

Practical 1

Aim:

a) Introduction to HTML.

HTML:

- HTML stands for HyperText Markup Language
- HTML is the standard markup language, which is used to create a web pages.
- It is the combination of Hypertext and Markup language.
- Hypertext defines the link between the web pages.
- A markup language is used to define the text document within tag which defines the structure of web pages.
- Different markup languages are: HTML, XHTML, XML, SGML etc.
- HTML5 is the 5th version of HTML.

Features of HTML:

- It is easy to learn and easy to use.
- It is platform-independent.
- Images, videos, and audio can be added to a web page.
- Hypertext can be added to the text.
- It is a markup language.

Advantages:

- HTML is used to build websites.
- It is supported by all browsers.
- It can be integrated with other languages like CSS, JavaScript, etc.

Disadvantages:

- HTML can only create static web pages. For dynamic web pages, other languages have to be used.
- A large amount of code has to be written to create a simple web page.
- The security feature is not good.

b) Write a HTML program to create Hello World Program. [Use <html>, <body>, <title>, comment <!-- --> tags.]

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO1</title>
</head>
<body>
  <!-- This is a hello world program -->
  Hello World
</body>
</html>
```

Practical 2

**Aim: Write a HTML code to demonstrate use of following text formatting tags: <i>, , <u>, <sup>, <sub>, <h1> to <h6>, <p>, <hr>,
, <div>, .**

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO2</title>
</head>
<body>
  <i>This is italics tag</i><br>
  <b>This is bold tag</b><br>
  <u>This is underline tag</u><br>
  <sup>This is sup tag</sup><br>
  <sub>This is sub tag</sub><br>
  <h1>This is heading tag</h1>
  <h2>This is heading tag</h2>
  <h3>This is heading tag</h3>
  <h4>This is heading tag</h4>
  <h5>This is heading tag</h5>
  <h6>This is heading tag</h6>
  <p>This is Paragraph tag.</p><br>
  <hr>
  <div>
    This is a division tag
  </div>
  <span>This is a text in span</span>
</body>
</html>
```

Practical 3

Aim: Write a HTML code to create ordered list, unordered list and definition list.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO3</title>
</head>
<body>
  <h3>Ordered list</h3>
  <ol>
    <li>Item-1</li>
    <li>Item-2</li>
    <li>Item-3</li>
  </ol>
  <h3>Unordered list</h3>
  <ul>
    <li>Item-1</li>
    <li>Item-2</li>
    <li>Item-3</li>
  </ul>
  <h3>Defination list</h3>
  <dl>
    <dt>Item-heading</dt>
    <dd>Item-1</dd>
  </dl>
</body>
</html>
```

Practical 4

Aim: Write a HTML code demonstrates use of images, hyperlinks and background attributes.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO4</title>
</head>
<body background="https://picsum.photos/2000">
  
  <br><br>
  <a href="http://utu.ac.in">UKA TARSADIA UNIVERSITY</a>
</body>
</html>
```

Practical 5

Aim: Write a HTML code to create a time table of your class using Table tags.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO5</title>
  <style>
    *{
      box-sizing: border-box;
      text-justify: auto;
    }
    body{
      background: rgb(250, 228, 232);
    }
    table{
      width: 60vw;
      border-radius: 12px;
    }
    table,tr,td,th{
      border: 3px solid black;
      border-radius: 12px;
      border-collapse: collapse;
      text-align: center;
      padding: 0.5%;
      margin: auto;
    }
    table,tr,th,td{
      background: rgb(180, 241, 180);
    }
    .heading{
      background: rgb(252, 252, 143);
    }
    .below{
      margin: 50px auto;
      width: 60%;
    }
    .item{
```

```

margin: 5px auto;
padding: 2% 2% 2% 10%;
}
#teacher{
float: left;
width: 47%;
}
#student{
float: left;
width: 47%;
}
</style>
</head>
<body>
<div class="content">
<table class="timetable">
<th colspan="9" class="heading"> CS 2 TIME TABLE</th>
<tr>
<th class="heading">Days</th>
<th class="heading">8:30-9:30</th>
<th class="heading">9:30-10:30</th>
<th class="heading">10:30-10:45</th>
<th class="heading">10:45-11:45</th>
<th class="heading">11:45-12:45</th>
<th class="heading">11:45-12:45</th>
<th class="heading">1:30-2:30</th>
<th class="heading">2:30-3:30</th>
</tr>
<tr>
<th class="heading">Monday</th>
<td>Calculus<br>
(HSP)
</td>
<td>ES<br>
(KS)
</td>
<td rowspan="6" class="heading">Lunch<br>Break</td>
<td>WD<br>
(JT)
</td>
<td>ES<br>
(KS)
</td>
<td rowspan="6" class="heading">Refreshment Break</td>

```

