


SJCIT/NBA/ COURSE/ 2020-21				<b>S J C INSTITUTE OF TECHNOLOGY</b> Chickballapur - 562 101 Department of Information Science & Engineering													
<b>Course Information</b>																	
Programme Name:		Information Science & Engineering															
Academic Year:	2021-22	Semester:	6	Section:	A & B	Subject Type:	Theory										
Course Title:		WEB TECHNOLOGY AND ITS APPLICATIONS															
Course Instructor Name:		SUSHEELAMMA K H & ARAVIND THEJAS CHANDRA			Class Strength:		114										
Subject Code:	18CS63	Course No:	3	Course ID:	C313												
<b>Scheme of Teaching &amp; Marks</b>																	
Contact Hr/Week:	5	Lecture Hours (Hr.):	3	Tutorials (Hr.):	2												
Max.CIE Marks:	40	Max. SEE Marks:	60	Total Max.Marks:	100												
Min.CIE Marks:	19	Min.SEE Marks:	21	Total Min.Marks:	40												
Final CIE (IA) Marks:	40	Assignment Marks:	20	Test Marks:	20												
<b>Threshold Values for Attainment Calculation</b>					<b>Final CO Attainment</b> (Percentage Contribution, %)												
Attainment level	3	%	2	%	1	%											
Internal Assessment	>=	70	>=	60	>=	50	CIE 40 SEE 50										
SE Examination	>=	60	>=	50	>=	40	CES 10										
<b>Statements of Course Outcomes</b>				<b>No.of CO's</b>		6	Target(%)	BL									
C313.1	Apply the syntax and Semantic Structure of HTML and CSS to build web pages and applications					60	3										
C313.2	Compose forms and tables using HTML and CSS					60	6										
C313.3	Design and Implement Client-Side programs using JavaScript and Server-Side programs					60	6										
C313.4	Apply Object Oriented Programming capabilities of PHP					60	3										
C313.5	Apply JavaScript frameworks such as jQuery and Backbone to build web applications					60	3										
C313.6	Demonstrate the web technology concepts through programs					60	2										
<b>Semester End Exam. (SEE) Target(%)</b>				60	<b>Course End Survey(CES) Target (%)</b>		70										
<b>CO-PO Mapping Table (In the scale of 3)</b>												<b>CO-PSO Mapping Table</b>					
CO/PO	1	2	3	4	5	6	7	8	9	10	11	12	CO/PSO	1	2	3	4
C313.1	3	2	2										C313.1	3			
C313.2	3	2	1										C313.2	3			
C313.3	3	2	3										C313.3	3	2		
C313.4	3	2	2										C313.4	3	2		
C313.5	3	3	2										C313.5	3	2		
C313.6	3	3	2										C313.6	3	2		
<b>Total</b>	18	14	12										<b>Total</b>	18	8		



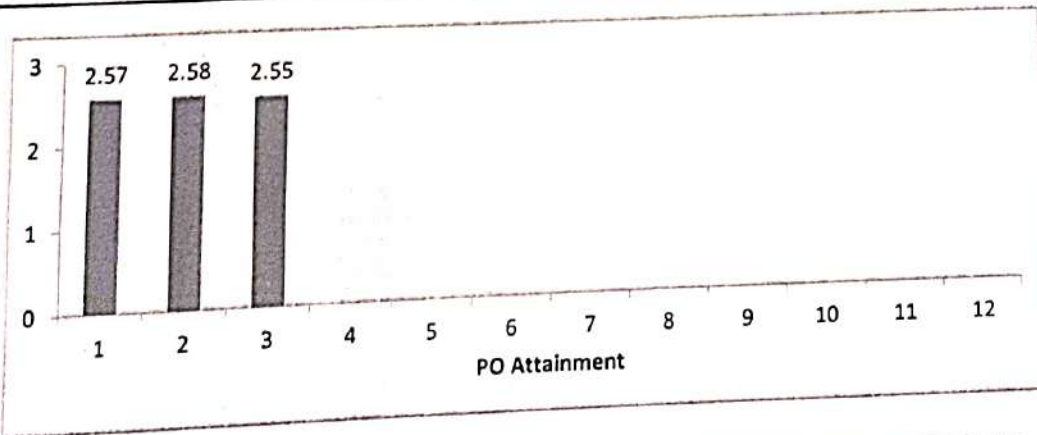
<b>Course Title</b>	WEB TECHNOLOGY AND ITS APPLICATIONS				<b>Course Code</b>	C313	
<b>Subject Code</b>	18CS63	<b>Semester</b>	6	<b>Section</b>	A & B	<b>Emp.ID</b>	1386
<b>Faculty Name</b>	SUSHEELAMMA K H & ARAVIND THEJAS CHANDRA				<b>No.students</b>	114	

**Summary of CO attainments of Sub: 18CS63 Based on (ACTUAL-TYPE-1) Academic Year:2020-21**

CO	CID_CO	CIE			SEE			CES			TOT_Attainment		
		S_AT	T_ST	ATN	S_AT	T_ST	ATN	S_AT	T_ST	ATN	ATN	%	Status
CO1	C313.1	86	112	2.3	93	114	2.4	114	114	3	2.4	81	YES
CO2	C313.2	100	113	2.7	93	114	2.4	114	114	3	2.6	86	YES
CO3	C313.3	87	113	2.3	93	114	2.4	114	114	3	2.4	81	YES
CO4	C313.4	111	113	2.9	93	114	2.4	114	114	3	2.7	89	YES
CO5	C313.5	98	109	2.7	93	114	2.4	114	114	3	2.6	86	YES
CO6	C313.6	110	114	2.9	93	114	2.4	114	114	3	2.7	89	YES

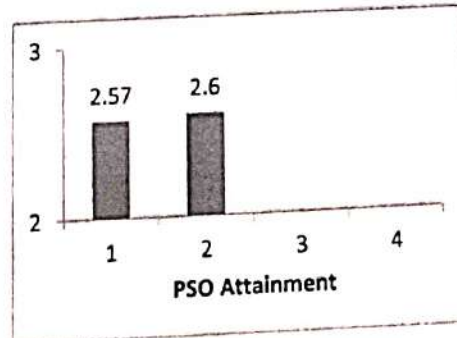
**Summary of PO attainments of Sub: 18CS63 Based on (ACTUAL-TYPE-1) Academic Year:2020-21**

PO Number	1	2	3	4	5	6	7	8	9	10	11	12
<b>Direct ATNT(D)</b>	2.5	2.52	2.49									
<b>Indirect ATNT(ID)</b>	3	3	3									
<b>Total-ATNT</b>	2.57	2.58	2.55									



**Summary of PSO attainments in Year:2020-21**

PSO Number	1	2	3	4
<b>Direct ATNT(D)</b>	2.5	2.53		
<b>Indirect ATNT(ID)</b>	3	3		
<b>Total-ATNT</b>	2.57	2.6		



SJCIT/NBA/  
CER/  
2020-22



**S J C INSTITUTE OF TECHNOLOGY**  
Chickballapur - 562 101  
Department of Information Science & Engineering

**A. Course Details**

Course Title	WEB TECHNOLOGY AND ITS APPLICATIONS				Course Code	C313	
Subject Code	18CS63	Semester	6	Section	A & B	Programme	UG
Course	Theory	Course Type		Core		No. of students	114
Date of commencement	19-04-2021		Date of Closure			7/7/2021	

**B. Course Instructor Details**

Course Instructor Name	SUSHEELAMMA K H & ARAVIND THEJAS CHANDRA		Emp.ID	1386
Total Teaching Experience	9	No. of times taught this course		3

**C. Course Delivery**

1	Course Plan was circulated among students before the start of course					YES
2	Total No of Modules/Chapters the course consists	5	Covered	5	%	100
3	Total No of Classes Planned for the course	50	Classes Held	50	%	100
4	Any reasons for non-coverage of 100 % syllabus (if not covered)					

**D. Course Outcome(s) & University Examination Results**

**University Examination Results**

1	Appeared	114	Pass	114	%Pass	100
2	Lost eligibility due to shortage of attendance			0	%	0
3	No. of students obtained minimum CIE marks			0	%	0

**Grades obtained by the students (No. of students)**

Grade Letter	S	A	B	C	D	E	E	Marks	Max.	Avg.			
Grade Point	10	9	8	7	6	4	0				CIE	40	36
No. of Students		23	81	8	2						SEE	60	39
% Students)		20	71	7	2						Total	100	76

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2020-21



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Chickballapur - 562 101  
Department of Information Science & Engineering

Summary of Course Outcomes

Weight, %	Attainment				Blooms Levels	
	40	50	10	Total	Level's	No.
CO-Number	CIE	SEE	CES			
C313.1	2.3	2.4	3	2.4	APPLY	3
C313.2	2.7	2.4	3	2.6	CREATE	6
C313.3	2.3	2.4	3	2.4	CREATE	6
C313.4	2.9	2.4	3	2.7	APPLY	3
C313.5	2.7	2.4	3	2.6	APPLY	3
C313.6	2.9	2.4	3	2.7	UNDERSTAND	2

E. Students Feedback

Over all feedback value

96.2

F. Remarks on CIE, attainment and suggestion(s) to improve course delivery by course instructor

TARGETS OF ALL COS - CO1, CO2, CO3, CO4, CO5, CO6 ARE ACHIEVED.

