JavaScript Descriptive Questions

1. What is JavaScript? What are the characteristics of JavaScript?

JavaScript is an interpreted language that works on client browser to manipulate UI components. It has following characteristics:

- a) Client-side object-based scripting language
- b) Interpreted language
- c) Weakly typed or un-typed
- d) Semicolon (;) is optional

2. What is the function of return statement?

The return statement is used to specify the value that is returned from the function. So function that are go9ing to return a value must use the return statement. The example below returns the product of two numbers (a and b):

```
<script type="text/javascript">
    function product(a,b) {
        return a*b;
    }
</script>
```

3. What do you mean by local and global variable?

Variables declared within a block are local variable which have functional scope within a block or function. Outside of the function the local variables have no existence. From ES6, 'let' and 'const' keywords are used to declare local variables.

Global variables are declared out of any function or block. The scope of global variables are visible to any function. Their lifetime begins with declaration and ends with closing of the page.

4. What is the difference between while and do-while loop?

While loop first evaluates a condition and executes a block of code if the condition is true. For example –

```
while(variable < value) {
        code to execute.
}
The do...while loop is a variant of the while loop where the loop first executes the code block and then evaluates a condition. The loop will continue if the condition is true. For example, do {
    code to execute.
}
while(variable < value);</pre>
```

5. What is JavaScript event?

Events are actions that can be detected by JavaScript. HTML elements possess certain events that can trigger JavaScript code. Some of the events are –

- a) A mouse click.
- b) A web page or image loading.
- c) Hovering mouse over an element.
- d) Selecting an input element.
- e) Submitting HTML form
- f) Changing value of an input element.

6. What is array? How can we declare an array?

An array is a type of data which can contain more than one data values. There are three ways to define an array.

```
    a) var arr = new Array(3); // Regular array. The argument 3 is optional to control array size.
    arr.[0] = '1';
    arr.[1] = '2';
    arr.[2] = '3';
    b) var arr = new Array('1', '2', '3'); // Condensed array
    c) var arr = ['1', '2', '3']; // Literal array
```

7. What is the difference between "==" and "==="?

Equal operator (==) check the condition whether two numbers or string values are equal.

Strictly equal operator (===) used to comparable values are equal and the types of the comparable values are the same.

8. What is DOM? Write its properties.

The Document Object Model (DOM) is the model that describes how all HTML elements are related to the document object. In the JavaScript DOM the primary document is an HTML page. The document object contains the properties whose information is used by JavaScript.

The properties of DOM are attributes[], childNodes[], className, clientWidth, clientHeight, dir, firstChild, lastChild, id, innerHTML, lang, style, tagName, title etc.

9. What is history object? Write methods of it.

The history object contains the URLs visited by the user (within a browser window). It is a part of window object and is accessed through the window history property.

History object has a single property named length and three methods - back(), forward() and go().

10. What do you mean by cookies?

A cookie is a variable stored in client's computer. Each time the same computer requests a page with a browser, it will send the cookie too. With JavaScript, we can both create and retrieve cookie values. Cookies are small text data that store our session, and other small information. Cookies are stored for a session or certain period of time.