```

        <td colspan="2">
            PP<br>
            (VDB)
        </td>
    </tr>
    <tr>
        <th class="heading">Tuesday</th>
        <td>Calculus
            (HSP)
        </td>
        <td>DLD<br>
            (JAP)
        </td>
        <td colspan="2">
            B1_DLD(JAP)<br>B2_ED(KS)
        </td>
        <td colspan="2">
            PP<br>
            (VDB)
        </td>
    </tr>
    <tr>
        <th class="heading">Wednesday</th>
        <td>Calculus<br>(HSP)</td>
        <td>
            PP<br>
            (VDB)
        </td>
        <td>DLD<br>
            (JAP)
        </td>
        <td>MOOC</td>
        <td colspan="2">
            B1_DLD(JAP)<br>B2_ED(KS)
        </td>
    </tr>
    <tr>
        <th class="heading">Thursday</th>
        <td>MOOC</td>
        <td>ES<br>(KS)</td>
        <td colspan="2">
            PP<br>
            (VDB)
        </td>
    </tr>

```



```

        <td colspan="2">WD<br>(AJD)</td>
    </tr>
    <tr>
        <th class="heading">Friday</th>
        <td colspan="2">NL<br>(AJD)</td>
        <td colspan="2">ED<br>(KS)</td>
        <td>WD<br>(JT)</td>
        <td>Library</td>
    </tr>
    <tr>
        <th class="heading">Saturday</th>
        <td colspan="2">WD<br>(JT)</td>
        <td>WD<br>(JT)</td>
        <td>DLD
            (JAP)
        </td>
        <td colspan="2">Sport/Club Activity</td>
    </tr>
</table>
<div class="below">
    <div class="item" id="teacher" >
        <p>
            ES - Environment Studies<br>
            WD - Web Designing<br>
            PP - Python Programming<br>
            NL - Networking Laboratory<br>
            ED - Engineering Drafting<br>
            DLD - Digital Logic Design<br>
            Calculus
        </p>
    </div>
    <div class="item" id="subject" >
        <p>
            KS - Mr. Keyur surti<br>
            AJD - Ms. Ankita J. Desai
            JT - ms. Jinal Tandel<br>
            VDB - Mr. Vishwajit D. Bakrola
            JAP - Mr. Jay A. Patel
            HSP - Mr. Hardik S. Patel
        </p>
    </div>
</div>
</div>
</body> </html>

```

Practical 6

Aim: Write a HTML code to create a form using the following tags: <form>, <input>(text, password, checkbox, radio, submit, button, reset).

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO6</title>
</head>
<body>
  <h2>This is a simple form</h2>
  <form action="">
    <label for="text">Name</label>
    <input type="text" name="text" id="text">
    <br>
    <label for="password">password</label>
    <input type="password" name="password" id="password">
    <br>
    <input type="checkbox" name="checkbox" id="checkbox">
    <label for="checkbox">Lorem ipsum dolor sit amet consectetur adipisicing elit. Dolor,
quia!</label><br>
    <label for="radio"></label>
    <input type="radio" name="radio" id="male"><label for="male">Male</label>
    <input type="radio" name="radio" id="female"><label for="female">Female</label>
    <br>
    <input type="submit" name="submit" id="submit">
    <input type="reset" name="reset" id="reset">
  </form>
</body>
</html>
```

Practical 7

Aim: Write a HTML code to create a form using the following tags: <textarea>, <select>, <option>, <fieldset>, <legend>, <button>.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO7</title>
</head>
<body>
  <h3>Simple Form</h3>
  <form action="">
    <fieldset>
      <legend>This is a form</legend>
      <label for="feedback">Feedback :</label><br>
      <textarea name="" id="feedback" cols="30" rows="10"></textarea><br>
      <select name="why" id="why">
        <option value="none">None</option>
        <option value="male">male</option>
        <option value="female">female</option>
      </select>
      <button>SUBMIT</button>
    </fieldset>
  </form>
</body>
</html>
```

Practical 8

Aim: Write internal and inline CSS code to design your product page using the following selector: body, h1, p, hr, img. Apply following properties: color, font, text, background, border.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO8</title>
</head>
<body>
  <div class="container">
    <div class="left">
      
      <div class="left-buttons">
        <button id="cart">Add to cart</button>
        <button id="buy">Buy now</button>
      </div>
    </div>
    <div class="right">
      <h3>GoPro Max Rexhargable battery Sports abd action camera (Black)</h3>
      <br><br><br>
      <h3>44,999rs <strike>49,999</strike></h3>
      <p>
        <h4>Availanle Offers</h4>
        <ul>
          <li><b>Bank Offer</b>&nbsp;10% off on ICIC Credit Cards</li>
          <li><b>Bank Offer</b>&nbsp;15% Cashback on using GoPro Payment
Method</li>
          <li><b>Partner Offer</b>&nbsp;Flat 10% off on UPI payment through
Paytm</li>
          <li><b>Partner Offer</b>&nbsp;GST Invoice Available! Save Upto 28% for
bussiness purpose.</li>
        </ul>
      </p>
    </div>
  </div>
  <div class="more-details">
    <div>
```

```
<h1>Specification</h1>
</div>
<div>
  <h4>In the Box</h4>
  <p>Camera, Charger, Battery, Manual</p>
</div>
<div>
  <table>
    <tr>
      <td colspan="2"><h3>General</h3></td>
    </tr>
    <tr>
      <th>Brand</th>
      <td>Go Pro</td>
    </tr>
    <tr>
      <th>Ports</th>
      <td>Type C, Type A</td>
    </tr>
    <tr>
      <th>Display Type</th>
      <td>LCD</td>
    </tr>
    <tr>
      <th>Display Resolution</th>
      <td>1080p</td>
    </tr>
    <tr>
      <th>Battey Type</th>
      <td>Rechargable Lithium Ion Battery</td>
    </tr>
  </table>
</div>
</div>
</body>
</html>
```