G. Innovative/Best methods used for course delivery by the course instructor

1. CHALK & TALK 2. ICT

H. Remarks of the Module Coordinator

TARGETS OF ALL COS - CO1, CO2, CO3, CO4, CO5, CO6 ARE ACHIEVED.

Signature *Sushelamma K H*  
Name *Sushelamma K H*  
Module Coordinator

Signature *Sushelamma K H & Aravind Thejas Chand*  
SUSHEELAMMA K H & ARAVIND THEJAS CHAND  
Course Instructor

Signature of the HOD

S.J.C. Institute of Technology, Chickballapur  
Department of Information Science & Engineering  
Tutorial-3

Sem: 6<sup>th</sup> 'B'

Date: 31.07.2021

Subject code: WEB TECHNOLOGY AND ITS APPLICATIONS - 18CS63

**Module-4 PHP Arrays and Superglobals**

1. What are the different types of errors
2. Explain the different error reporting flags of PHP.
3. Write a PHP script to move the uploaded file to the desired location
4. Write a PHP script to limit the type of file.


**Module-5 Managing State, Advanced JavaScript and jQuery**

1. Why is state is a problem for web applications? Explain.
2. What does S( ) short and stand for in JQuery? Explain any 3 JQuery form selectors.
3. Write the DTD for the following XML code:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<person id="207">
  <title>Balaram </title>
  <gender>
    <name>Male </name>
    <nationality>France </nationality>
  </gender>
  <year>1811 </year>
  <medicine>oil of an curvas </medicine>
</person>
```

4. Explain different selectors of jQuery with example.
5. What are cookie? What is the purpose of it? Demonstrate cookies with PHP program
6. Define the following:  
i) Session cookies ii) Persistent cookies iii) session state
7. With a neat diagram explain SOAP and RESET web services.
8. How is JSON values accessed in PHP? Explain with example
9. Explain the AJAX system.
10. Explain the web storage using javascript API.

Surbheeramaiah,  
Staff Incharge 31/07/2021

  
HOD  
Dept. of ISE



## Internal Test Question paper format- CBCS Scheme

Name of the staff/s:

Date: 07/08/2021

Signature: *Sudheer M*  
02/08/2021

Reviewer's Signature:

*S. Paday*  
7/8/22

NOTE: Only the following information's to be given to the students.

S.J.C. Institute of Technology  
Department of Information Science & Engineering

Test: III

Semester: VI

Duration: 90 minutes

Section: 'A' &amp; 'B'

Max Marks: 50

Subject Name &amp; Code: Web Technology &amp; its Applications -18CS63

Instructions: Answer any five full questions,

Note: The Choice question should satisfy same COs and levels.

Sl. No.	Questions	Marks	CO	Levels
1.	Explain handling of file upload in php with coding example.	10M	CO4	L2
OR				
2.	List and Explain the two basic techniques of reading and writing files in php with coding example.	10M	CO4	L2
3.	Explain the concept of <b>Data encapsulation</b> and <b>Inheritance</b> in php with examples. Write detailed UML diagram for the classes used in examples.	10M	CO4	L2
OR				
	Explain the concept of <b>Polymorphism</b> and <b>Interfaces</b> in php with examples. Write detailed UML diagram for the classes used in examples.	10M	CO4	L2
5.	What are Exception and Errors? Explain Three main Error reporting flags in php.	10M	CO4	L2
OR				
6.	What is caching? Explain two basic strategies of caching web applications.	10M	CO4	L2
7.	What is Session state? Explain creating, accessing and checking session existence in php with sample script.	10M	CO4	L3
OR				
8.	What is a cookie? Explain reading and writing cookie in php with PHP code.	10M	CO4	L3



9.	What is serialization? Explain how serialization is done in PHP with coding example.	10M	CO5	L2
<b>OR</b>				
10.	What is URL rewriting? Explain URL rewriting with an example.	10M	CO5	L2

<b>Course Outcomes:</b> At the end of this course, students are able to:	
CO1	Apply the syntax and Semantic Structure of HTML and CSS to build web pages and applications
CO2	Compose forms and tables using HTML and CSS
CO3	Design and Implement Client-Side programs using JavaScript and Server-Side programs using PHP
CO4	Apply Object Oriented Programming capabilities of PHP
CO5	Apply JavaScript frameworks such as jQuery and Backbone to build web applications
CO6	Demonstrate the web technology concepts through programs

**DEPARTMENT**

**Test 3 Scheme & Solutions**

Semester: 6th B

Subject Title: Web Technology & its Applications

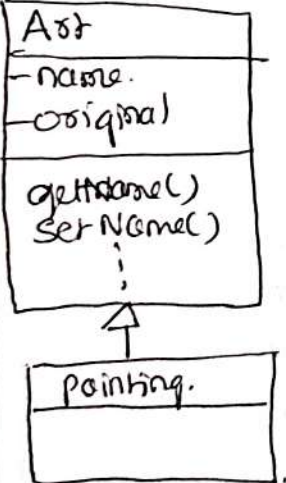
Subject Code: 18CS63

Question Number	Solution	Marks Allocated
1.	<p><u>Handling file upload in php with Example -</u>                      php use superglobal \$ _FILES array, this array contain a key-value pair for each file uploaded in the post. The keys in that array are the name, type, tmp-name, error and size.</p> <pre>                     &lt;form enctype = 'multipart / form-data' method =                     'post' . action = 'upload.php' &gt;                     &lt;input type = 'file' . name = 'files' / &gt;                     &lt;input type = 'submit' / &gt;                     &lt;/form &gt;                     C : Users / ricardo / pictures / sample.png .                     Post Upload.php                     -----                     -----                     -----                     echo \$ _FILES ["files"] ["name"]                     echo \$ _FILES ["files"] ["type"]                     echo \$ _FILES ["files"] ["tmp-name"]                     echo \$ _FILES ["files"] ["error"]                     echo \$ _FILES ["files"] ["size"]                     </pre> <p style="text-align: right;">Expln = 5m Example = 5m</p>	10m
2.	<p><u>Reading &amp; writing files in php - 2 Techniques</u>                      Php Functions can read/write from a file or from external website through two techniques.</p>	10m



Question Number	Solution	Marks Allocated
	<p>1. <u>Stream access</u> - Can read/write sequentially. Common modes are "r", binary read, "w" binary read &amp; write, "c" create a new file for writing.</p> <pre> \$b = fopen("sample.txt", "r"); \$ln = 0; while (\$line = fgets(\$b)) {     \$ln++;     printf("#%d:", \$ln);     echo \$line. "&lt;br&gt;"; } fclose(\$b); </pre> <p>2. <u>In memory File Access</u> - Functions shown below provide a simpler alternative to the process of file in PHP.</p> <p><code>file()</code> Reads entire file into an array, with each array element corresponding to one line in the file.</p> <p><code>file_get_contents</code> Reads the entire file into a string variable.</p> <p><code>file_put_contents</code> writes the contents of a string variable out to a file.</p> <p style="text-align: right;">Read &amp; Write - <math>5 \times 2 = 10m</math></p>	
3.	<p><u>Data Encapsulation</u> Encapsulated class are accessed through methods getters and setters.</p> <p><u>getter</u> return a variable value.</p> <p><u>Setter</u> - methods modify properties.</p>	10m



Question Number	Solution	Marks Allocated
	<p><u>Artist</u></p> <pre> class Artist {     count: int;     first-name: string;     last-name: string;      get first-name(): string;     ...     set last-name(\$last-name): void; </pre> <p><u>Inheritance</u> - enables to create new php classes that reuse, extend &amp; modify the behaviors that is defined in another PHP class.</p> <p>class - inheriting from another class - subclass / derived class.</p> <p>class - inherited from is - super class / base class.</p> <p>PHP defines subclass using the <u>extends</u> keyword</p> <pre> class painting extends Artist {     private function foo() {         ...     } } </pre>  <p>Encapsulation - Expln = 3m UML = 2m</p> <p>Inheritance - Expln = 3m UML = 2m</p>	
4.	<p><u>polymorphism</u> manage list of objects and call the same overridden method on each.</p> <pre> \$picasso = new Artist(" "); \$queonica = new painting(" "); \$chicago = new Sculpture(" "); </pre>	10 m



Question Number	Solution	Marks Allocated
	<pre> \$works = array(); \$works[0] = \$guernica; \$works[1] = \$chicayo; foreach (\$works as \$art) { echo \$art; } </pre> <p><u>Interfaces</u> - for defining what a class can do without specifying how it does it.</p> <pre> interface Viewable { public function getSize(); public function getPNG(); } </pre> <pre> classDiagram     class Art     class Painting     class Movie     class Song     class Viewable {     &lt;&lt;interface&gt;&gt;     getSize()     }     class Playable {     &lt;&lt;interface&gt;&gt;     getLength()     }     Art &lt; -- Painting     Art &lt; -- Movie     Art &lt; -- Song     Painting .. &gt; Viewable     Movie .. &gt; Playable     Song .. &gt; Playable </pre> <p>Polymorphism - Exph = 3m UML = 2m</p> <p>Interfaces - Exph = 3m UML = 2m</p>	
5.	<p><u>Errors and Exceptions</u></p> <p><u>Types of Errors</u></p> <ul style="list-style-type: none"> <li>(a) Expected Errors - routinely occurs during apply</li> <li>(b) warnings - will not halt execution</li> <li>(c) Fatal Errors - Execution terminate.</li> </ul> <p><u>Exceptions</u> used with try-catch construct</p> <p><u>PHP Error Reporting</u> - Three main flags</p> <ul style="list-style-type: none"> <li>(1) Error reporting - E_ALL, E_ERROR, E_WARNING</li> <li>(2) Display Errors - ini_set() - ini_set('display_errors', '0');</li> <li>(3) Log errors - ini_set() - ini_set('log_errors', '1');</li> </ul> <p><u>Error reporting settings</u> - E_ALL, E_ERROR, E_WARNING</p> <p>Errors = 3m Exceptions = 2m</p>	10m

