

Graded Questions with Solutions

1] Which of the following statements about SGML is/are correct? [MSQ: 1 point]

1. SGML is a language on which other markup schemes can be built.
2. The set of tags that can be used in an SGML document is fixed and standardized by ISO.
3. In SGML, tags can be defined for specific applications.
4. All versions of HTML are specific applications of SGML.

Answer: Option 1 and 3.

Solution: Markup schemes can be built on SGML as SGML applications. In SGML, tags can be defined for specific applications. HTML 2 to 4 were attempts at standardizing, but HTML5 has moved away from this.

2] Which of the following statements about XML is true? [MCQ: 2 points]

1. XML is a form of machine language and cannot be read by humans.
2. XML was designed to display data with focus on how data looks.
3. The XML language has no predefined tags.
4. XML cannot have attributes like HTML.

Answer: Option 3.

Solution: The XML markup is simple enough to read. XML was designed to carry data with focus on what data is and not how it looks. It does not have predefined tags but can have attributes just like that of HTML.

3] Which of the following are used to create web components? [MCQ: 2 points]

1. JS filesystem APIs
2. CSS shadow styles
3. HTML templates and slots
4. None of the above

Answer: Option 3.

Solution: JS customElement APIs and shadow DOM are needed.

4] Consider the following JavaScript code below. [MCQ: 3 points]

```
const para = document.querySelector('p');
para.addEventListener('click', updateName);

function updateName() {
  let name = prompt('Enter a new name');
  para.textContent = 'Player 1: ' + name;
}
```

What will be the output of above code?

1. It will output all the names of the players within the paragraph.
2. It will show a pop up which will replace the player name within the paragraph.

3. It will only shows a pop up which doesn't do anything functional.
4. None of the above

Answer: Option 2.

Solution: On executing the code, it will show a pop up which will replace the player name within the paragraph.

5] A custom element is created with the name `<my_button>` . What will the browser infer from its name? [MCQ: 2 points]

1. It adds a link to the HTML page.
2. It adds a button to the HTML form.
3. It displays an image of a button on the HTML page.
4. None of the above

Answer: Option 4.

Solution: There is nothing compulsory that the browser will infer the functionality of a tag by its button unless it is defined.

6] Which of the following statements is true? [MCQ: 3 points]

1. JavaScript is a subset of Java.
2. The Document Object Model can be manipulated only using JS.
3. JS by itself cannot be used to display anything on the screen, that can only be done with HTML and CSS.
4. JS can be used directly to draw with the canvas API.

Answer: Option 4.

Solution: In case of Java and JavaScript, there is very little in common except the name. JS can be used directly to draw with the canvas API. Now how do you invoke the Canvas API without HTML? This can still be done by some browsers that can directly invoke JS without needing HTML.

7] Consider the following statements and choose the correct option. [MCQ: 1 point]

Statement 1: XHTML allowed users to create and use arbitrary tags without any extra language support.

Statement 2: Implementation of tag functionality cannot be done purely in XHTML alone, something like JS is required.

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: Implementation of tag functionality in XHTML can be done with extra language support of something like JS.