Practical 9

Aim: Write a CSS code to design your product page using class, id and pseudo class selectors. Apply following properties: color, font, text, background, border, margin, padding, liststyle and position using concept of class(.) and id(#), pseudo class selector, internal and external CSS.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO9</title>
  <style>
    *{
      box-sizing: border-box;
      margin: 0px 0px;
      padding: 0px 0px;
    }
    .navbar{
      margin: 10px 10px;
      display: flex;
    }
    .navbar ul{
      margin-left: 80%;
      overflow: hidden;
    }
    .navbar ul li{
      display: flex;
      justify-content: center;
      list-style: none;
      float: right;
    }
    .navbar img{
      width: 100px;
      height: 35px;
    }
    .navbar ul li a{
      padding: 5px;
      text-decoration: none;
    }
  </style>
</head>
<body>
```

```
li.right-nav{
  float: right;
}
li a#home{
  padding: 5px;
  background: orange;
}
li a#home:hover{
  background: yellow;
}
.container{
  display: flex;
}
.container div{
  margin-top: 30px;
  width: 50%;
}
.left{
  text-align: center;
  align-items: center;
}
.left .left-buttons{
  margin-top: 10px;
  width: 80%;
  display: flex;
  margin-left: 70px;
  justify-content: center;
}
.left img{
  border: 3px solid rgb(191, 191, 191);
  padding: 20px;
  width: 80%;
}
.left button{
  text-transform: uppercase;
  font-weight: bold;
  margin: 2px;
  width: 100%;
  padding: 5px;
  font-size: 15px;
}
#cart{
  background: yellow;
}
```

```
#buy{
  background: red;
}
button:hover{
  color: rgb(191, 171, 167);
}
.right h3{
  margin: 30px 0px;
}
.right h4{
  margin: 20px 0px;
}
.right div.offers{
  margin-top: 60px;
  text-align: justify;
  width: 700px;
}
.offers ul li{
  list-style: square url("svg/tag.svg");
}
.more-details{
  margin-top: 20px;
}
.more-details div{
  border: 5px double black;
  border-collapse: collapse;
  text-align: left;
  padding: 10px;
}
#Original_Price{
  margin-left: 20px;
  font-size: 15px;
  text-decoration: line-through
}
#item_amount{
  font-weight: 100;
  color: red;
}
</style>
</head>
<body>
<div class="navbar">
  
  <ul>
```



```

    <li class="right-nav"><a id="home">Home</a></li>
    <li class="right-nav"><a>About</a></li>
    <li class="right-nav"><a>Contact</a></li>
  </ul>
</div>
<div class="container">
  <div class="left">
    
    <div class="left-buttons">
      <button id="cart">Add to cart</button>
      <button id="buy">Buy now</button>
    </div>
  </div>
  <div class="right">
    <h3>GoPro Max Rexhargable battery Sports abd action camera (Black)</h3>
    <h3>44,999rs <span id="Original_Price">49,999</span><br><span
id="item_amount">hurry only 15 left</span></h3>
    <div class="offers">
      <h4>Available Offers</h4>
      <ul>
        <li><b>Bank Offer</b>&nbsp;10% off on ICIC Credit Cards</li>
        <li><b>Bank Offer</b>&nbsp;15% Cashback on using GoPro Payment
Method</li>
        <li><b>Partner Offer</b>&nbsp;Flat 10% off on UPI payment through
Paytm</li>
        <li><b>Partner Offer</b>&nbsp;GST Invoice Available! Save Upto 28% for
bussiness purpose.</li>
      </ul>
    </div>
  </div>
</div>
<div class="more-details">
  <div>
    <h1>Specification</h1>
  </div>
  <div>
    <h4>In the Box</h4>
    <p>Camera, Charger, Battery, Manual</p>
  </div>
  <div>
    <table>
      <tr>
        <td colspan="2"><h3>General</h3></td>
      </tr>
    </table>
  </div>

```

