign()
- c) Object.defineProperty()
- d) Object.defineProperties()

Answer: a) Object.create()

4. What is the output of the following code?

```
let animal = { eats: true };  
let rabbit = Object.create(animal);  
console.log(rabbit.eats);
```

- a) true
- b) false
- c) undefined
- d) Error

Answer: a) true

5. Which keyword is used to call the constructor of a parent class in a child class?

- a) super
- b) this
- c) new
- d) constructor

Answer: a) super

Module 14: ES6+ Features

1. Which of the following is NOT an ES6 feature?

- a) let and const
- b) Arrow functions
- c) Promises
- d) var

Answer: d) var

2. What is the output of the following code?

```
let [a, b] = [1, 2];  
console.log(a, b);
```

- a) 1 2
- b) 2 1

c) undefined undefined

d) Error

Answer: a) 1 2

3. Which operator is used to spread elements of an array or object?

a) ...

b) *

c) &

d) #

Answer: a) ...

4. What is the output of the following code?

```
let obj = { a: 1, b: 2 };
```

```
let newObj = { ...obj, c: 3 };
```

```
console.log(newObj);
```

a) { a: 1, b: 2, c: 3 }

b) { a: 1, b: 2 }

c) { c: 3 }

d) Error

Answer: a) { a: 1, b: 2, c: 3 }

5. Which keyword is used to define a class in JavaScript?

a) class

b) function

c) object

d) new

Answer: a) class

Module 15: Modules and Import/Export

1. Which keyword is used to export a module in JavaScript?

a) export

b) import

c) module

d) require

Answer: a) export

2. What is the output of the following code?

```
// module.js
```

```
export let x = 10;
```

```
// main.js
```

```
import { x } from './module.js';
```

```
console.log(x);
```

a) 10

b) undefined

c) null

d) Error

Answer: a) 10

3. Which keyword is used to import all exports from a module?

- a) import *
- b) import all
- c) import {}
- d) import default

Answer: a) import *

4. What is the output of the following code?

```
// module.js
```

```
export default function() { return "Hello"; }
```

```
// main.js
```

```
import greet from './module.js';
```

```
console.log(greet());
```

- a) Hello
- b) undefined
- c) null
- d) Error

Answer: a) Hello

5. Which keyword is used to import a default export from a module?

- a) import
- b) export
- c) default
- d) require

Answer: a) import