1. **Create a HTML page to explain the use of various predefined functions in a**

**math object in java script**

<html>

<head>

<title>Math Functions</title>

</head>

<body>

<h1>MATH FUNCTIONS</h1>

<table>

<tr>

<td>ENTER A NUMBER</td>

<td></td>

<td><input type="text" name="in1" id="in1"></td>

</tr>

<tr>

<td>ENTER A DECIMAL NUMBER</td>

<td></td>

<td><input type="text" name="in2" id="in2"></td>

</tr>

<tr>

<td>ENTER A POWER</td>

<td></td>

<td><input type="text" name="in3" id="in3"></td>

</tr>

<tr>

<td>ENTER A DEGREE</td>

<td></td>

<td><input type="text" name="in4" id="in4"></td>

</tr>

<tr>

<td><button type="button" id="con" onclick="submit()">SUBMIT</button></td>

</tr>

</table><br>

<table>

<tr>

<td>Area of a circle using math.pi:</td>

<td><span id="out1"></span></td>

</tr>

<tr>

<td>Square root using math.sqrt:</td>

<td><span id="out2"></span></td>

</tr>

<tr>

<td>Rounded number using math.round:</td>

<td><span id="out3"></span></td>

</tr>

<tr>

<td>Rounded number using math.ceil:</td>

<td><span id="out4"></span></td>

</tr>

<tr>

<td>Rounded number using math.floor:</td>

<td><span id="out5"></span></td>

</tr>

<tr>

<td>Rounded number using math.trunc:</td>

<td><span id="out6"></span></td>

</tr>

<tr>

<td>Absolute value using math.abs:</td>

<td><span id="out7"></span></td>

</tr>

<tr>

<td>Find sign using math.sign:</td>

<td><span id="out8"></span></td>

</tr>

<tr>

<td>Power using math.pow:</td>

<td><span id="out9"></span></td>

</tr>

<tr>

<td>Sin using math.sin:</td>

<td><span id="out10"></span></td>

</tr>

<tr>

<td>Cos using math.cos:</td>

<td><span id="out11"></span></td>

</tr>

<tr>

<td>Max value using math.max:</td>

<td><span id="out12"></span></td>

</tr>

<tr>

<td>Min value using math.min:</td>

<td><span id="out13"></span></td>

</tr>

<tr>

<td>Random value using math.random:</td>

<td><span id="out14"></span></td>

</tr>

<tr>

<td>Log using math.log:</td>

<td><span id="out15"></span></td>

</tr>

</table>

<script>

function submit() {

var in1 = parseFloat(document.getElementById("in1").value);

var in2 = parseFloat(document.getElementById("in2").value);

var in3 = parseFloat(document.getElementById("in3").value);

var in4 = parseFloat(document.getElementById("in4").value);

document.getElementById("out1").innerHTML = Math.PI \* in1 \* in1;

document.getElementById("out2").innerHTML = Math.sqrt(in1);

document.getElementById("out3").innerHTML = Math.round(in2);

document.getElementById("out4").innerHTML = Math.ceil(in2);

document.getElementById("out5").innerHTML = Math.floor(in2);

document.getElementById("out6").innerHTML = Math.trunc(in2);

document.getElementById("out7").innerHTML = Math.abs(in2);

document.getElementById("out8").innerHTML = Math.sign(in2);

document.getElementById("out9").innerHTML = Math.pow(in1, in3);

document.getElementById("out10").innerHTML = Math.sin(in4 \* Math.PI / 180);

document.getElementById("out11").innerHTML = Math.cos(in4 \* Math.PI / 180);

document.getElementById("out12").innerHTML = Math.max(in1, in2);

document.getElementById("out13").innerHTML = Math.min(in1, in2);

document.getElementById("out14").innerHTML = Math.random();

document.getElementById("out15").innerHTML = Math.log(in1);

}

</script>

</body>

</html>

1. **Create a HTML page to explain the use of various predefined functions in a**