```
<tr>
  <th>Brand</th>
  <td>Go Pro</td>
</tr>
<tr>
  <th>Ports</th>
  <td>Type C, Type A</td>
</tr>
<tr>
  <th>Display Type</th>
  <td>LCD</td>
</tr>
<tr>
  <th>Display Resolution</th>
  <td>1080p</td>
</tr>
<tr>
  <th>Battey Type</th>
  <td>Rechargable Lithium Ion Battery</td>
</tr>
</table>
</div>
</div>
</body>
</html>
```

Practical 10

Aim: Create responsive HTML web pages using Bootstrap4 Framework.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>PO10</title>
    <link rel="stylesheet"
      href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
    <script
      src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
    <script
      src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
  </head>
  <body>
    <nav class="navbar navbar-default" style="padding-top: 20px;">
      <div class="container-fluid">
        <div class="navbar-header">
          <a class="navbar-brand" href="#">WebSiteName</a>
        </div>
        <ul class="nav navbar-nav">
          <li class="active"><a href="#">Home</a></li>
          <li><a href="#">Page 1</a></li>
          <li><a href="#">Page 2</a></li>
          <li><a href="#">Page 3</a></li>
        </ul>
      </div>
    </nav>
    <div class="container-fluid" style="border: solid; padding: 10px;">
      <div class="row" style="border: solid; padding: 10px;">
        <div class="col-sm-6" style="border: solid;">
          <h3>Lorem ipsum dolor sit, amet consectetur adipisicing
            elit. Veniam atque, modi dicta repudiandae quos deleniti
            numquam aperiam vitae beatae laudantium at a labore qui
            quasi, ratione eaque fugit maxime reiciendis.</h3>
        </div>
        <div class="col-sm-6" style="border: solid;">
          <h3>Lorem, ipsum dolor sit amet consectetur adipisicing
            elit. Laudantium temporibus tenetur ea maxime. Labore id
```

dignissimos quae, veniam eveniet, quo inventore
corporis, culpa tenetur voluptate odit. Quia beatae
fugit voluptate.</h3>

</div>

</div>

<div class="row" style="text-align: center; padding: 10px;">

<div class="col-sm-4">

</div>

<div class="col-sm-4">

</div>

<div class="col-sm-4">

</div>

</div>

</div>

</body>

</html>

Practical 11

Aim: Write a CSS code for applying animation, shadows, text effects and gradients to design a web page.

HTML CODE:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<title>PO11</title>
```

```
<style>
```

```
body{
```

```
    background-image: linear-gradient(to right, darkblue, blue, skyblue, white);
```

```
}
```

```
h1 {
```

```
    text-shadow: 2px 2px 4px #000000;
```

```
    font-size: 400%;
```

```
}
```

```
div {
```

```
    position: relative;
```

```
    text-align: center;
```

```
    animation-name: example;
```

```
    animation-duration: 4s;
```

```
    animation-iteration-count: infinite;
```

```
}
```

```
@keyframes example {
```

```
    0% {
```

```
        color: white;
```

```
        left: 0px;
```

```
        top: 0px;
    }
    25% {
        color: skyblue;
        left: 200px;
        top: 0px;
    }
    50% {
        color: darkblue;
        left: 200px;
        top: 200px;
    }
    75% {
        color: skyblue;
        left: 0px;
        top: 200px;
    }
    100% {
        color: white;
        left: 0px;
        top: 0px;}
    }
</style>
</head>
<body>
    <div>
        <h1>CSS ANIMATION</h1>
    </div>
</body>
</html>
```

Practical 12

Aim: Write a JavaScript to show alert, confirm and prompt boxes.

HTML CODE:

```
<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>PO12</title>

    <style>

      body{

        text-align: center;

      }

      button{

        height: 50px;

        width: 100px;

      }

    </style>

  </head>

  <body>

    <h2>JavaScript Alert Confirm & prompt box</h2>

    <button onclick="myFunction()">Alert</button><br><br>

    <button onclick="myFunction1()">Prompt</button><br><br>

    <button onclick="myFunction2()">Confirm</button><br><br>

    <script>

      function myFunction() {

        alert("I am an alert box!");