ERROR REPORTING FLAG = 5m



Question Number	Solution	Marks Allocated
6.	<p><u>Caching</u> - way to improve performance of web applications.</p> <p>(1) <u>Page output caching</u> - Useful for contents that not change frequently.</p> <p><u>Two models</u></p> <p>(a) Full page caching - Entire contents cached.</p> <p>(b) partial page caching - Specific parts of a page are cached.</p> <p>(2) <u>Application data caching</u> - Allows programmer/developer to programmatically cache data.</p> <p style="text-align: right;">DBn = 2m Page output caching = 6m Appln data caching = 2m</p>	10m
7.	<p><u>Session State</u> available for developer as a Superglobal associative array.</p> <p><u>Creating &amp; accessing</u> - session_start()</p> <pre>&lt;?php: session_start(); if (!isset(\$_SESSION['user'])) { ... } else { ... } ?&gt;</pre> <p><u>Existence</u> - to check session exists.</p> <pre>&lt;?php include_once("ShoppingCart.class.php"); session_start() if (!isset(\$_SESSION["cart"])) { \$_SESSION["cart"] = new ShoppingCart(); } \$cart = \$_SESSION["cart"]; ?&gt;</pre> <p style="text-align: right;">DBn = 2m. Creating &amp; Accessing = 5m Checking Existence = 3m</p>	10m
8.	<p><u>COOKIES</u> - client-side approach for persisting state information. , name=value pairs saved in</p>	10m



Question Number	Solution	Marks Allocated
8.	<p>Text files managed by browser.</p> <p><u>Writing cookie</u></p> <pre> &lt;?php \$expiryTime = time() + 60*60*24; \$name = "Username"; \$value = "Ricardo"; setcookie(\$name, \$value, \$expiryTime); </pre> <p><u>Reading cookie</u></p> <pre> &lt;?php if (!isset(\$_COOKIE['Username'])) { } else { echo \$_COOKIE['Username']; } ?&gt; </pre> <p>Debn = 2m Reading cookie = 4m Writing cookie = 4m</p>	10m
9.	<p><u>Serialization</u> process of taking complicated object &amp; reducing it down to zeros &amp; ones for either storage/transmission.</p> <p>PHP objects - reduced down to binary string using <u>serialize()</u> function</p> <p>The string can be reconstituted back into an object using <u>unserialize()</u> method.</p> <p>Serialization = 4m Serialize = 3m unserialize = 3m</p>	10m
10.	<p><u>URL Rewriting</u> - Rewrite dynamic URL into a static one (and vice versa).</p> <p><u>Example</u> - www.somedomain.com/Display_Artist.php?artist=16</p> <p><u>Alternate Approach</u> - www.somedomain.com/artists/16.php</p> <p>Debnation = 2m Explanation = 8m</p>	10m

Name of the staff/s: Susheelamma K H	Signature:
Name of the Reviewer:	Signature:
Signature of HOD	

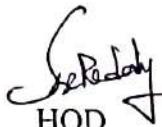
**S. J. C. Institute of Technology**  
**Department of ISE**  
**Subject: WEB TECHNOLOGY AND ITS APPLICATIONS - 18CS63**  
**Tutorial-2**

**Semester: VI B**

**Faculty: Susheelamma K H**  
**Date: 21-06-2021**

- 1) List and explain CSS positioning of elements with examples
- 2) List and explain the advanced CSS properties with examples
- 3) Briefly describe two ways to construct multicolumn layouts in CSS
- 4) List and explain CSS floating of elements with examples
- 5) Briefly describe two types of CSS frameworks
- 6) What is viewport? Why is it important?
- 7) What are the advantages and disadvantages of using a CSS framework?
- 8) Briefly describe javascript design principles
- 9) Write a javascript program embedded in html to validate USN. USN should be accepted from html forms.
- 10) Write a javascript program embedded in html to validate phone num. Phone num should be accepted from html forms.
- 11) List and explain the client side development technologies?
- 12) List and explain different ways of linking javascript to html with examples
- 13) Write a javascript program embedded in html to find position of left-most vowel in a string. String should be accepted from html forms
- 14) List and explain any 5 server-side development technologies.
- 15) Write a PHP program to keep track of the number of visitors visiting the web page and to display this count of visitors, with proper headings
- 16) List and explain program control in PHP with examples.
- 17) Write a PHP program to find square and cube of numbers from 1 to N. N should be accepted from user through html form.
- 18) What is DOM? List and explain different JavaScript Event handling techniques by giving code example for each.
- 19) List and explain different Event Types and its subtypes handled by DOM and JavaScript.
- 20) Compare client script execution and server script execution with neat diagram.
- 21) List and explain key properties and methods of event object, List and explain types of comment styles in PHP.

*Susheelamma K H.*  
Staff In charge 21/06/2021

  
HOD  
Dept. of ISE



**Internal Test Question paper format- CBCS Scheme**

Name of the staff/s: SUSHEELAMMA K H  
Date: 29/06/2021  
Signature: *Susheelamma KH* 29/06/2021

Reviewer's Signature: *Susheelamma KH* 29/06/21

NOTE: Only the following information's to be given to the students.

**S.J.C. Institute of Technology**  
**Department of Information Science & Engineering**  
Test: 2

Semester: VI  
Duration: 90 minutes

Section: 'A' & 'B'  
Max Marks: 50

**Subject Name & Code: Web Technology & its Applications (18CS63)**  
**Instructions: Answer any five full questions,**

Note: The Choice question should satisfy same COs and levels.

Sl. No.	Questions	Marks	CO	Levels
1.	What is Responsive Design? Explain the four key components that makes Responsive Design work with coding examples.	10M	CO2	L2
OR				
2.	Explain positioning elements in CSS in detail with coding examples.	10M	CO2	L2
3.	List and explain the three approaches to CSS layout with coding examples.	10M	CO2	L2
OR				
4.	List and Explain CSS Frameworks in detail with coding example.	10M	CO2	L2
5.	Write a JavaScript that calculates the even and odd numbers from 0 to 100 and outputs HTML text that displays the resulting values in an HTML table format. Even and odd numbers should be displayed in separate columns with proper table headings.	10M	CO3	L3
OR				
6.	Develop and demonstrate a HTML5 file that includes JavaScript script that uses functions for the following problems: a. Entered string is palindrome or not. b. Reverse a number. The Two Inputs, string and number should be accepted using HTML forms.	10M	CO3	L3
7.	Write a Javascript program embedded in HTML to display a paragraph of text and enlarge the text in paragraph to 50 points upon user clicking on the paragraph.	10M	CO3	L3



OR		10M	CO3	L3
8.	Write a Javascript program embedded in HTML to accept Name and VTU USN in form and convert it to uppercase upon filling each field in form.	5M	CO3	L2
9.	a) With a neat diagram explain the PHP module in Apache.	5M	CO3	L3
	b) Write a php program to generate Fibonacci series from 0 to 100.			
OR		5M	CO3	L2
10.	a) Explain the different ways of including files in php with example. Also explain difference between them.	5M	CO3	L3
	b) Write a php program to generate Leap Year between 1921 to 2021.			

**Course Outcomes:** At the end of this course, students are able to:

CO1	Apply the syntax and Semantic Structure of HTML and CSS to build web pages and applications
CO2	Compose forms and tables using HTML and CSS
CO3	Design and Implement Client-Side programs using JavaScript and Server-Side programs using PHP
CO4	Apply Object Oriented Programming capabilities of PHP
CO5	Apply JavaScript frameworks such as jQuery and Backbone to build web applications
CO6	Demonstrate the web technology concepts through programs



DEPARTMENT Information Science & Engineering

**Test 2 Scheme & Solutions**

Semester: VI B.

Subject Title: Web Technology &amp; its Applications

Subject Code: 18CS63

Question Number	Solution	Marks Allocated
1.	<p><u>Responsive Design</u> - page responds to changes in browser size, In a responsive layout, images will be scaled down, navigation elements will be replaced as the browser shrinks.</p> <p align="right">Defn = 2m</p> <p><u>4 key components</u></p> <ol style="list-style-type: none"> <li>1. Liquid layouts</li> <li>2. Scaling images to the viewport size.</li> <li>3. Setting viewports via &lt;meta&gt; tag.</li> <li>4. Customizing the CSS for different view ports using media queries.</li> </ol> <p align="right">4 * 2 = 8m</p>	=> 10m.
2.	<p><u>positioning elements in CSS</u>. - It is possible to move an item from its regular position in its normal flow, <u>position</u> property used to specify type of positioning.</p> <p align="right">Defn = 2m</p> <p><u>Position values</u></p> <ol style="list-style-type: none"> <li>1. absolute - Element removed from normal flow and positioned in relation nearest positioned ancestor.</li> <li>2. fixed - Element fixed in a specific position in window even the document is scrolled.</li> <li>3. relative - Element is moved relative to where it would be in normal flow.</li> <li>4. static - Element is positioned according to normal flow. This is default.</li> </ol> <p align="right">4 * 2 = 8m</p>	=> 10m.



