**Techno India NJR Institute of Technology, Udaipur**

**Java Script Technology**

<span style="color:red">**Total Time: 1 Month**</span>

1. **Introduction to JavaScript**

   Introduction to Scripting
   JavaScript Characteristics
   JavaScript and Common Programming Concepts
   JavaScript Flavors and Versions
   Technologies Based on JavaScript
   Server-Side vs. Client-Side Applications
   Annotating Your Code with Comments
   Expanding the Role of JavaScript

2. **Working with Variables and Data in JavaScript**

   Using JavaScript to Communicate with the User
   Using Data More Than Once: Variables
   JavaScript Operators
   JavaScript Expressions
   JavaScript Alerts and Prompts
   Inline Scripting, Simple User Events and Basic Event Handlers
   JavaScript Keywords and Reserved Words

3. **Functions, Methods and Events in JavaScript**

   Introduction to Functions
   Defining a Function
   Calling a Function
   Methods as Functions
   Types of Functions
   User Events and JavaScript Event Handlers

4. **Debugging and Troubleshooting JavaScript**

   What Is Debugging?
   Tools for Debugging Code
   Testing Code in Various Browsers
   Debugging Logic Errors
   JavaScript and Mobile Devices

5. **Controlling Program Flow in JavaScript**

   Controlling Decisional Program Flow
   The if...else Statement
   The while Statement
   The do...while Statement

The for Statement
The break Statement
The continue Statement
The switch Statement

## 6. The JavaScript Document Object Model (DOM)

The JavaScript Document Object Model (DOM)
The window Object
The document Object
The image Object
The history Object
The location Object
The navigator Object
The Virtual DOM

## 7. JavaScript Language Objects

Introduction to JavaScript Language Objects
The String Object
Evaluating Strings
JavaScript Regular Expressions
The Array Object
The forEach Method
The Map Method
The Date Object
Setting and Extracting Time Information
The Math Object