      }

    </script>

  </body>

</html>
```

```
function myFunction1() {  
    prompt("I am an prompt box!");  
}  
function myFunction2() {  
    confirm("I am an confirm box!");  
}  
</script>  
</body>  
</html>
```


Practical 13

Aim: Write a JavaScript function to find a maximum of three numbers taken from the user using if-else and print it.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>PO13</title>
    <style>
      @import url('https://fonts.googleapis.com/css2?family=Koulen&display=swap');
      *{
        box-sizing: border-box;
        font-size: 20px;
        font-family: 'Koulen', cursive;
      }
      #one{
        display: flex;
        justify-content: center;
        margin-top: 300px;
      }
      div{
        background: linear-gradient(to bottom,purple,skyblue);
        display: block;
        width: 500px;
        margin: auto;
        border-radius: 12px;
        padding: 30px;
```

```
}  
input[type=number]::-webkit-inner-spin-button,  
input[type=number]::-webkit-outer-spin-button {  
    -webkit-appearance: none;  
    margin: 0;  
}  
.NumberInput{  
    width: 100%;  
    text-align: right;  
    text-transform: uppercase;  
    border: 2px solid green;  
    height: 40px;  
    margin: 10px 0px;  
    padding: 10px;  
    border-radius: 8px;  
}  
td{  
    color: white;  
}  
button{  
    background: linear-gradient(to left, purple,skyblue,white);  
    color: black;  
    font-size: 25px;  
    font-weight: 400;  
    border-radius: 8px;  
    margin-top: 10px;  
}  
p{  
    color: red;  
    font-size: 20px;
```

```
    }  
    </style>  
</head>  
<body>  
    <div id="one">  
        <div>  
            <table>  
                <tr>  
                    <td>First Number :</td>  
                    <td> <input type="number" name="a" id="first" placeholder="Enter first  
number" class="NumberInput" /> </td>  
                </tr>  
                <tr>  
                    <td>Second Number :</td>  
                    <td> <input type="number" name="b" id="second" placeholder="Enter  
second number" class="NumberInput" /> </td>  
                </tr>  
                <tr>  
                    <td>Third Number :</td>  
                    <td> <input type="number" name="c" id="third" placeholder="Enter third  
number" class="NumberInput" /> </td>  
                </tr>  
                <tr style="text-align: center;">  
                    <td colspan="2"> <button onclick="biggest()">CHECK</button> </td>  
                </tr>  
            </table>  
            <p id="num"></p>  
        </div>  
    </div>  
    <script type="text/javascript">  
        function biggest()
```

```
{
var num1,num2,num3;
num1 = parseInt(document.getElementById ("first").value);
num2 = parseInt(document.getElementById ("second").value);
num3 = parseInt(document.getElementById ("third").value);
if(num1 > num2 && num1 > num3)
{
    document.getElementById ("num").innerHTML = num1+" is the biggest number";
}
else
if(num2 > num3 && num2 > num1)
{
    document.getElementById ("num").innerHTML = num2+" is the biggest number";
}
else
{
    document.getElementById ("num").innerHTML = num3+"is the biggest number";
}
}
</script>
</body>
</html>
```

Practical 14

Aim: Print date and time on click of a button using inner HTML in JavaScript.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO14</title>
  <style>
    button{
      height: 50px;
      width: 100px;
    }
    body{
      text-align: center;
    }
    p{
      font-size: 50px;
    }
  </style>
</head>
<body>
  <h1>Click to get Date and Time</h1>
  <button type="button" onclick="time()">Click here.</button>
  <p id="date_time_button"></p>
  <script>
    function time(){
```

```
        document.getElementById('date_time_button').innerHTML = Date()
    }
</script>
</body>
</html>
```

Practical 15

Aim: Write a HTML/JavaScript code to create a simple calculator.

HTML CODE:

```
<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>PO15</title>

    <style>

      .calculator {

        padding: 10px;

        border-radius: 1em;

        height: 380px;

        width: 400px;

        margin: auto;

        background: radial-gradient(white,orange,red,blue,purple);

        box-shadow: rgba(0, 0, 0, 0.19) 0px 10px 20px, rgba(0, 0, 0, 0.23) 0px 6px 6px;

      }

      .display-box {

        font-family: 'Orbitron', sans-serif;

        background-color: white;

        border: solid rgb(240, 128, 128) 0.5px;

        color: black;

        border-radius: 2px;

        width: 100%;

        height: 65%;

        font-size: 20px;
```

```
border-top-left-radius: 12px;
border-bottom-left-radius: 12px;
}
.button {
  font-family: 'Orbitron', sans-serif;
  background-color: #472b33;
  color: white;
  border: solid rgb(240, 185, 185) 0.5px;
  width: 100%;
  border-radius: 12px;
  height: 70%;
  outline: none;
  font-size: 20px;
}
.button:hover{
  background-color: #440254;
}
.button:active {
  background: #e5e5e5;
  -webkit-box-shadow: inset 0px 0px 5px #c1c1c1;
  -moz-box-shadow: inset 0px 0px 5px #c1c1c1;
  box-shadow: inset 0px 0px 5px #c1c1c1;
}
</style>
</head>
<body>
<table class="calculator">
  <tr>
    <td colspan="3"> <input class="display-box" type="text"
      id="result" disabled /> </td>
```



```
<td> <input class="button" type="button" value="C"
      onclick="clearScreen()"
      style="background-color: #85284d;border-top-left-radius:
      0px;border-bottom-left-radius: 0px" /> </td>
</tr>
<tr>
  <td> <input class="button" type="button" value="1"
        onclick="display('1')" /> </td>
  <td> <input class="button" type="button" value="2"
        onclick="display('2')" /> </td>
  <td> <input class="button" type="button" value="3"
        onclick="display('3')" /> </td>
  <td> <input class="button" type="button" value="/"
        onclick="display('/')" /> </td>
</tr>
<tr>
  <td> <input class="button" type="button" value="4"
        onclick="display('4')" /> </td>
  <td> <input class="button" type="button" value="5"
        onclick="display('5')" /> </td>
  <td> <input class="button" type="button" value="6"
        onclick="display('6')" /> </td>
  <td> <input class="button" type="button" value="-"
        onclick="display('-')" /> </td>
</tr>
<tr>
  <td> <input class="button" type="button" value="7"
        onclick="display('7')" /> </td>
  <td> <input class="button" type="button" value="8"
        onclick="display('8')" /> </td>
```