**string object in java script**

<html>

<head>

<title>string</title>

</head>

<body>

<center>

<h1>STRING FUNCTIONS</h1>

<table style=background-color:cadetblue>

<tr>

<td>Enter the string</td>

<td></td>

<td><input type=text name="in1" id="in1"></td>

</tr>

<tr>

<td>search the string</td>

<td></td>

<td><input type=text name="in2" id="in2"></td>

</tr>

<tr>

<td>slice the string</td>

<td></td>

<td><input type="number" name="in3" id="in3" placeholder="start"></td>

<td><input type="number" name="in4" id="in4" placeholder="stop"></td>

</tr>

<tr>

<td>Enter the substring to replace</td>

<td></td>

<td><input type=text name="in5" id="in5"></td>

</tr>

<tr>

<td>Enter the string to replace</td>

<td></td>

<td><input type=text name="in9" id="in9"></td>

</tr>

<tr>

<td>enter a string concat </td>

<td></td>

<td><input type=text name="in7" id="in7"></td>

</tr>

<tr>

<td>enter a string pad</td>

<td></td>

<td><input type=text name="in8" id="in8"></td>

</tr>

<tr>

<td><button type="submit" id="con" onclick="submit()">SUBMIT</button></td>

</tr>

</table>

<table align="center" width="50%" style="background-color:beige" >

<tr>

<td>length of string:</td>

<td><span id="out1"></span></td>

</tr>

<tr>

<td>index of string:</td>

<td><span id="out2"></span></td>

</tr>

<tr>

<td>slice the string:</td>

<td><span id="out3"></span></td>

</tr>

<tr>

<td>substrng of string:</td>

<td><span id="out4"></span></td>

</tr>

<tr>

<td>replace the string:</td>

<td><span id="out5"></span></td>

</tr>

<tr>

<td>uppercase of string:</td>

<td><span id="out6"></span></td>

</tr>

<tr>

<td>lowercase of string:</td>

<td><span id="out7"></span></td>

</tr>

<tr>

<td>concatenated of string:</td>

<td><span id="out8"></span></td>

</tr>

<tr>

<td>padding at beginning of string:</td>

<td><span id="out9"></span></td>

</tr>

<tr>

<td>padding at end of string:</td>

<td><span id="out10"></span></td>

</tr>

<tr>

<td>substring of string:</td>

<td><span id="out11"></span></td>

</tr>

</table>

</center>

<script>

function submit(){

var in1=document.getElementById("in1").value;

var in2=document.getElementById("in2").value;

var in3=document.getElementById("in3").value;

var in4=document.getElementById("in4").value;

var in5=document.getElementById("in5").value;

var in9=document.getElementById("in9").value;

var in7=document.getElementById("in7").value;

var in8=document.getElementById("in8").value;

out1=in1.length;

document.getElementById("out1").innerHTML=out1;

out2=in1.indexOf(in2);

document.getElementById("out2").innerHTML=out2;

out3=in1.slice(in3,in4);

document.getElementById("out3").innerHTML=out3;

out4=in1.substr(in5,in4);

document.getElementById("out4").innerHTML=out4;

out5=in1.replace(in5,in9);

document.getElementById("out5").innerHTML=out5;

out6=in1.toUpperCase();

document.getElementById("out6").innerHTML=out6;

out7=in1.toLowerCase();

document.getElementById("out7").innerHTML=out7;

out8=in1.concat(in7);

document.getElementById("out8").innerHTML=out8;

out9=in1.padStart(30,in8);

document.getElementById("out9").innerHTML=out9;

out10=in1.padEnd(30,in8);

document.getElementById("out10").innerHTML=out10;

out11=in1.substring(in3,in4);

document.getElementById("out11").innerHTML=out11;

}

</script>

</body>

</html>

1. **Generate the calendar using JavaScript code by getting the year from the user.**

<html>

<head>

<title>Calender</title>

<script>

function createCalendar(){

var year=Number(document.getElementById("year").value);

const months = [

"January",

"February",

"March",

"April",

"May",

"June",

"July",

"August",

"September",

"October",

"November",

"December",

];

for(let mon=0;mon<12;++mon)

{

let d=new Date(year,mon);

let table=

months[mon]+

"<table border='5'><tr><th>SUN</th><th>MON</th><th>TUE</th><th>WED</th><th>THU</th><th>FRI</th><th>SAT</th></tr><tr>";

for(let i=0; i < d.getDay(); i++){

table =table+"<td></td>";

}

while(d.getMonth()==mon){

table+="<td>" +d.getDate()+ "</td>";

if (d.getDay() == 6) {

table += "</tr><tr>";

}

d.setDate(d.getDate() + 1);

}

if(d.getDay!=0){

for(let i=d.getDay();i<=6;i++){

table+="<td></td>";

}

}

table+="</tr></table>";

document.getElementById(mon).innerHTML = table;