Question Number	Solution	Marks Allocated
3.	<p><u>Three approaches to CSS Layout</u></p> <ol style="list-style-type: none"> <li><u>Fixed Layout</u> - Corresponds to ideal width based on "typical" monitor resolution. - 960 to 1000 pixel range.</li> <li><u>Liquid Layout</u> - width are specified using percentages. values. → Adapts to different browser sizes.</li> <li><u>Other Layout Approaches</u> - Hybrid layout - Combine pixel and percentage measurements.</li> </ol> <p style="text-align: right;">List = 1m Explan = 3x3 = 9m</p>	10m.
4.	<p><u>CSS Frameworks</u></p> <ol style="list-style-type: none"> <li><u>Grid Systems</u> - used to create multi-column layouts.</li> <li><u>CSS preprocessors</u> - takes code written in preprocessed language and converts into normal CSS. → provides additional functionalities that are not in CSS</li> </ol> <p style="text-align: right;">Explan = 5x2 = 10m</p>	10m.
5.	<p>JavaScript that calculates even and odd numbers from 0 to 100, Even and odd numbers should be displayed in separate columns.</p> <pre> &lt;script type="text/javascript"&gt; document.write("&lt;table&gt;"); for (i=1; i&lt;=100; i++) { if (i%2 == 0) { </pre>	10m.



Question Number	Solution	Marks Allocated
	<pre> document.write("&lt;td&gt;" + i + "&lt;/td&gt;&lt;/tr&gt;"); } else { document.write("&lt;tr&gt;&lt;td&gt;" + i + "&lt;/td&gt;"); } } document.write("&lt;/table&gt;"); : </pre>	10m.
6.	<p>HTML5 file with javascript that uses functions for.</p> <ol style="list-style-type: none"> <li>1. Entered string palindrome/not.</li> <li>2. Reverse a number.</li> </ol> <pre> &lt;!DOCTYPE HTML&gt; &lt;html&gt; &lt;script type="text/javascript"&gt; function checkpalindrome(str){ const len = str.length; for (int i=0; i &lt; len/2; i++){ if (string[i] != string[len-1-i]){ return 'it is not a palindrome'; } } return 'it is a palindrome'; } function rev-num() { var num = prompt("Enter the number to be reversed: ", ""); var n = num; var rev = 0, rem; while (n &gt; 0) { </pre>	10m.

HTML part - 3m  
 Javascript - 7m

*[Signature]*



Question Number	Solution	Marks Allocated
	<pre> rem = n % 10; rev = rev * 10 + rem; n = Math.floor(n/10); } &lt;/script&gt; &lt;/html&gt; </pre> <p style="text-align: right;">palindrome = 505 Reverse no. = 505</p>	
7.	<p>JavaScript embedded in HTML to display a paragraph of text and enlarge text in paragraph to 50 points upon user clicking on the paragraph.</p> <pre> &lt;!DOCTYPE html&gt; &lt;html&gt; &lt;body&gt; &lt;input type="button" value="Increase font size 50pt" onclick="increaseFontSizeBy50pt()" &gt; &lt;p id="a"&gt; Font size &lt;/p&gt; &lt;script&gt; function increaseFontSizeBy50pt() { document.getElementById('a').style.fontSize = "50pt"; } &lt;/script&gt; &lt;/body&gt; &lt;/html&gt; </pre>	10M
8.	<p>JavaScript embedded in HTML to accept Name, USN in form, Convert it to upper case upon filling each field in form.</p> <pre> &lt;html&gt; &lt;head&gt; &lt;script type="text/javascript"&gt; function convertCase(text) { var strUCase = text.toUpperCase(); </pre>	10M



Question Number	Solution	Marks Allocated
	<pre> while (\$num &lt;= 100) {     \$n3 = \$n2 + \$n1;     echo \$n3 . ' ' ;     \$n1 = \$n2;     \$n2 = \$n3;     \$num = \$num + 1; } ? &gt; </pre>	
20a.	<p><u>Different ways of including files in php.</u></p> <pre> include "somefile.php"; include_once "somefile.php"; require "somefile.php"; require_once "somefile.php"; </pre> <p>→ include - warning is displayed, List - 2 m Execution continues. Difference = 4m</p> <p>→ require - Error is displayed, execution stops.</p> <p>include_once works exactly like include &amp; require_once &amp; require. but if requested file has already been included once, then it will not be included again.</p>	5m.
10b.	<p>PHP program to generate Leap year between 1921 to 2021</p> <pre> &lt;?php function isLeap(\$year) {     return (date('L', mktime(0,0,0,1,1,\$year)) == 1) ?     true (\$year = 1921; \$year &lt; 2021; \$year++)     { if (isLeap(\$year))         { echo "\$year : Leap year &lt;br/&gt; \n"; }         else { echo "\$year : NOT leap year &lt;br/&gt; \n"; }     } } ? &gt; </pre>	5m.

Name of the staff/s: Susheelamma K H

Signature: Susheelamma. 6.4.22/06/2022

Name of the Reviewer:

Signature:

Signature of HOD

Sre Reddy

Department of ISE

S. J. C. Institute of Technology

Subject: WEB TECHNOLOGY AND ITS APPLICATIONS - 18CS63

Semester: VI B

Tutorial-1

Faculty: Susheelamma K H

Date: 20-05-2021

**MODULE - 1 INTRODUCTION TO HTML, INTRODUCTION TO CSS**

Question Number	
1	Briefly explain the history of markup languages
2	Write a note on XHTML and HTML5
3	Explain- i) <a> ii) <img> iii) <p> iv) <div> elements with examples
4	What is the difference between unordered lists and ordered lists
5	What are the three cascade principles used by browsers when style rules conflict? Briefly describe each.
6	What is specificity? Why are they necessary
7	Describe the difference between a relative and an absolute reference. When should each be used?
8	What is an element selector and a grouped element selector? Provide an example of each.
9	What are class selectors? What are id selectors? Briefly discuss why you would use one over the other.
10	What are contextual selectors? Identify the four different contextual selectors.

**MODULE - 2 HTML TABLES & FORMS, ADVANCED CSS**

Question Number	
1	Create an HTML table to list 8 subjects internal and external marks with proper headings. USN, Subject name (Sub1 to Sub8) and subject code (S1 to S8) is to be included. Insert 3 students external and internal marks data into the table.
2	What are the two different ways of passing information via the URL? With a neat example mention its advantages and disadvantages.
3	How Form works? Explain with neat diagram
4	In what situation would you use a radio button? In what situation would you use a checkbox? Explain in detail with example for each.
5	List and explain different Text input controls give syntax for each.
6	What is the purpose of the action attribute? Explain with example
7	What are microformats? What is their purpose? Explain with neat diagram
8	What is an hCard? Explain in detail

Susheelamma K H  
Staff In charge 20/05/2021

Susheelamma K H  
HOD  
Dept. of ISE



### Internal Test Question paper format- CBCS Scheme

Name of the staff/s: SUSHEELAMMA K H

Date: 28/05/2021

Signature: *Susheelamma KH*  
28/05/2021Reviewer's Signature: *Susheelamma KH*  
28/05/21

NOTE: Only the following information's to be given to the students.

### S.J.C. Institute of Technology Department of Information Science & Engineering

Test: 1

Semester: VI

Duration: 90 minutes

Section: 'A' &amp; 'B'

Max Marks: 50

Subject Name &amp; Code: Web Technology &amp; its Applications (18CS63)

Instructions: Answer any five full questions,

Note: The Choice question should satisfy same COs and levels.

Sl. No.	Questions	Marks	CO	Levels
1.	a). With an example explain the structure of HTML5 document. How do you validate a html page?	5M	CO1	L1
	b) Explain the difference between a relative and an absolute reference with an example. When should each be used?	5M	CO1	L1
<b>OR</b>				
2.	a) List and explain all HTML5 semantic elements with coding examples.	5M	CO1	L1
	b) List and explain any 5 block level elements of html with coding examples	5M	CO1	L1
3.	List and explain the types of CSS style sheet and location of CSS styles with examples	10M	CO1	L1
<b>OR</b>				
4.	List and explain the CSS Cascading principles in detail with coding examples	10M	CO1	L1
5.	A. Write HTML5 code to accept and validate VTU USN.	5M	CO1	L3
	B. How do you make html tables accessible? Explain with coding example.	5M	CO2	L2
<b>OR</b>				
6.	A. write HTML5 code to accept Indian postal pin code and URL of a website from user and validate it.	5M	CO1	L3
	B. What is a Query string? Explain it with respect to GET and POST methods with example.	5M	CO2	L2



10. Write the complete HTML5 code to create the following html form. Use appropriate CSS style. The form should be exactly same in style and content with proper validation.

### Vaccination Registration form

Personal Information

Name

Date of Birth (As per Aadhar)

Gender

Email

Mobile number

Security PIN

Aadhar Number

Vaccination Hospital preference(Seelect one or more)

Bowring Hospital Bangalore

KC General Hospital Bangalore

Chickballapur Govt Hospital

Yelahanka Govt Hospital

I agree to the terms and conditions

10M

CO2

L3

**Course Outcomes:** At the end of this course, students are able to:

CO1	Apply the syntax and Semantic Structure of HTML and CSS to build web pages and applications
CO2	Compose forms and tables using HTML and CSS
CO3	Design and Implement Client-Side programs using JavaScript and Server-Side programs using PHP
CO4	Apply Object Oriented Programming capabilities of PHP