```

        <td> <input class="button" type="button" value="9" onclick="display('9')" />
    </td>

    <td> <input class="button" type="button" value="+" onclick="display('+)" />
    </td>

</tr>

<tr>

    <td> <input class="button" type="button" value="."
        onclick="display('.')" /> </td>

    <td> <input class="button" type="button" value="0"
        onclick="display('0')" /> </td>

    <td> <input class="button" type="button" value="=" onclick="calculate()"
        style="background-color: #440244;" /> </td>

    <td> <input class="button" type="button" value="*"
        onclick="display('*)" /> </td>

</tr>

</table>

<script>
function clearScreen() {
    document.getElementById("result").value = "";
}
// This function display values
function display(value) {
    document.getElementById("result").value += value;
}
// This function evaluates the expression and return result
function calculate() {
    var p = document.getElementById("result").value;
    var q = eval(p);
    document.getElementById("result").value = q;
}
</script></body></html>

```

Practical 16

Aim: Write JavaScript to validate book issue form.

HTML CODE :

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO16</title>
  <style>
    body {
      font-family: Calibri;
    }
    input[type=number]::-webkit-inner-spin-button,
      input[type=number]::-webkit-outer-spin-button {
        -webkit-appearance: none;
        margin: 0;
      }
    input[type=text],
    input[type=email],
    input[type=textarea],
    input[type=number],
    select {
      width: 100%;
      padding: 12px 20px;
      margin: 8px 0;
      display: inline-block;
      border: 1px solid #ccc;
      border-radius: 4px;
      box-sizing: border-box;
    }
    input[type=submit],
    input[type=reset] {
      width: 100%;
      background-color: hotpink;
      color: white;
      padding: 14px 20px;
      margin: 8px 0;
      border: none;
      border-radius: 4px;
```

```
        cursor: pointer;
    }
    input[type=submit]:hover,
    input[type=reset]:hover{
        opacity: 0.8;
        color: black;
    }
    form {
        text-align: center;
        font-family: Calibri;
        font-size: 20px;
        border: 3px solid black;
        width: 600px;
        margin: 20px auto;
    }
    td {
        padding: 10px;
    }
    td:first-child {
        text-align: right;
        font-weight: bold;
    }
    td:last-child {
        text-align: left;
    }
    h1 {
        text-align: center;
    }
</style>
</head>
<body>
<h1>Validate book issue form</h1>
<hr>
<form method="" action="" name="reg_form" onsubmit="return validate()">
    <table>
        <tr>
            <td><label>First Name: </label></td>
            <td>
                <input type="text" name="fname" placeholder="First Name">
            </td>
        </tr>
        <tr>
            <td><label>Last Name: </label></td>
            <td>
```

```

        <input type="text" name="lname" placeholder="Last Name">
    </td>
</tr>
<tr>
    <td><label>Address: </label></td>
    <td>
        <input type="textarea" size="50" name="address" placeholder="Address">
    </td>
</tr>
<tr>
    <td><label>Gender: </label></td>
    <td>
        <input type="radio" name="gender" value="male">Male
        <input type="radio" name="gender" value="femele">Female
    </td>
</tr>
<tr>
    <td><label>Email Id: </label></td>
    <td>
        <input type="email" name="email" placeholder="example@gmail.com">
    </td>
</tr>
<tr>
    <td><label>Mobile: </label></td>
    <td>
        <input type="number" name="mobile">
    </td>
</tr>
<tr>
    <td><label>BOOKS: </label></td>
    <td>
        <select name="Books">
            <option value="select Books">select Books</option>
            <option value="HTML">HTML</option>
            <option value="CSS">CSS</option>
            <option value="JavaScript">JAVASCRIPT</option>
            <option value="Java">JAVA</option>
        </select>
    </td>
</tr>
<tr>
    <td>
    </td>
    <td>
    </td>
</tr>

```

```
<td>
    <input type="submit" name="submit" value="Submit">
    <input type="reset" name="reset" value="Reset">
</td>
</tr>
</table>
</form>
<script>
function validate() {
    var fname = document.reg_form.fname;
    var lname = document.reg_form.lname;
    var address = document.reg_form.address;
    var gender = document.reg_form.gender;
    var email = document.reg_form.email;
    var mobile = document.reg_form.mobile;
    var Books = document.reg_form.Books;

    if (fname.value.length <= 0) {
        alert("Name is required");
        return false;
    }
    if (lname.value.length <= 0) {
        alert("Last Name is required");
        return false;
    }
    if (address.value.length <= 0) {
        alert("Address is required");
        return false;
    }
    if (gender.value.length <= 0) {
        alert("Gender is required");
        return false;
    }
    if (email.value.length <= 0) {
        alert("Email Id is required");
        return false;
    }
    if (mobile.value.length <= 0) {
        alert("Mobile number is required");
        return false;
    }
    if (Books.value == "select course") {
        alert("Books is required");
        return false;
    }
}
```

```
    }  
    return false;  
  }  
</script>  
</body>  
</html>
```

