**B1)** **What is React Js?**

* React is a free and open-source front-end JavaScript library for building user interfaces based on UI components.

**B2) What is NPM in React Js?**

* NPM is short for **node package manager**, an online directory that contains the various already registered open-source packages.

**B3) What is Role of Node Js in react Js ?**

* Node JS is known to be **the most suitable platform for hosting and running web servers for applications built on React**. The two primary reasons for this are; Node uses a node package manager or an NPM to install all new updates and packages.

**B4) What is CLI command In React Js ?**

* ReactCLI is a ReactJS component that provides a simple way to present a command line interface to your user in your web app.

**B5) What is Components In React Js ?**

* Components are **independent and reusable bits of code**. They serve the same purpose as JavaScript functions, but work in isolation and return HTML. Components come in two types, Class components and Function components

**B6) What is Header and Content Components in React Js?**

* The Header is an important element of a website’s design. It’s the first impression of the website. It provides useful links to other areas of the website that the user may want to visit.

**B7) What is JavaScript?**

JavaScript is a scripting language that enables you to create dynamically updating content, control multimedia, animate images, and pretty much everything else.

**B8) What is JavaScript Boxes?**

There are three types of dialog boxes supported in JavaScript that are **alert, confirm, and prompt**. These dialog boxes can be used to perform specific tasks such as raise an alert, to get confirmation of an event or an input, and to get input from the user.

**B9) What is JavaScript Events?**

JavaScript's interaction with HTML is handled through events that occur when the user or the browser manipulates a page. **When the page loads, it is called an event**. When the user clicks a button, that click too is an event. Other examples include events like pressing any key, closing a window, resizing a window, etc.

**B10) What is JavaScript Output method?**

JavaScript Output defines the ways to display the output of a given code.

**I1) How to use JavaScript Output method?**

JavaScript can "display" data in different ways:

* Writing into an HTML element, using innerHTML.
* Writing into the HTML output using document.write().
* Writing into an alert box, using window.alert().
* Writing into the browser console, using console.log().

**I2) How to use JavaScript Events to Do all examples?**

Basically, to handle events in HTML, you just need to **add the function in the HTML tag** which is going to be executed in JavaScript when any event in HTML is fired or triggered.

**I3) Calculate subtotal price of quantity in JavaScript?**

<table>

<thead>

<th>Quantity</th>

<th>Price</th>

<th>Sub Total</th>

</thead>

<tbody>

<tr>

<td><input type="number" name="" value="1" id="qnty" min="1"></td>

<td><div class="money">$<span id="price">20</span></div></td>

<td>$<span id="subtotal">20</span></td>

</tr>

</tbody>

</table>

<script type="text/javascript">

document.getElementById('qnty').addEventListener("keyup",subTotal);

function subTotal(){

let quantity = document.getElementById('qnty').value;

let price = parseInt(document.getElementById('price').innerHTML);

let subtotal\_price = quantity \* price;

document.getElementById('subtotal').innerHTML = subtotal\_price;

}

</script>

**I4) How to change images using onchange Events in JavaScript?**

<img src="pic\_bulboff.gif" id="bulb\_img" style="width:140px;display: block;margin-bottom: 30px;">

<label><input type="checkbox" value="" id="switch"><span>Switch on</span></label>

<script type="text/javascript">

document.getElementById("switch").addEventListener("change",mySwitch);

function mySwitch(){

let x = document.getElementById("switch");

if(x.checked){

var imgSrc = document.getElementById('bulb\_img');

imgSrc.src = "pic\_bulbon.gif";

x.nextSibling.innerHTML = 'Switch off';

}

else{

var imgSrc = document.getElementById('bulb\_img');

imgSrc.src = "pic\_bulboff.gif";

x.nextSibling.innerHTML = 'Switch on';

}

}

</script>

**A1) Write an examples of JavaScript Onblur events?**

Enter your name: <input type="text" id="fname" onblur="myFunction()">

<p>When you leave the input field, a function is triggered which transforms the input text to upper case.</p>

<script>

function myFunction() {

var x = document.getElementById("fname");

x.value = x.value.toUpperCase();

}

</script>

**A2) Write an example of HTML5 embed tag how to implements animation images in webpage?**

The <embed> tag defines a container for an external resource, such as a web page, a picture, a media player, or a plug-in application.

<embed type="image/jpg" src="pic\_trulli.jpg" width="300" height="200">

**A3) Write an example of transitions and transform attributes of css3 in web pages?**

To create a transition effect, you must specify two things:

* the CSS property you want to add an effect to
* the duration of the effect

**example:**

div{

width: 100px;  
   height: 100px;  
  background: red;

transition: width 2s;

}

**A4) Make a small calculator to add, subtracts and divide of two numbers in JavaScript?**

<form name = "form1">

<input id = "calc" type ="text" name = "answer"> <br> <br>

<input type = "button" value = "1" onclick = "form1.answer.value += '1' ">

<input type = "button" value = "2" onclick = "form1.answer.value += '2' ">

<input type = "button" value = "3" onclick = "form1.answer.value += '3' ">

<input type = "button" value = "+" onclick = "form1.answer.value += '+' ">

<br> <br>

<input type = "button" value = "4" onclick = "form1.answer.value += '4' ">

<input type = "button" value = "5" onclick = "form1.answer.value += '5' ">

<input type = "button" value = "6" onclick = "form1.answer.value += '6' ">

<input type = "button" value = "-" onclick = "form1.answer.value += '-' ">

<br> <br>

<input type = "button" value = "7" onclick = "form1.answer.value += '7' ">

<input type = "button" value = "8" onclick = "form1.answer.value += '8' ">

<input type = "button" value = "9" onclick = "form1.answer.value += '9' ">

<input type = "button" value = "\*" onclick = "form1.answer.value += '\*' ">

<br> <br>

<input type = "button" value = "/" onclick = "form1.answer.value += '/' ">

<input type = "button" value = "0" onclick = "form1.answer.value += '0' ">

<input type = "button" value = "." onclick = "form1.answer.value += '.' ">

<input type = "button" value = "=" onclick = "form1.answer.value= eval(form1.answer.value) ">

<br>

<input type = "button" value = "Clear All" onclick = "form1.answer.value = ' ' " id= "clear" >

<br>

</form>