CO5	Apply JavaScript frameworks such as jQuery and Backbone to build web applications
CO6	Demonstrate the web technology concepts through programs



DEPARTMENT Information Science & Engineering

Test1 Scheme & Solutions

Semester: 6<sup>th</sup> B.

Subject Title: Web Technology & its Applications

Subject Code: 18CS63.

Question Number	Solution	Marks Allocated
1. (a)	<p><u>Structure of HTML Document.</u></p> <pre> &lt;!DOCTYPE html&gt; &lt;html&gt;   &lt;head lang="en"&gt;     &lt;meta charset="utf-8"/&gt;     &lt;title&gt; share your Travels &lt;/title&gt;     &lt;link rel="stylesheet" href="css/main.css"/&gt;     &lt;script src="js/html5shiv.js"&gt;&lt;/script&gt;   &lt;/head&gt;   &lt;body&gt;     &lt;h1&gt; Main heading goes here &lt;/h1&gt;     ...   &lt;/body&gt; &lt;/html&gt; </pre> <p>validation - <a href="http://validator.w3.org">http://validator.w3.org</a> Structure - 02M  Expln. - 02M  Val = 02M</p>	= 05M.
1 (b)	<p>Relative and an Absolute reference.</p> <p><u>Relative reference</u> - Constructing links with &lt;a&gt; element, referencing images with &lt;img&gt; element, within our site.</p> <p>&lt;a href="#top"&gt; Go to Top of Document &lt;/a&gt;</p> <p><u>Absolute reference</u> - Referencing page or resource on an external site.</p> <p>&lt;a href="http://www.centralpark.com/lequirib"&gt; Central park &lt;/a&gt;. 2*5=10</p>	2*5*2 = 5M
2a.	<p><u>HTML Semantic elements.</u></p> <p>(i) Header and Footer. (vi) Aside.  (ii) Heading Groups  (iii) Navigation  (iv) Articles and Sections  (v) Figure and Figure Captions.</p> <p>Any 5  5*1 = 5M</p>	5*1 = 5M



Question Number	Solution	Marks Allocated
2b.	<p><u>Block level elements of html.</u></p> <p> <math>\langle h2 \rangle</math>            <math>\langle /h2 \rangle</math>  <math>\langle ul \rangle</math>             <math>\langle /ul \rangle</math>  <math>\langle p \rangle</math>                <math>\langle /p \rangle</math>  <math>\langle div \rangle</math>             <math>\langle /div \rangle</math>  <math>\langle table \rangle</math>          <math>\langle /table \rangle</math> </p> <p>Expln - <math>5 \times 1 = 5m</math></p>	5m.
3i.	<p><u>Types of css style sheet; locations of stylesheet</u></p> <p>1. <u>Inline</u> - style rules are placed within HTML element via style attribute.</p> <p>2. <u>Embedded stylesheet</u> - style rules are placed within <math>\langle style \rangle</math> element inside the head element of an HTML document.</p> <p>3. <u>External stylesheet</u> - style rules are placed within a external text file with .css extension.</p> <p>Listing - Type - 1m  Location - 1m  Explanation - 3m  Example - <math>2 + 2 + 1 = 5m</math></p>	1.0m.
4.	<p><u>CSS cascading principles</u></p> <p><u>Inheritance</u> - Font, color, link and text properties are inheritable. Layout, sizing, border, background and spacing properties are not inheritable.</p> <p><u>Specificity</u> - Determines which style rule takes precedence when more than one style rule could be applied to the same element.</p> <p><u>Location</u> - when inheritance &amp; specificity cannot determine style precedence, the principle of location will be used. When rules have same specificity, then later are given more weight - is the principle of location</p> <p>Mention = 2m  Expln - <math>3 \times 3 = 9m</math>            = 20m</p>	10m



Question Number	Solution	Marks Allocated
5a.	<p><u>HTML5 code to accept &amp; validate VTU USN</u></p> <pre> &lt;form onsubmit = findex() &gt;   .USN : &lt;input id = usn type = text &gt; &lt;/input&gt;   &lt;input type = submit value = submit &gt; &lt;/form&gt;  findex = function() { var a = document . getElementById ('usn') . value ; if (a . length == 0) { alert ("USN empty"); return ; } var b = a . toLowerCase () . var str = b . search (/^[1-4][0-3][0-3] [0-9][0-9][0-3][0-3][0-9][0-9][0-9] /); if (str == 0) alert ("USN is valid"); else alert ("USN is invalid"); } </pre>	= 5m
5b.	<p><u>How to make html table accessible.</u></p> <p>&lt;caption&gt; - element - to brief description of table.</p> <p>&lt;thead&gt; , &lt;tfoot&gt; &lt;tbody&gt; - Use with tables having large number of rows.</p> <p>&lt;col&gt; , &lt;colgroup&gt; - used for styling.</p> <p>Explan - 02m Exmple - 3M</p>	= 5m
6a.	<p><u>HTML5 code to accept Indian postal pin code &amp; URL of a website from user &amp; validate it.</u></p> <p>function CheckIndianZipCode (b) {</p>	



Question Number	Solution	Marks Allocated
	<pre> var a = /(^\d{6}\$)/; if (a.test(b)) {   alert("zipcode valid"); } else alert("zipcode not valid"); }  &lt;Form name="windowEvent"&gt; Enter string: &lt;input type="text" name="txtOriginal" /&gt; &lt;br&gt; &lt;input type="button" value="Check" name="btnIndianZipCode" onclick="CheckIndianZipCode(txtOriginal.value);" /&gt; &lt;/Form&gt; &lt;form action="/action-page.php"&gt; &lt;label for="website"&gt;Homepage &lt;/label&gt; &lt;input type="url" id="website" name="website" pattern="https?:\/\/.*" title="Include http: //"&gt; &lt;input type="submit"&gt; &lt;/form&gt; </pre>	<p>- 3 m</p> <p>= 5 m</p> <p>- 2 m</p>
<p>6b.</p>	<p><u>Query String</u> - GET &amp; POST METHODS</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Details Title - Country <input type="submit"/></p> </div> <pre> &lt;form method="get" action="process.php"&gt; GET/process.php? title=Central+park+where=United+States http://1.1 </pre> <p style="text-align: center;">Query String</p> <pre> &lt;form method="post" action="process.php"&gt; </pre> <p>HTTP Header</p> <pre> POST /process.php http/1.1 Date: Sun, 20 May 2022 23:59:50 GMT Host: www.mysite.com User-Agent: mozilla/4.0 Content-Length: 47 title=Central+park+where=United+States </pre> <p style="text-align: center;">Query string. 2.5 x 2 = 5 m</p>	<p>5 m</p>



Question Number	Solution	Marks Allocated
7.	HTML5 code to create following table. - Invoice table.	10m.
8.	HTML5 code to create web Technology Seminar table.	10m.
9.	HTML5 code to create Webinar Registration Form.	10m
10.	HTML code to create Vaccination Registration form.	10m.

SJB



Estd: 1986

|| Jai Sri Gurudev ||  
Sri Adichunchanagiri Shikshana Trust ®

## SJC INSTITUTE OF TECHNOLOGY


Chickballapur – 562 101

### Department of Information Science & Engineering ASSIGNMENT

<b>SUBJECT TITLE</b>	WEB TECHNOLOGY AND ITS APPLICATIONS		
<b>SUBJECT TYPE</b>	CORE		
<b>SUBJECT CODE</b>	18CS63		
<b>ACADEMIC YEAR</b>	2021 (EVEN SEMESTER)	BATCH	2018-2022
<b>SCHEME</b>	CBCS scheme (Effective from the academic year 2018 -2019)		
<b>SEMESTER</b>	IS-6-B		
<b>FACULTY NAME and DESIGNATION</b>	SUSHEELAMMA K H, Assistant Professor		

#### Module -1

<b>Q. No.</b>	<b>Questions</b>	<b>Bloom's LL</b>	<b>COs</b>
1	Write an XHTML document to describe an ordered list of four states. Each element of the list must have an unordered list of atleast two cities in the state.	L3	
2	Write an HTML program to output the following ordered list 1. Edge of Tomorrow 1. Tom crwse 2. Emily Blunt 2. Battle ship 1. Taylar kitsch 2. Brooklyn Deeker	L3	
3	Write an HTML program to get the output as shown below.	L3	

	<h2 style="text-align: center;">Rainbow lorakeets</h2>  <p>The rainbow lorakeet is a medium-sized parrot. The head is deep blue with a greenish-yellow nuchal collar, and the rest of the upper parts (wings, back and tail) are deep green. The chest is red with blue-black barring. The belly is deep green, and the thighs and rump are yellow with deep green barring. In flight a yellow wing-bar contrasts clearly with the red underwing coverts.</p> <p>There is little to visually distinguish between the sexes; however, to a keen observer of their colouring and behaviour, their dimorphism is readily apparent.</p>			
<p>4</p>	<p>Develop a html program to get the following output using basic text formatting</p> <p>This Example is <b>Bold Text</b>          This Example is <b>Big Text</b>          This Example is <span style="display: inline-block; width: 100px; text-align: center;">Center Text</span></p> <p>This Example is <del>Delete Text</del>          This Example is <i>Emphasize Text</i>          This Example is <i>Italic Text</i>          This Example is <u>Insert Text</u>          This Example is          This Example is</p> <p>Paragraph Text</p> <p style="text-align: center;">This Example is <b>Short Quotation</b>          This Example is Small Text          This Example is <math>h_2+so_4=h_2so_4</math>          This Example is <math>3^2+4^2=5^2</math>          This Example is Teletype Text</p>		<p>L4&amp;L5</p>	
<p>5</p>	<p>Develop a html program to get the following output using box model approach.</p>		<p>L4&amp;L5</p>	


# Box Model Example

[Redacted]

My Content Example 2

My Content Example 3

Module -2		Blooms LL	COs												
Q. No.	Questions														
1	Write javascript that illustrates dynamic stacking of images.	L3													
2	Write XHTML document that includes atleast two images and enough text to precede the images, flow around them (one on left and one on right) and continue after the last image	L3													
