

JavaScript Assignment

- (1) JavaScript is a Programming language used primarily for creating interactive and dynamic content on websites.
- (2) The `isNaN` function in JavaScript is used to determine whether a value is NaN or not. It returns true if the value is NaN, indicating that the value is not a valid number. The function is commonly used to validate whether a ^{value} number is valid number before performing mathematical operations on it.
- (3) Negative infinity is a special value in JS that represents a number smaller than any other number, including negative numbers. It is typically the result of certain arithmetic operations, such as dividing a negative number by zero or subtracting infinity from a negative number.
- (4) JavaScript was developed by Netscape Communications Corporation.
- (5) Undeclared variables are those that have been used in code without being formally declared using the `var`, `let`, or `const` keywords. They may lead to unexpected behaviour and are considered to be global variables.

undefined Variable, on other hand, are variables that have been declared but have not assigned a value, or variables that have been accessed before they are assigned a value. In JavaScript, accessing an uninitialized variables results in the value undefined.

Q2) (6) `var Paragraph = document.createElement("p");
var text = document.createTextNode("Hello");
Paragraph.appendChild(text);
document.getElementById("Container").appendChild(Paragraph)`

Ans (7) ViewState stores Page-Specific state on the client side and is short-lived.
SessionState stores user-specific data on the server-side and persists across multiple request until the session ends.

Ans (8) The '===' operator in JS is known as the strict equality operator. It checks whether two values are equal in both sides values and types.

Ans (9) (a) changing style Directly

`document.getElementById("myElement").style.
color = "red";`

(b) changing class

`document.getElementById("myElement").
className = "newClassName";`

(c) document Toggle Class

`document.getElementById("myElement").classList.
toggle("active");`

Ans (10) (a) Reading a file

`const fs = require('fs');`

`fs.readFile('example.txt', 'utf8', (err, data) => {
 if (err) throw err;
 console.log(data);
});`

(b) Writing to a file

```
const fs = require('fs');
fs.writeFile('example.txt', 'Hello, world!', 'utf8',
(err) => {
    if (err) throw err;
    console.log('File written Successfully.').
3);
```

Ans II Looping Structures in JS :-
for, while, do-while

Ans 12 we can convert a string of any base to an integer in JS using the 'ParseInt()' function.

ex :-

```
Var binaryString = "1010";  
Var decimalNumber = ParseInt  
                           (binaryString, 2);  
console.log(decimalNumber);
```

Ans 13 The delete operator in JS used to remove property from an object. It can also be used to remove an element from an array

```
var obj = { a: 1, b: 2, c: 3 };  
delete obj.b;
```

```
var arr = [1, 2, 3, 4, 5];  
delete arr[2];
```

Ans 14 There are three types of POP-up boxes
Commonly used:

alert(C), "Conformed, or 'Prompt C'")

Ans 15

use of Void CO): Prevents link follow

Ans 16

In JS, we can force a Page to load another Page by using changing Value of the 'window.location.href' Property to the URL

ex :-

window.location.href = "https://www.example.com/nextpage.html";

Ans 17

main Disadvantage of using ~~forcing~~ innerHTML: -
Security risks, Potential for script injection

Ans. 18

Password field with show-hide functionality.

```
<input type="Password" id="PasswordField">
```

```
<input type="checkbox" id="showPassword"> show Password
```

```
var PasswordField = document.getElementById("PasswordField");
```

```
var showPasswordCheckbox = document.getElementById("showPassword");
```

```
showPasswordCheckbox.addEventListener("change",
```

```
function() {
```

```
    PasswordField.type = this.checked ? "text" :  
    "password";
```

```
});
```