**Unit-2**

**2 marks & 4 marks questions**

**2 marks questions**

**1. What is jQuery?**

* **Answer**: jQuery is a fast, small, and feature-rich JavaScript library. It simplifies tasks like DOM manipulation, event handling, animations, and AJAX interactions, making it easier to work with HTML and JavaScript.

**2. How do you include jQuery in a webpage?**

* **Answer**: You can include jQuery by using a CDN (Content Delivery Network) or by downloading the jQuery library.
* **Using CDN**:

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

**3. What is the purpose of the $(document).ready() function in jQuery?**

* **Answer**: $(document).ready() ensures that the code inside it runs only after the HTML document has fully loaded and the DOM is ready for manipulation. This avoids errors from trying to manipulate elements before they are loaded.

$(document).ready(function() {

// Code to be executed

});

**4. What is a jQuery selector?**

* **Answer**: A jQuery selector is used to select HTML elements on the page and perform actions on them. It uses CSS-style selectors.

$('#myElement') // Selects an element with id="myElement"

$('.myClass') // Selects elements with class="myClass"

$('p') // Selects all <p> elements

**5. What is the difference between $(this) and this in jQuery?**

* **Answer**: $(this) is a jQuery object, which allows you to use jQuery methods on the element, while this is a plain JavaScript object referring to the current DOM element.

$(this).css('color', 'red'); // jQuery method

this.style.color = 'red'; // Vanilla JavaScript

**6. What does the .hide() method do in jQuery?**

* **Answer**: The .hide() method in jQuery is used to hide the selected element(s) by setting their display CSS property to none.

$('#element').hide();

**7. What does the .show() method do in jQuery?**

* **Answer**: The .show() method makes hidden elements visible by changing their CSS display property back to its default value.

$('#element').show();

**8. How can you perform animations using jQuery?**

* **Answer**: jQuery provides methods like .fadeIn(), .fadeOut(), .slideUp(), .slideDown(), and .animate() to perform animations.

$('#element').fadeIn();

$('#element').slideDown();

**9. What is the .css() method used for in jQuery?**

* **Answer**: The .css() method is used to get or set the CSS properties of an element. You can use it to manipulate style dynamically.

$('#element').css('color', 'red'); // Set color to red

var color = $('#element').css('color'); // Get color property

**10. What is the .val() method used for in jQuery?**

* **Answer**: The .val() method is used to get or set the value of form elements like <input>, <select>, and <textarea>.

var value = $('#inputField').val(); // Get value

$('#inputField').val('New Value'); // Set value

**11. How do you add or remove classes in jQuery?**

* **Answer**: You can use .addClass() to add a class, .removeClass() to remove a class, and .toggleClass() to toggle a class.

$('#element').addClass('new-class'); // Add a class

$('#element').removeClass('old-class'); // Remove a class

$('#element').toggleClass('toggle-class'); // Toggle class

**12. What is the .each() method in jQuery?**

* **Answer**: The .each() method is used to iterate over a jQuery object (a set of elements) and execute a function for each matched element.

$('li').each(function(index, element) {

console.log(index, $(element).text());

});

**13. What is the difference between .on() and .click() in jQuery?**

* **Answer**: .click() is a shorthand for attaching click event listeners, while .on() is more general and flexible, allowing you to handle multiple events (like click, mouseover, etc.) and supports event delegation.

$('#button').click(function() {

alert('Button clicked!');

});

Using .on():

$('#button').on('click', function() {

alert('Button clicked!');

});

**14. What is event delegation in jQuery?**

* **Answer**: Event delegation is a technique where an event listener is attached to a parent element instead of directly to the child elements. This is especially useful for dynamically added elements.

$(document).on('click', '.child', function() {

alert('Child clicked!');

});

**15. How do you make an AJAX request in jQuery?**

* **Answer**: You can make AJAX requests using the $.ajax() method, or shorthand methods like $.get() or $.post().

$.ajax({

url: 'data.json',

method: 'GET',

success: function(response) {

console.log(response);

},

error: function() {

console.log('Error occurred');

}

});

**16. How do you prevent the default action of an event in jQuery?**

* **Answer**: You can use the .preventDefault() method inside the event handler to prevent the default action of an event, such as preventing form submission.

$('#form').submit(function(event) {

event.preventDefault(); // Prevent form submission

alert('Form submission prevented');

});

**17. What is the $(this) keyword used for in jQuery?**

* **Answer**: $(this) refers to the current DOM element in context (usually inside an event handler). It allows you to apply jQuery methods to the element triggering the event.

$('button').click(function() {

$(this).css('color', 'red'); // Change the color of the clicked button

});

**18. How do you dynamically change an element's HTML content using jQuery?**

* **Answer**: You can use .html() to get or set the HTML content of an element.

$('#element').html('<p>New Content</p>'); // Set HTML content

var content = $('#element').html(); // Get HTML content

**19. What is the .fadeIn() method used for in jQuery?**

* **Answer**: The .fadeIn() method gradually changes the opacity of an element from 0 to 1, making it visible.

$('#element').fadeIn(1000); // Fades in over 1 second

**20. How do you remove an element from the DOM using jQuery?**

* **Answer**: You can use the .remove() method to completely remove an element from the DOM.

$('#element').remove(); // Removes the element

**4 marks questions**

1. Explain any four key features of JQuery.
2. Explain basic syntax of JQuery.
3. Explain JQuery Selectors.
4. Explain JQuery Events.
5. Explain jquery methods for DOM manipulation.
6. Explain jquery css method
7. What is jquery menu. List types of menu.
8. Explain the difference between accordian and collapsible.
9. Explain diference between jquery and jqueryUI
10. What is JQuery plugin? Explain structure of it.
11. Explain pros and cons of plugin.