3	write the HTML program to create following table with exact the same style specified in the table and title of the table should be "Table", Caption of the table should be "Winner List", table border="8", cellspacing="4", cellpadding="5".	L3													
<table border="1"> <thead> <tr> <th>Country Name</th> <th>GOLD</th> <th>SILBER</th> <th>BRONZE</th> </tr> </thead> <tbody> <tr> <td>India</td> <td>5</td> <td>5</td> <td>3</td> </tr> <tr> <td>Chaina</td> <td>4</td> <td>4</td> <td>3</td> </tr> </tbody> </table>				Country Name	GOLD	SILBER	BRONZE	India	5	5	3	Chaina	4	4	3
Country Name	GOLD	SILBER	BRONZE												
India	5	5	3												
Chaina	4	4	3												
4	Develop an HTML program to create an HTML form as shown below.	L4&L5													
<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;"><b>Personal Details</b></p> <p>Name: <input type="text"/></p> <p>Password: <input type="password"/></p> <p>E-mail id: <input type="text"/></p> <p>Gender: <input type="radio"/> Male <input type="radio"/> Female</p> <p>Contact#: <input type="text"/></p> <p style="text-align: center;"><b>Educational Qualification</b></p> <p>Degree: <input type="text" value="-- Select Group --"/></p> <p>Engineering: <input type="text" value="-- Select Group --"/></p> <p>Hobbies: <input type="checkbox"/> Playing chess <input type="checkbox"/> Reading Books</p> <p style="text-align: center;"><b>Address</b></p> <div style="border: 1px solid gray; height: 30px; width: 100%;"></div> <p>Attch Resume: <input type="button" value="Choose File"/> No file chosen</p> <p style="text-align: center;"><input type="button" value="SUBMIT"/></p> </div>															
5	Develop and HTML program to create a set of 12 boxes as shown below by automatically placing the grid item into the next available empty grid cell.	L4&L5													
<table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> </tr> </tbody> </table>		1	2	3	4	5	6	7	8	9	10	11	12		
1	2	3	4	5	6										
7	8	9	10	11	12										

Module -3			
Q. No.	Questions	Bloom's LL	COs
1	Write an XHTML document and Javascript function to compute and print reverse of a given number	L3	
2	Write a Javascript that contains a function named validate - phoneno, which tests the phone number of the format ddd - dddd - ddddddd <09i -,8256 * 1234567> and display whether the given number is valid or not using alert.	L3	
3	Write a Javascript which displays the message when the mouse button is pressed no matter where it is on the screen.	L3	
4	Develop an XHTML and Java script which has five buttons labeled five different colors. The event handler for these buttons must produce a message stating the chosen favorite color. The event handler must be implemented as a function whose name must be assigned to the on-click attribute of the radio button element. The chosen color must be sent to the event handler as a parameter. Use a onclick event to trigger a call to alert, which should display brief description of the selected color.	L4&L5	
5	Develop a javascript code to implement keyboard event "onkeyup" by allowing the user to write something in textbox, on releasing the key after pressing it should output that looks as below 	L4&L5	

Module -4			
Q. No.	Questions	Bloom's LL	COs
1	Write a PHP functions that reads contents from a file and write into a file.	L3	
2	Write a program to hide or show HTML elements using visibility property in javascript	L3	
3	Write a PHP program to generate 10 Random numbers using loop.	L3	
4	Develop a PHP function to display E_USER_WARNING error value 512 on screen.	L4&L5	
5	<p>Predict the output of the following PHP program.</p> <pre> &lt;html&gt; &lt;head&gt; &lt;/head&gt; &lt;?php if (!isset(\$_POST["sub"])) { ?&gt; &lt;form method="post" action="&lt;?php echo \$_SERVER["PHP_SELF"];?&gt;"&gt; &lt;table style="background: #AAFFFF; margin-left:100px; margin-top:50px; margin-bottom:100px; padding:10px; " &gt; &lt;tr&gt; &lt;td style="color:#333333;font-size:20px;"&gt;Name&lt;/td&gt; &lt;td&gt;&lt;input name="name" type="text" required/&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td style="color:#333333;font-size:20px;"&gt;Email&lt;/td&gt; &lt;td&gt;&lt;input name="email" type="email" required/&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td style="color:#333333;font-size:20px;"&gt;Messege&lt;/td&gt; &lt;td&gt;&lt;textarea name="mess" cols="15" rows="10" required &gt;&lt;/textarea&gt;&lt;/td&gt; &lt;/tr&gt; &lt;tr&gt; &lt;td&gt;&lt;input name="res" type="reset" value="Reset"/&gt;&lt;/td&gt; &lt;td&gt;&lt;input name="sub" type="submit" value="Submit"&gt;&lt;/td&gt; &lt;/tr&gt; &lt;/table&gt; &lt;/form&gt; &lt;?php } else { if (isset(\$_POST["name"])) { \$from = \$_POST["name"]; // sender \$subject = \$_POST["email"]; \$message = \$_POST["mess"]; </pre>	L4&L5	

	<pre>mail("info@ptutorial.com", \$subject, \$message, "From: \$from\n"); echo "Thanks"; } } ?&gt; &lt;/html&gt;</pre>		
--	---	--	--



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# SJC INSTITUTE OF TECHNOLOGY

Chickballapur – 562 101

Estd: 1986

## Department of Department of Information Science & Engineering

<b>SUBJECT TITLE</b>	WEB TECHNOLOGY AND ITS APPLICATIONS		
<b>SUBJECT TYPE</b>	CORE		
<b>SUBJECT CODE</b>	18CS63		
<b>ACADEMIC YEAR</b>	2021 (EVEN SEMESTER)	<b>BATCH</b>	2018-2022
<b>SCHEME</b>	CBCS scheme (Effective from the academic year 2018 -2019)		
<b>SEMESTER</b>	IS-6-B		
<b>FACULTY NAME and DESIGNATION</b>	SUSHEELAMMA K H, Assistant Professor		

## QUESTION BANK

<i>Module -1</i>			
<i>Q. No.</i>	<i>Questions</i>	<i>Bloom's LL</i>	<i>COs</i>
1	With an example explain the structure of HTML5 document. How do you validate a html page?	L1	CO1
2	What are the advantages of using the new HTML5 semantic elements? Disadvantages?	L1	CO1
3	List and explain the types of CSS style sheet and location of CSS styles with examples	L1	CO1
4	Illustrate the CSS box model. Be sure to label each of the components of the box.	L2	CO1
5	Compare the approach the W3C has used with CSS3 in comparison to CSS2.1.	L2	CO1
6	Explain the difference between a relative and an absolute reference with an example. When should each be used?	L2	CO1
7	Write a program by using internal style sheet to set text color of ALL the <h1> elements (on that page) to blue, and the text color of ALL the <p> elements to red. In addition, the page should be displayed with a "powderblue" background color.	L3	CO1
8	Write a program by using external style sheet to set text color of ALL the <h5> elements (on that page) to green, and the text color of ALL the <p> elements to blue. In addition, the page should be displayed with a "yellow" background color.	L3	CO1
9	Differentiate between a relative and an absolute measure unit in CSS? Why are relative units preferred over absolute units in CSS?	L4	CO1

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10	Predict the output of following HTML code. <pre> &lt;!DOCTYPE html&gt; &lt;html&gt; &lt;head&gt; &lt;title&gt;Heading tags&lt;/title&gt;&lt;/head&gt; &lt;body&gt; &lt;h1 align=left&gt;Information Technology&lt;/h1&gt; &lt;hr&gt; &lt;h2 align=center&gt;XI Standard&lt;/h2&gt; &lt;h3 align=right&gt;Division&lt;/h3&gt; &lt;/body&gt; &lt;/html&gt; </pre>	L5&L6	CO1
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Module -2			
Q. No.	Questions	Bloom's LL	COs
1	Describe the purpose of a table caption and the table heading elements	L1	CO2
2	Briefly describe the role of CSS media queries.	L1	CO2
3	. Describe how block-level elements are different from inline elements. Be sure to describe the two different types of inline elements.	L1	CO2
4	Explain the role of grid systems in the creation of multicolumn layouts.	L2	CO2
5	List and Explain CSS Frameworks in detail with coding example.	L2	CO2
6	What is Responsive Design? Explain the four key components that makes Responsive Design work.	L2	CO2
7	Write the complete HTML5 program to create the following html form. Use appropriate CSS style. The form should be exactly same in style and content with proper validation. <div data-bbox="263 1568 1157 2004" style="border: 1px solid gray; padding: 10px; margin: 10px 0;"> <p><b>Meeting Details</b></p> <p>Client Name: <input type="text" value="Enter name"/></p> <p>First Meeting? <input type="checkbox"/></p> <p>Client Type: <input type="radio"/> School <input type="radio"/> College <input type="radio"/> University</p> <p>Meeting Date: <input type="text" value="dd / mn / yyyy"/> <input type="button" value="▲"/> <input type="button" value="▼"/></p> <p><input type="button" value="Submit"/></p> </div>	L3	CO2

8 Write a program to create HTML table having border and alternate row background colors using CSS. Final output should be like this:

STUDENTS MARK SHEET					
Name	Maths	Science	English	Physics	General Knowledge
David	85	87	88	92	88
Richard	91	81	78	71	74
John	81	86	88	84	92
Tony	84	86	87	82	81
Scott	71	79	82	88	89

L3

CO2

9 Classify and explain replaced inline elements and nonreplaced inline elements.

L4

CO2

10 Predict the output of following HTML code.

