***Assignment – 4***

***Web Designing [Module – JavaScript]***

**Q-1. What is JavaScript. How to use it?**

**Ans**.

JavaScript is a client-side scripting language which defines the behaviour of a webpage.

There are two ways to use JavaScript in a webpage:

1. Internal

* We can write the JS code within the <script> tag inside the <head> or the <body> part.

1. External

* We can integrate an external JS file using <script src = “script.js”>.

**Q-2. How many types of Variables in JavaScript?**

**Ans.**

There are 3 types of variables in JavaScript:

1. Var

* In this type, a variable can be defined as: var a = 10, where a is the variable\_name and the value assigned to it is 10.

Var type supports Declaration, Re-Declaration as well as Re-assignment of variable.

1. Let

* In this type, a variable can be defined as: let a = 10, where a is the name of variable and 10 is the assigned value.

Let supports Declaration and Re-Assignment but does not support Re-Declaration.

1. Constant

* In this type, a variable can be defined as: const a = 10, where a is the variable name and 10 is the assigned value.

Const is unique and does not support Re-declaration or Re-assignment.

The value is constant throughout.

**Q-3. Define a Data Types in JS?**

**Ans.**

In programming, data type is an important concept.

To be able to operate on variables, we need to know what type of data it is.

There are main 2 types of Data types :

1. Primitive
2. Non-Primitive
3. **Primitive data types**

There are further 7 types of primitive data types:

1. Number – include all the numbers, integers.
2. String - A string (or a text string) is a series of characters.
3. Boolean - Booleans can only have two values: true or false.
4. BigInt - All JavaScript numbers are stored in a 64-bit floating-point format.

JavaScript BigInt is a data type that can be used to store integer values that are too big to be represented by a normal JavaScript Number.

1. Undefined - In JavaScript, a variable without a value, has the value undefined. The type is also undefined.
2. Null
3. Symbols – Special characters are stored as symbols
4. **Non-Primitive data types**
5. Array –

Arrays are multiple values stored in a single variable.

JavaScript arrays are written with square brackets.

Array items are separated by commas.

a [car, bike, scooter]

1. Objects

JavaScript objects are written with curly braces {}.

Object properties are written as name:value pairs, separated by commas.

**Q – 4. Write a mul Function Which will Work Properly When invoked With Following Syntax.**

**Ans.**