}

}

</script>

</head>

<body>

<table align="center" >

<tr>

<td><div id="0"></div></td>

<td><div id="1"></div></td>

<td><div id="2"></div></td>

<td><div id="3"></div></td>

</tr>

<tr>

<td><div id="4"></div></td>

<td><div id="5"></div></td>

<td><div id="6"></div></td>

<td><div id="7"></div></td>

</tr>

<tr>

<td><div id="8"></div></td>

<td><div id="9"></div></td>

<td><div id="10"></div></td>

<td><div id="11"></div></td>

</tr>

</table>

Enter an year <input type="text" id="year">

<button onClick="createCalendar();">OK</button>

</body>

</html>

**4. Evaluating JavaScript Event Handling for every click of a button to change the**

**background color of a HTML page.**

<html>

<head>

<title>Background change</title>

</head>

<style>

.container{

width:100%;

height:100%;

text-align: center;

display: grid;

}

#btn{

margin:auto;

padding:1em;

border:3px solid black;

outline:none;

}

</style>

<body>

<div class="container">

<input id="btn" type="button" value="Change background">

</div>

<script>

document.getElementById("btn").addEventListener("click", colorchange);

function colorchange() {

(Math.random() \* 10000000);

var color = '#' + Math.floor(Math.random() \* 10000000).toString(16);

document.body.style.background = color;

}

</script>

</body>

</html>

**5.Create a HTML page to show online exam using JavaScript.**

<html>

<head>

<title>

Online exam

</title>

<style>

label

{

font-size: 20px;

font-weight: bold;

}

h1

{

font-size: 40px;

}

input[type=radio]

{

padding:10px 30px;

border-radius: 8px;

margin-left: 50px;;

font-size: 15px;

}

input[type=submit]

{

background-color: red;

color:white;

padding:10px 30px;

border-radius: 8px;

font-size: 15px;

}

</style>

</head>

<body>

<div style="margin: 0px 350px 0px 350px;">

<center><h1>Online Test</h1></center>

<form name="test">

<label>QN1.Computer Moniter is also known as \_\_\_\_\_\_\_\_\_\_\_\_ .</label><br>

<input type="radio" name="qn1" value="qn1an1">DVU<br>

<input type="radio" name="qn1" value="qn1an2">UVD<br>

<input type="radio" name="qn1" id="an1" value="qn1an3">VDU<br>

<input type="radio" name="qn1" value="qn1an4">CCTV<br><hr>

<label>QN2.Which one of these stores more data than a DVD ?</label><br>

<input type="radio" name="qn2" value="qn2an1">CD Rom<br>

<input type="radio" name="qn2" value="qn2an2">Floppy<br>

<input type="radio" name="qn2" id="an2"value="qn2an3">Blue Ray Disk<br>

<input type="radio" name="qn2" value="qn2an4">Red Ray Disk<br><hr>

<label>QN3.Identify the device through which data and instructions are entered into a computer</label><br>

<input type="radio" name="qn3" value="qn3an1">Software<br>

<input type="radio" name="qn3" value="qn3an2">Output device<br>

<input type="radio" name="qn3" id="an3" value="qn3an3">Input device<br>

<input type="radio" name="qn3" value="qn3an4">Memory<br><hr>

<label>QN4.Which of the following statement is correct?</label><br>

<input type="radio" name="qn4" id="an4"value="qn4an1">1 KB = 1024 bytes<br>

<input type="radio" name="qn4" value="qn4an2">1 MB=2048 bytes<br>

<input type="radio" name="qn4" value="qn4an3">1 MB = 1000 kilobytes<br>

<input type="radio" name="qn4" value="qn4an4">1 KB = 1000 bytes<br><hr>

<label>QN5.USB is a device used to store data and it stands for \_\_\_\_\_\_\_\_\_\_\_ .</label><br>

<input type="radio" name="qn5" value="qn5an1">Unlimited Service Band<br>

<input type="radio" name="qn5" value="qn5an2">Unlimited Serial Bus<br>

<input type="radio" name="qn5" id="an5"value="qn5an3">Universal Serial Bus<br>

<input type="radio" name="qn5" value="qn5an4">Universal Service Bus<br><br>

<div style="margin-left: 350px;">

<input type="submit" onclick="result()" name="submit">

</div>

</form>

</div>

<script>

function result()

{

var score=0;

if(document.getElementById('an1').checked)

{

score+=1;

}

if(document.getElementById('an2').checked)

{

score+=1;

}

if(document.getElementById('an3').checked)

{

score+=1;

}

if(document.getElementById('an4').checked)

{

score+=1;

}

if(document.getElementById('an5').checked)

{

score+=1;

}

alert("Score is "+score);

}

</script>

</body>

</html>