```

<!DOCTYPE html>
<html>
  <head>
    <title>Table</title>
    <style>
      table,th,t{
        border: 1px solid black;
        border-collapse: collapse;
        background-color: buttonface;
      }
      td{
        text-align: center;
        background-color: yellow;
      }
    </style>
  </head>
  <body>
    <table style="width: 50%">
      <tr>
        <th>Employee Name</th>
        <th colspan="3">Company name</th>
      </tr>
      <tr>
        <td>Arohi</td>
        <td>Sookshmas</td>
        <td>15K</td>
        <td>8</td>
      </tr>
      <tr>
        <td>Anu</td>
        <td>Sook</td>
        <td>20K</td>
        <td>34</td>
      </tr>
      <tr>
        <td>Pinky</td>
        <td>S-leadger</td>
      </tr>
    </table>
  </body>
</html>

```

L5&L6

CO2

<pre> &lt;td&gt;50K&lt;/td&gt; &lt;td&gt;98&lt;/td&gt; &lt;/tr&gt; &lt;/table&gt; &lt;/body&gt; &lt;/html&gt;                 </pre>		
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Module -3			
Q. No.	Questions	Bloom's LL	COs
1	List and explain at least four different server-side development technologies	L1	CO3
2	Describe the ASP.NET framework	L1	CO3
3	Describe the steps taken by the Zend Engine when it receives a PHP request.	L1	CO3
4	Compare graceful degradation with progressive enhancement.	L2	CO3
5	Discuss the advantages and disadvantages of client-side scripting.	L2	CO3
6	Differentiate between the multi-threaded and multi-process setup of PHP in Apache.	L2	CO3
7	Write a javascript function to check whether a word or a sentence is palindrome or not irrespective of case and spaces	L3	CO3
8	Write a program to create a JavaScript Calculator using the JavaScript, HTML and CSS programming languages.	L3	CO3
9	Differentiate between the multi-threaded and multi-process setup of PHP in Apache.	L4	CO3
10	<pre> &lt;html&gt; &lt;head&gt; &lt;title&gt; Registration Page &lt;/title&gt; &lt;/head&gt; &lt;body bgcolor="LightSkyBlue"&gt; &lt;br&gt; &lt;br&gt; &lt;form&gt;  &lt;label&gt; Firstname &lt;/label&gt; &lt;input type="text" name="firstname" size="15"/&gt; &lt;br&gt; &lt;br&gt; &lt;label&gt; Middlename: &lt;/label&gt; &lt;input type="text" name="middlename" size="15"/&gt; &lt;br&gt; &lt;br&gt; &lt;label&gt; Lastname: &lt;/label&gt; &lt;input type="text" name="lastname" size="15"/&gt; &lt;br&gt; &lt;br&gt;  &lt;label&gt; Course : &lt;/label&gt;                 </pre>	L5&L6	CO3

