#### HTML

- 1. Describe any three HTML tags from following with simple example? i) head ii) body iii) form iv) table v) marquee
- 2. What is the difference between span and div tag in HTML5?
- 3. What are two types of Web Storage in HTML?

#### **CSS**

- 4. What is a style sheet? How to create a multi colour text on a web page using CSS?
- 5. What is the importance of CSS selectors? Where do you use them?
- 6. What are different types of CSS? Explain each with examples.

#### **BOOTSTRAP**

- 7. Write Short note on Bootstrap? Write a program to demonstrate button styles (warning, danger, Default, Primary, link, success)?
- 8. Discuss why BOOTSTRAP is preferred for website development.
- 9. What are the key components of BOOTSTRAP?
- 10. How do you make images responsive?

### W<sub>3</sub>C

11. What is W3C? How W3C handles/Supports Web Technologies?

### Extra

- 12. How would you make your web pages load fast?
- 13. What is the advantage of collapsing white space?
- 14. What is the use of alternative text in image mapping?

### Unit - 2

# **JavaScript**

- 15. Explain with an example how to access values of textboxes of form using JavaScript?
- 16. What are the different data types available in Javascript? Explain the syntax of it.
- 17. Explain how to call JavaScript from an HTML page? Write a program to validate atleast one textfield for empty value?
- 18. Design a form to accept workshop registration details from participants and validate any five fields using JavaScript? (Assume suitable structure)
- 19. Write an HTML Page and provide JavaScript for accepting userID and password from the user to ensure the input is not empty.
- 20. List and brief any five functions in JavaScript.
- 21. Write Javascript code to convert kilometers to miles.

# Advance JavaScript

- 22. What is JSON file format and explain the usage of JSON
- 23. Which is better XML or JSON? Why?
- 24. Explain how to transform JSON text to a JavaScript object? Explain JSON Parser.
- 25. Explain data types supported by JSON? What is the role of JSON.stringify?

# **AJAX**

- 26. What is the purpose of AJAX? Explain with relevant example?
- 27. What is use of XMLHttpRequest Object? Explain its use with the help of simple JavaScript Code.
- 28. Explain different applications without AJAX and with AJAX.

### **JQuery**

- 29. Write a program of your choice to demonstrate the use of DOM
- 30. Explain the following document object properties with proper syntax. Give one example. i) document.getElementById()
- 31. ii) document.getElementByClass()
- 32. iii) document.getElementByName()
- 33. When to use JQuery? What are the advantages of JQuery over JavaScript?
- 34. What is the difference between JavaScript and JQuery?
- 35. What is the purpose of DOM node tree? Draw a DOM node tree for a simple HTML page
- 36. What is the difference between ID and Class selector in JQuery?
- 37. What is the following jQuery instruction used for
  - a) \$(document).ready(function(){ ......}); b) \$("#Element")
- 38. What would happen if you would click the button from the code below?

```
<h1> Unit Test-1</h1>
<button id="wad">WAD</button>
<script>

let button=document.getElementById("wad");
$(button).click(function() {
    $("h1").css("color","red");
    $(this).hide();
    console.log($("h1").text());
}
</script>
```

### Unit - 3

# **Front-End Frameworks**

38. What is web framework? Why web framework is important? What are web framework types?

# **MVC**

- 39. Draw and discuss MVC architecture in details.
- 40. Explain the MVC Application life cycle.

### **TypeScript**

- 41. Write short note on TypeScript
- 42. What is advantage of TypeScript over JavaScript?
- 43. Explain the difference between Type inference and Type Annotations with examples.
- 44. Explain Variable and Constant declaration in TypeScript.
- 45. Explain with example how to export and import class in Typescript.

### Angular Version 10+

- 46. What is Angular? List and explain various directives and components in Angular?
- 47. Create Simple Angular application to display "Hello, Input Name" using proper directive.
- 48. What is the difference between AngularJS and Angular? Draw a pictorial diagram of Angular architecture?
- 49. Explain different files that consist in angular component.
- 50. Explain Angular Module in detail..
- 51. Explain in brief about -i) Data Binding in Angular ii) Angular CLI iii)Dependency injection in Angular iv)Pipes in Angular v) Angular Router

#### ReactJS

52. What is Node Package Manager or NPM?