Practice Questions with Solutions

1] Markup languages were originally invented to help with __. [MCQ]

1. formatting code
2. writing compilers
3. document typesetting
4. classroom teaching

Answer: Option 3

Solution: A markup language is a human-readable language that is used by a computer to annotate an electronic document so that the computer can better understand the style and structure of the document originally invented to help with document typesetting.

2] Which of the following are examples of self-closing tags? [MSQ]

1. `<br>`
2. `<rect>`
3. `<em>`
4. `<input>`

Answer: Option 1, 2 and 4.

Solution: The tags like `<br>`, `<rect>` and `<input>` are self closing while `<em>` tag needs to be closed by `</em>`.

3] Indicate the order in terms of earliest to latest: (a) XHTML (b) HTML5 (c) XML (d) SGML [MCQ]

1. d --> c --> b --> a
2. d --> c --> a --> b
3. d --> b --> c --> a
4. a --> c --> b --> d

Answer: Option 2.

Solution: The correct order in terms of earliest to latest is SGML --> XML --> XHTML --> HTML5.

4] Which of the following statements about HTML is/are true? [MCQ]

1. HTML5 is completely backward compatible with older versions of HTML.
2. It has all the tags present in previous versions.
3. HTML6 standardization process is currently under development and can be expected to come out in 2025
4. HTML5 is not based on SGML.

Answer: Option 4.

Solution: HTML5 maintains backward compatibility in terms of accepting the HTML as valid input, but has left out certain tags such as `<blink>`, `<font>` etc. HTML5 is defined as a living

standard separated from SGML and will continue to evolve without starting new version numbers.

5] Which of the following statements is/are true for JavaScript? [MSQ]

1. It can be used for functional programming.
2. It can be used for event-driven programming.
3. It can be used to write games.
4. It is a type of machine instruction set.

Answer: Option 1, 2 and 3.

Solution: JavaScript, is an interpreted programming language that conforms to the ECMAScript specification and can be used for functional and event-driven programming and can also be used to write games. It is not a machine instruction set.

6] Consider the following statements and choose the correct option. [MCQ]

Statement 1: Javascript always requires a GUI browser to run.
Statement 2: Core Javascript provides direct file access in the browser and can directly call any system level function.

1. Both statements 1 and 2 are correct.
2. Both statements 1 and 2 are incorrect.
3. Statement 1 is correct but, statement 2 is incorrect.
4. Statement 2 is correct but, statement 1 is incorrect.

Answer: Option 2.

Solution: There is a server-side version of JS called node.js that runs purely without any GUI. Access of file in the browser is provided only through restricted APIs and is not part of core JS functionality.

7] Which of the following is used by JS to provide user interaction? [MCQ]

1. events
2. styles
3. functional programming
4. None of the above

Answer: Option 1.

Solution: Events are attached to mouse movements, clicks etc and can call JS functions.

8] Consider the following statements and choose the correct option. [MCQ]

Statement 1: Javascript is the only language that can be used for developing interactive web applications.
Statement 2: There are compilers to convert several languages to forms of JS that can run on existing browsers.

1. Both statements 1 and 2 are correct.
2. Both statements 1 and 2 are incorrect.

3. Statement 1 is correct but, statement 2 is incorrect.
4. Statement 2 is correct but, statement 1 is incorrect.

Answer: Option 4.

Solution: Javascript is not the only language that can be used for developing interactive web applications as some browsers may directly support other languages, and there are compilers to convert several languages to forms of JS that can run on existing browsers.

9] When creating web components, we want to keep the styles applied to a component separate from the rest of the page. This is accomplished by using the concept of_. [MCQ]

1. separation of concerns
2. shadow DOM
3. object oriented programming
4. None of the above

Answer: Option 2.

Solution: Others are generic concepts but do not help with restricting scope of styles.

10] The primary goal of introducing web components is to promote the idea of __. [MCQ]

1. code reusability
2. standardization
3. HTML5
4. All of the above

Answer: Option 1.

Solution: Part of the problem of components is lack of standardization, and though HTML5 is a requirement, components are not meant to popularize it.

11] Flask is __ [MCQ]

1. a framework for building JavaScript applications.
2. a framework for building Python based web applications.
3. a framework for designing web components.
4. All of the above

Answer: Option 2.

Solution: Flask focuses only on the use of Python for application logic. JS has to be added separately if required.

12] Consider the following statements and choose the correct option. [MCQ]

Statement 1: Frameworks like React cannot be used to design static HTML pages.
Statement 2: Use of JS with frameworks like React violates the principles of accessibility that are essential for the web.

1. Both statements 1 and 2 are correct.
2. Both statements 1 and 2 are incorrect.

3. Statement 1 is correct but, statement 2 is incorrect.

4. Statement 2 is correct but, statement 1 is incorrect.

Answer: Option 2.

Solution: It may not be very useful, but nothing prevents you from using only minimal React and not having any interactivity. By itself, a framework can be used in ways that are still accessible. It may be easier to write bad code that is not accessible in some ways, but that is not a limitation of the framework itself.