KONGU ENGINEERING COLLEGE, PERUNDURAI - 638 060
CONTINUOUS ASSESSMENT TEST – I
(Regulations 2020)
Answer Key

Month and Year : March 2023		Roll Number :	
Programme : B.Tech. Branch : IT Semester : IV		Date : Time : 09.15 am to 10.45 am Duration : 1 ½ Hours	
Course Code : 20ITT44 Course Name : WEB TECHNOLOGY		Max. Marks : 50	

PART - A (10 × 2 = 20 Marks)

ANSWER ALL THE QUESTIONS

1.	List the key features of Web 2.0. • Dynamic content that is responsive to user input • Developed APIs to allow self-usage • It changed the concept of "mostly read only web" to "widely read and write" over web. • to actively participating in creation, sharing, and collaboration.	CO1	K1
2.	How to set the width and height of an image using HTML? <img src= "logo.png" alt="logo" width="300" height="300">	CO1	K1
3.	Create an HTML document containing an order list of two items about your favourite foods. <html> <body> Foods <ol type="1"> - Strawberry - chocklate - pineapples </body> </html>	CO1	K3
4.	Recall the purpose of responsive web design. To create a website and it can automatically adjust itself to look good on all devices, from smart phones to desktops etc	CO1	K1
5.	Give the basic Structure of a Bootstrap Grid. 	CO1	K1
6.	List the CSS selectors. Element name selector (p{}) Element id selector(#id) Element class selector(.class) Universal selector(*) Grouping Selectors(h1,p,em {})	CO1	K1

7. What is the output of the following script? **(Ans: no output)** CO2 K2

```
<!DOCTYPE html>
<html lang="en">
<body>
<p id=”#output” > </p>
   <script>
      var x = 20;
      var y = '20';
      if (x === y) {
         document.getElementById('output').innerHTML = 'x and y are equal.';
      } else {
         document.getElementById('output').innerHTML = 'x and y are not equal.';
      }
   </script>
</body>
</html>
```

Correct Program:

```
<!DOCTYPE html>
<html lang="en">
<body>
<p id="output"> </p>
   <script>
      var x = 20;
      var y = '20';
      if (x === y) {
         document.getElementById("output").innerHTML = "x and y are equal.";
      } else {
         document.getElementById("output").innerHTML = "x and y are not equal.";
      }
   </script>
</body>
</html>
```

8. Difference between var and let in JavaScript. CO2 K2

var	**let**
It can be declared globally and can be accessed globally.	It can be declared globally but cannot be accessed globally.

Variable declared with var keyword can be re-declared and updated in the same scope.
Example:
function varGreeter(){
var a = 10;
var a = 20; //a is replaced
console.log(a);
}
varGreeter();
	Variable declared with let keyword can be updated but not re-declared.
	Example:
	function varGreeter(){
	let a = 10;
	let a = 20; //SyntaxError:
	//Identifier 'a' has already been declared
	console.log(a);
	}
	varGreeter();

It is hoisted.
Example:
{
console.log(c); // undefined.
//Due to hoisting
	It is not hoisted.
	Example:
	{
	console.log(b); // ReferenceError:
	//b is not defined

		var c = 2;
		}
		
		let b = 3;
		}			

9.		Write a JavaScript that performs the cube of a given number. Read the input from the user.
		<!DOCTYPE html>
		<html lang="en">
		<body>
		
		<script>
		var x=prompt();
		document.getElementById("output").innerHTML = x*x*x;
		</script>
		</body>
		</html>
				CO2	K3

10.		Find the Page Structured Elements in HTML. <article> <aside> <details> <figcaption> <figure> <footer> <header> <main>		CO1	K1
		Part – B (3 × 10 = 30 Marks)			
		ANSWER ANY THREE QUESTIONS			
11.	i)	Design a home page banking application using the following bootstrap elements a. Navigation tab <ul class="nav nav-tabs"> <li class="nav-item"> Active <li class="nav-item"> Link <li class="nav-item"> Link <li class="nav-item"> Disabled b. Forms (Input and Input groups) <form>	(5)	CO1	K3

```
<div class="input-group">
  <span class="input-group-text">@</span>
  <input type="text" class="form-control" placeholder="Username">
</div>

<div class="input-group">
  <input type="text" class="form-control" placeholder="Your Email">
  <span class="input-group-text">@example.com</span>
</div>
</form>
```

ii) Explain the syntax of different data types in JavaScript with one example for each type. (5) CO2 K2

```
// Numbers:
let length = 16;
let weight = 7.5;
// Strings:
let color = "Yellow";
let lastName = "Johnson";
// Booleans
let x = true;
let y = false;
// Object:
const person = {firstName:"John", lastName:"Doe"};
// Array object:
const cars = ["Saab", "Volvo", "BMW"];
//BigInt
let x = BigInt("12345678901234567890123456789O");
//undefined
let car;    // Value is undefined, type is undefined
//null
var x = null;
console.log(x);   // returns null
//Symbol
        let id = Symbol();
// id is a symbol with the description "id"
        let id = Symbol("id");
```