Practical 17

Aim: Write a code to implement a dynamic web page for adding and deleting elements.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>PO17</title>
    <style>
      *{
        font-size: 25px;
      }
      h1,
      h2 {
        color: hotpink;
        display: flex;
        justify-content: center;
      }

      #mybutton {
        display: block;
        margin: 0 auto;
      }

      #innerdiv {
        display: flex;
        flex-direction: column;
        justify-content: center;
        align-items: center;
      }

      #myList {
        align-content: center;
      }
      #deldiv{
        display: block;
        width: 900px;
        align-items: center;
        text-align: center;
      }
```



```

    }
    li{
        list-style: none;
    }
    button{
        font-weight: 900;
        border-radius: 8px;
    }
    button:hover{
        opacity: 0.7;;
    }
</style>
</head>
<body>
    <h1>
        Saurabh Yadav<br>
    </h1>
    <div id="innerdiv"></div>
    <h2>click on "click me" to add element</h2>
    <button id="mybutton">
        click me
    </button><b><br></b>
    <div id="deldiv">
        <h3>Elemet will delete one-by-one after clicking on "Delete" button</h3>
        <ul id="myList">
            <li>Coffee</li>
            <li>Tea</li>
            <li>Milk</li>
        </ul>
        <button onclick="myFunction()">Delete</button>
    </div>
    <script>
    document.getElementById("mybutton").
        addEventListener("click", function () {
            document.getElementById("innerdiv").
                innerHTML = "<h3>This is a Added element</h3>";
        });
    function myFunction() {
        const list = document.getElementById("myList");
        list.removeChild(list.firstElementChild);
    }
    </script>
</body>
</html>

```

Practical 18

Aim: Write a JavaScript program which initializes jQuery and accesses various properties of html tags using jQuery methods.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>PO18</title>
    <style>
      p {
        font-size: 20px;
        color: red;
      }
      body {
        text-align: center;
      }
      #panel,
      #flip {
        padding: 5px;
        text-align: center;
        background-color: #e5eccc;
        border: solid 1px #c3c3c3;
      }
      #panel {
        padding: 50px;
        display: none;
      }
      span{
        display: block;
        margin: 0px 20px;
      }
    </style>
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
  </head>
  <body>
    <p>If you click on me, I will disappear.</p>
    <span>Name: <input type="text" id="test"></span>
    <button>Show </button>
    <div id="flip">Click to slide down panel</div>
```

```
<div id="panel">Hello world</div>
<script>
  $(document).ready(function () {
    $("p").click(function () {
      $(this).hide();
    });
  });
  $(document).ready(function () {
    $("button").click(function () {
      alert("Value: " + $("#test").val());
    });
  });
  $(document).ready(function () {
    $("#flip").click(function () {
      $("#panel").slideDown("slow");
    });
  });
</script>
</body>
</html>
```

Practical 19

Aim: Write a code to read and update the value of textbox using jQuery.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>PO19</title>
    <style>
      button {
        height: 50px;
        width: 200px;
      }
      body {
        text-align: center;
      }
    </style>
    <script
      src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
    </head>
    <body>
      <p>Input Field: <input type="text" name="userInput" placeholder="click
        to add text">
      </p>
      <button id="set">
        click to Add text
      </button>
      <script>
        $(document).ready(function () {
          $("#set").click(function () {
            $("input:text").val("Hello World!");
          });
        });
      </script>
    </body>
  </html>
```

Practical 20

Aim:

- a) Write a jQuery function to find a maximum of three numbers taken from the user.
- b) Print date and time on click of a button using the html method of jQuery

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>PO20</title>

  <!-- CSS -->
  <style>
    @import url('https://fonts.googleapis.com/css2?family=Koulen&display=swap');
    *{
      box-sizing: border-box;
      font-size: 20px;
      font-family: 'Koulen', cursive;
    }
    #one{
      display: flex;
      justify-content: center;
      margin-top: 300px;
    }
    div{
      background: linear-gradient(to bottom,red, orange,yellow,white);
      display: block;
      width: 500px;
      margin: auto;
      border-radius: 12px;
      padding: 30px;
    }
    input[type=number]::-webkit-inner-spin-button,
    input[type=number]::-webkit-outer-spin-button {
      -webkit-appearance: none;
      margin: 0;
    }
    .NumberInput{
```

```

width: 100%;
text-align: right;
text-transform: uppercase;
border: 2px solid green;
height: 40px;
margin: 10px 0px;
padding: 10px;
border-radius: 8px;
}
td{
color: white;
}
button{
background: linear-gradient(to left, red, orange, yellow,white);
color: black;
font-size: 25px;
font-weight: 400;
border-radius: 8px;
margin-top: 10px;
cursor: pointer;
}
button:hover{
transition-delay: 3s;
background: linear-gradient(to left, white, yellow, orange, red);
}
p{
color: red;
font-size: 20px;
}
</style>

<!-- JQuery CDN -->
<script src="https://code.jquery.com/jquery-3.6.0.js" integrity="sha256-
H+K7U5CnXl1h5ywQfKtSj8PCmoN9aaq30gDh27Xc0jk="
crossorigin="anonymous"></script>
</head>
<body>
<div id="one">
<div>
<table>
<tr>
<td>First Number :</td>
<td><input type="number" name="a" id="first" placeholder="Enter first
number" class="NumberInput" /> </td>

