HTML, CSS and JavaScript/TypeScript quiz

There are 3 parts to this quiz – HTML, CSS and JavaScript/TypeScript.

Number of questions: 25
Time: 25 – 30 minutes

Part 1. HTML

1. When a form is filled and submitted, what happens?
    a) The browser makes an HTTP request for a page and sends the user filled-in form data to the server
    b) The browser stores the user filled-in data on your system
    c) The browser makes an HTTP request for a page but does not send the user filled-in form data to the server
    d) The browser simply refreshes the page already loaded

2. Which tab in Chrome Developer Tools shows details of HTTP communication between the browser and the server?
    a) Elements
    b) Console
    c) Sources
    d) Network
    e) Application

3. How do we group a set of checkboxes / radio buttons (so that they are sent under the same query string parameter in URL / request body)?
    a) We give each one the same name
    b) We add each one to the same CSS class
    c) We give each one the same value
    d) We nest them within a div / fieldset

4. Which attribute of a form is used to specify the URL of resource to be fetched on form submit and to which form data is submitted.
    a) method
    b) enctype
    c) to
    d) action

5. Which of these attributes must be present on an input element so that its value gets submitted when the form in which it exists gets submitted?
    a) title
    b) id
    c) name
    d) required

Part 2. CSS

6. You would like to select all elements with class snippets that lie somewhere within a div with id examples. Which of these selects the desired elements correctly?
   a) div #examples.snippets { ... }
   b) div#examples.snippets { ... }
   c) div#examples .snippets { ... }
   d) div > #examples.snippets { ... }

7. Given the following styles for a div that exists within the body, what is the width of the div when the body is 1280px wide?
   ```
   div {
       width: 80%;
       max-width: 960px;
       min-width: 640px;
   }
   ```
   a) 640px
   b) 960px
   c) 1024px
   d) 1280px

8. You would like paragraphs to be invisible, and space allocated for them NOT be seen on the page. Which of these settings will help achieve this?
   a) p { opacity: 0; }
   b) p { opacity: 1; }
   c) p { visibility: hidden; }
   d) p { display: none; }

9. What is the specificity value of the following selector?
   ul#gallery > li > span.title span.logo
   a) (0, 1, 2, 4)
   b) (0, 1, 2, 3)
   c) (0, 0, 2, 4)
   d) (0, 1, 3, 3)

10. We would like to have some special styles applied for devices whose width is greater than or equal to 768px. Which of these media queries will help achieve this?
    a) @media print and (min-width: 768px) { ... }
    b) @media all and (max-width: 768px) { ... }
    c) @media screen and (width: 768px) { ... }
    d) @media all and (min-width: 768px) { ... }

11. Which of these statements is **TRUE** with respect to an element on which **display: inline-block** is set?
    a) By default, it will occupy only as much width as the content requires
    b) Any width/height setting in CSS will be ignored
    c) No other element can appear horizontally next to it
    d) Any padding set on it will be ignored

12. What does setting overflow: auto set on the parent of floated elements achieve?
    a) Ensure the floated children of an element fall within an element's box
    b) Forcibly add scrollbars to the element
    c) Hide content within an element
    d) Float elements to either left or right

Part 3. JavaScript and TypeScript

13. Which of these tests correctly if a variable obj is actually an object?
    a) typeof obj === 'object'
    b) typeof obj === 'object' || obj instanceof Object
    c) typeof obj === 'object' && obj !== null
    d) typeof obj === 'object' || typeof obj === null

14. Given the following snippet of code, what is logged in the console?
```
function f() {
   function g() {
      x = 1;
      console.log( x );
   }

   g();
   console.log( x );
}

f();
```
    a) 1
        An error is logged and script execution stops
    b) An error is logged (and script execution continues)
        1
    c) 1
        1
    d) An error is logged and script execution stops
    e) 1
        undefined

15. Which of these is a valid way to declare a function in JavaScript?
    a) function sum(a, b) { return a + b; }
    b) function sum(var a, var b) { return a + b; }
    c) var sum = function(a, b) => a + b;
    d) var sum = function(var a, var b) { return a + b; }

16. Given the following snippet of code, what is logged in the console when it is executed by the browser?

```
function f() {
   var g = function() {
      console.log( 'g called' );
   };

   return g;
}

var h = f()();
```

a) The code of the function g is logged
b) An error is thrown
c) g called
d) Nothing is logged

17. There is an element in the HTML document like so.
        `<input type="text" id="txt-name" />`
        Which of the following are valid ways to get hold of the DOM node for this element?
a) var node = document.getElementById('txt-name');
b) var node = document.querySelector('txt-name');
c) var node = document.getElementById('#txt-name');
d) var node = document.querySelectorAll('#txt-name');

18. What does the event object's preventDefault() method do?
a) Prevents default action by browser for the event if one exists.
b) Prevents event object from being passed to handler
c) Prevents bubbling of events

19. What is the output for the code snippet below?
```
function foo( x, …rest ) {
    console.log( rest );
}
foo( 1, 2, 3 );
```
a) [1, 2, 3]
b) 1 2 3
c) [2, 3]
d) 2 3

20. What is the output of the code snippet below?
```
let obj1 = { x : 100, y : 200 };
let obj2 = { x: 101, y: 201, z: 301, …obj1, y: 202, z: 302 };
console.log( obj2 );
```
a) { x: 100, y: 202, z: 302 }
b) { x: 101, y: 202, z: 302 }
c) { x: 101, y: 201, z: 301 }
d) { x: 100, y: 200, z: 302 }

21. You have exported a function *sum* as default export from a module called arithmetic. How will you import the same function into a variable called *add* in another module (which exists in the same folder as arithmetic module)?
a) import * as add from './arithmetic';
b) import sum as add from './arithmetic';
c) import { sum as add } from './arithmetic';
d) import add from './arithmetic';

22. What is the data type of variable x?

        let x;
        x = 1;

    a) number
    b) undefined
    c) void
    d) any

23. Which of these defines an array that can hold either only numbers or only strings as items?
    a) number | string[ ]
    b) (number | string)[ ]
    c) number[ ] | string[ ]
    d) Array<number | string>

24. Which of these when applied to a class property (data member) makes the property immutable?
    a) const
    b) readonly
    c) nowrite
    d) private

25. Which of these statements is FALSE?
    a) An interface can extend another interface
    b) A class can extend another class
    c) An interface can implement another interface
    d) A class can implement an interface