12. i) Create a webpage to display the following table with design specification as shown, using HTML and CSS. (5) CO1 K3

Name:	AAA
Email:	aaa@example.com
Phone:	0424
	220000

```
<!DOCTYPE html>
<html>
```

		<head>
		<style>
		table, th, td {
		  border: 1px solid;
		}
		</style>
		</head>
		<body>
		<table>
		  <tr>
		  <th>Name:</th>
		  <td>AAA</td>
		  </tr>
		  <tr>
		  <th>Email:</th>
		  <td>aaa@example.com</td>
		  </tr>
		  <tr>
		  <th rowspan="2">Phone:</th>
		  <td>0424</td>
		  </tr>
		  <tr>
		  <td>220000</td>
		  </tr>
		</table>
		</body>
		</html>			

	ii)	Illustrate the different types of CSS with one example for each type. Three ways u can apply CSS to a HTML Document Inline Internal / Embedded External Inline - Using the style attribute in HTML elements Inline CSS is applied on this heading. Embedded (Internal) - Using a <style> element in the <head> section <html> <head> <style> p { color: red;	(5)	CO1	K2

```
        text-align: center;
}
</style>
</head>
<body> <p>hai </p> <p> hello></p> </body></html>
```

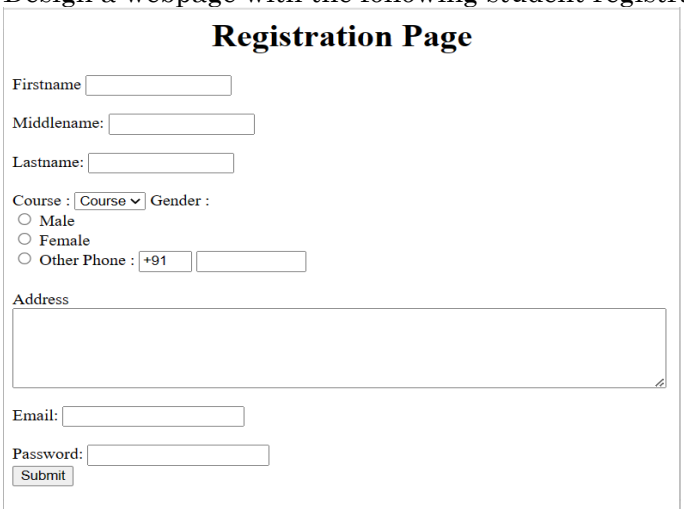
External - Using an external CSS file

```
<html>
<head>
<link href="mystyle.css“ rel="stylesheet" type="text/css" >
</head>
<body>
        <h1>This is a heading</h1>
        <p>This is a paragraph.</p>
</body>
</html>
```

mystyle.css

```
body
{
   background-color: lightblue;
}
h1 {
   color: navy;
   margin-left: 20px;
}
```

13. Design a webpage with the following student registration form (10) CO1 K3




```
<Html>
<body>
 Registration Page <br> <br>
<form>
<label> Firstname </label>
<input type="text" name="firstname" size="15"/> <br> <br>
<label> Middlename: </label>
```

		<input type="text" name="middlename" size="15"/> <label> Lastname: </label> <input type="text" name="lastname" size="15"/> <label> Course : </label> <select> <option value="Course">Course</option> <option value="BCA">BCA</option> <option value="BBA">BBA</option> <option value="B.Tech">B.Tech</option> <option value="MBA">MBA</option> <option value="MCA">MCA</option> <option value="M.Tech">M.Tech</option> </select> <label> Gender : </label> <input type="radio" name="male"/> Male <input type="radio" name="female"/> Female <input type="radio" name="other"/> Other <label> Phone : </label> <input type="text" name="country code" value="+91" size="2"/> <input type="text" name="phone" size="10"/> Address <textarea cols="80" rows="5" value="address"> </textarea> Email: <input type="email" id="email" name="email"/> Password: <input type="Password" id="pass" name="pass"> Submit </form> </body> </html>			
14.	i)	Calculate the electricity bill with the help of the below charges using JavaScript: 1 to 100 units – Rs. 10/unit 100 to 200 units – Rs. 15/unit 200 to 300 units – Rs. 20/unit	(10)	CO2	K3

above 300 units – Rs. 25/unit

```
<html>
<body>
<script>
var units=prompt();
   if (units <= 100)
   {
       document.write(units * 10);
   }
   else if (units <= 200)
   {
       document.write((100 * 10)+ (units - 100)* 15);
   }
   else if (units <= 300)
   {
       document.write((100 * 10)+ (100 * 15) + (units - 200)* 20);
   }
   else if (units > 300)
   {
       document.write((100 * 10)+ (100 * 15)+ (100 * 20) + (units - 300)* 25);
   }
 </script>
</body>
</html>
```

Bloom's Taxonomy Level	Remembering (K1)	Understanding (K2)	Applying (K3)	Analysing (K4)	Evaluating (K5)	Creating (K6)
Percentage	20	23	57	--	--	--