```

```

    </tr>
    <tr>
        <td>Second Number :</td>
        <td> <input type="number" name="b" id="second" placeholder="Enter second
number" class="NumberInput" /> </td>
    </tr>
    <tr>
        <td>Third Number :</td>
        <td> <input type="number" name="c" id="third" placeholder="Enter third
number" class="NumberInput" /> </td>
    </tr>
    <tr style="text-align: center;">
        <td colspan="2"> <button onclick="LargestNum()">CHECK</button> </td>
    </tr>
    <tr style="text-align: center;">
        <td colspan="2"> <button onclick="DisplayDateTime()">SHOW DATE
TIME</button> </td>
    </tr>
</table>
<p id="num"></p>
</div>
</div>
<script>
    function LargestNum(){
        num1 = $("#first").val();
        num2 = $("#second").val();
        num3 = $("#third").val();

        var array = [num1,num2,num3];
        var largest = Math.max.apply( null, array)
        console.log(largest)
        $("#num").html(largest + " is the largest numbr.");
    }
    function DisplayDateTime(){
        var date = new Date()
        $("#num").html(date);
    }
</script>
</body>
</html>

```

Practical 21

Aim: Write JavaScript code to validate book issue form using jQuery validate.

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
  <script
src="https://cdn.jsdelivr.net/jquery.validation/1.16.0/jquery.validate.min.js"></script>
  <script src="https://cdn.jsdelivr.net/jquery.validation/1.16.0/additional-
methods.min.js"></script>
  <style>
    body{
      text-align: center;
      font-size: 15px;
    }
    form{
      font-size: 25px;
      color: black;
      font-weight: bolder;
    }
    fieldset{
      background: aquamarine;
      align-items: center;
      text-align: center;
      width: 80%;
      border: 4px solid red;
    }
    table{
      width: 80%;
      margin: 100px auto;
    }
    table tr{
      width: 200px;
    }
    table tr td{
      background: rgb(1, 177, 118);
```



```
        width: 200%;
        padding: 15px;
    }
    input{
        height: 30px;
        width: 300px;
    }
    input[type=submit]{
        width: auto;
        height: auto;
        padding: 8px;
        font-size: 25px;
        margin: 10px auto;
        background-color: aquamarine;
        border: none;
        font-weight: bold;
        text-transform: uppercase;
    }
    input[type=submit]:hover{
        opacity: 0.6;
    }
    label{
        color: blue;
    }
    .pre_label{
        color: black;
    }
</style>
<script>
    $(function() {
        $("#bookissu").validate({
            rules: {
                firstname: "required",
                lastname: "required",
                address: {
                    required: true,
                    minlength: 2
                },
                email: {
                    required: true,
                    email: true
                },
                book: {
                    required: true,
```

```

        text: true
    },
    agree: "required"
},
messages: {
    firstname: "Please enter your firstname",
    lastname: "Please enter your lastname",
    address: {
        required: "Please enter a address",
        minlength: "Your address must consist of at
least 2 characters"
    },
}
});
});
</script>
</head>
<body>
    <form class="cmxform" id="bookissu" method="get" action="form-handler.html"
autocomplete="off">
        <fieldset>
            <legend>BOOK Issue Form</legend>
            <table>
                <tr>
                    <td>
                        <label for="firstname" class="pre_label">First Name</label>
                    </td>
                    <td>
                        <input id="firstname" name="firstname" type="text"></input>
                    </td>
                </tr>
                <tr>
                    <td>
                        <label for="lastname" class="pre_label">Last Name</label>
                    </td>
                    <td>
                        <input id="lastname" name="lastname" type="text"></input>
                    </td>
                </tr>
                <tr>
                    <td>
                        <label for="address" class="pre_label">Address</label>
                    </td>
                    <td>

```

```
        <input id="address" name="address" type="text"></input>
    </td>
</tr>
<tr>
    <td>
        <label for="email" class="pre_label">Email</label>
    </td>
    <td>
        <input id="email" name="email" type="email"></input>
    </td>
</tr>
<tr>
    <td>
        <label for="text" class="pre_label">Book Name</label>
    </td>
    <td>
        <input id="book" name="book" type="book"></input>
    </td>
</tr>
<tr>
    <td colspan="2">
        <input class="submit" type="submit" value="submit">
    </td>
</tr>
</table>
</fieldset>
</form>
</body>
</html>
```