```

<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>

<br>
<br>
<label>
Gender :
</label><br>
<input type="radio" name="male"/> Male <br>
<input type="radio" name="female"/> Female <br>
<input type="radio" name="other"/> Other
<br>
<br>

<label>
Phone :
</label>
<input type="text" name="country code" value="+91" size="2"/>
<input type="text" name="phone" size="10"/> <br> <br>
Address
<br>
<textarea cols="80" rows="5" value="address">
</textarea>
<br> <br>
Email:
<input type="email" id="email" name="email"/> <br>
<br> <br>
Password:
<input type="Password" id="pass" name="pass"> <br>
<br> <br>
Re-type password:
<input type="Password" id="repass" name="repass"> <br> <br>
<input type="button" value="Submit"/>
</form>
</body>
</html>

```

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Module -4		Bloom's LL	COs
Q. No.	Questions		
1	Describe the relationship between keys and indexes in arrays.	L1	CO4
2	Describe the different error reporting constants	L1	CO4
3	List and briefly describe the ways you can limit the types and size of file uploaded?	L1	CO4
4	Discuss strategies for handling validation errors.	L2	CO4
5	Explain the role of an interface in object oriented programming	L2	CO4
6	Explain how an array acts as an ordered map in PHP.	L2	CO4
7	Write a program to accept a number from html form upon clicking on the submit button convert number into words using PHP script.	L3	CO4
8	Write a php program to generate Leap Year between 1921 to 2021.	L3	CO4
9	Differentiate the trade-offs between procedural and object-oriented exception handling.	L4	CO4
10	<p>Predict the output of following HTML code.</p> <pre> &lt;!DOCTYPE html&gt; &lt;html&gt; &lt;head&gt; &lt;title&gt;&lt;/title&gt; &lt;meta http-equiv="Content-Type" content="text/html; charset=UTF-8"&gt; &lt;/head&gt; &lt;body&gt; &lt;h3&gt;Chess Board using Nested For Loop&lt;/h3&gt; &lt;table width="270px" cellspacing="0px" cellpadding="0px" border="1px"&gt; &lt;!-- cell 270px wide (8 columns x 60px) --&gt; &lt;?php for(\$row=1;\$row&lt;=8;\$row++) { echo "&lt;tr&gt;"; for(\$col=1;\$col&lt;=8;\$col++) { \$total=\$row+\$col; if(\$total%2==0) { echo "&lt;td height=30px width=30px bgcolor=#FFFFFF&gt;&lt;/td&gt;"; } else { echo "&lt;td height=30px width=30px bgcolor=#000000&gt;&lt;/td&gt;"; } } echo "&lt;/tr&gt;"; } ?&gt; &lt;/table&gt; &lt;/body&gt; </pre>	L5&L6	CO4

&lt;/html&gt;

Module -5			
Q. No.	Questions	Bloom's LL	COs
1	Describe the use of URL rewriting.	L1	CO5
2	Describe the best practices for using persistent cookies.	L1	CO5
3	Describe the two models for page caching.	L1	CO5
4	Discuss the merits and drawbacks of SOAP and REST based web services and for XML versus JSON as a REST data format.	L2	CO5
5	Explain the in-memory and the event approaches to XML processing? How do they differ? What are some examples of each approach in PHP?	L2	CO5
6	jQuery extends the CSS syntax for selectors. Explain what that mean.	L2	CO5
7	Write a javascript program that counts the number of times a user has clicked a button, in the current session.	L3	CO5
8	Write a javascript program that uses different function to store the username cookie for 365 days and to return the value of a specified cookie.	L3	CO5
9	Differentiate between the append () and appendTo() methods?	L4	CO5
10	Predict the output of following XHTML code embedded with javascript.  <pre> &lt;!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"&gt; &lt;html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en"&gt; &lt;head&gt; &lt;meta http-equiv="content-type" content="text/html; charset=iso-8859-1" /&gt; &lt;title&gt;JavaScript creating cookies - receive real data. example1&lt;/title&gt; &lt;/head&gt; &lt;body&gt; &lt;h1 style="color: red"&gt;JavaScript creating cookies, receive real data. - example1&lt;/h1&gt; &lt;hr /&gt; &lt;script type="text/javascript"&gt; //This is done to make the following JavaScript code compatible to XHTML. &lt;![CDATA[ var visitor_name = prompt("What's your name?", ""); var curdate = new Date(); curdate.setMonth(curdate.getMonth() + 6); var cookie_date = curdate.toUTCString(); final_cookie = "my_cookie=" + encodeURIComponent(visitor_name) + ";expires_on = " + cookie_date; document.cookie = final_cookie; alert(final_cookie); </pre>	L5&L6	CO5

	//]]> </script> </body> </html>		
--	--	--	--

## Note:

1. Questions shall be framed by consolidating comprehensively from the following sources
  - Exercise problems of text books/ references
  - Previous year question VTU exam Question paper. (Mark the year/exam beside the question)
  - Questions by Experts during Interview/Academic Audit
  - Internet sources/ other Universities examination question papers.
  - Own / experience.
  - Gate questions mentioning the year.
2. Questions shall follow all the Bloom's learning levels with appropriate action verbs
3. There shall be a total of 50 questions considering 10 questions from each module, of which, 3 questions each at L1 and L2, 2 questions at L3, 1 question each at L4 and L5/L6.
4. Ensure the coverage of all Cos.



Estd: 1986

|| Jal Sri Gurudev ||  
Sri Adichunchanagiri Shikshana Trust ®

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## Department of Information Science & Engineering

### LESSON PLAN

<b>SUBJECT TITLE</b>	WEB TECHNOLOGY AND ITS APPLICATIONS		
<b>SUBJECT TYPE</b>	CORE /-ELECTIVE		
<b>SUBJECT CODE</b>	18CS63		
<b>ACADEMIC YEAR</b>	2021 (EVEN SEMESTER)	2021 (EVEN SEMESTER)	2021 (EVEN SEMESTER)
<b>SCHEME</b>	CBCS scheme (Effective from the academic year 2018 -2019)		
<b>SEMESTER &amp; SECTION</b>	IS-6-B		
<b>IA MARKS</b>	40	<b>EXAM MARKS</b>	60
<b>NUMBER OF LECTURE HOURS/WEEK</b>	4	<b>TOTAL NUMBER OF LECTURE HOURS</b>	50
<b>FACULTY NAME</b>	SUSHEELAMMA K H	<b>NO. OF TIMES HANDLED</b>	1 <sup>st</sup> Time / First time
<b>COURSE LEARNING OBJECTIVES:</b> This course will enable students to			
1. Illustrate the Semantic Structure of HTML and CSS.			
2. Compose forms and tables using HTML and CSS.			
3. Design Client-Side programs using JavaScript and Server-Side programs using PHP.			
4. Infer Object Oriented Programming capabilities of PHP.			
5. Examine JavaScript frameworks such as jQuery and Backbone.			
<b>Course Outcomes:</b> At the end of this course, students are able to:			
<b>Web Technology and its applications-18CS63</b>			
C401.1	Apply the syntax and Semantic Structure of HTML and CSS to build web pages and applications		
C401.2	Compose forms and tables using HTML and CSS		
C401.3	Design and Implement Client-Side programs using JavaScript and Server-Side programs using PHP		
C401.4	Apply Object Oriented Programming capabilities of PHP		
C401.5	Apply JavaScript frameworks such as jQuery and Backbone to build web applications		
C401.6	Demonstrate the web technologies through a simple application		

Web Technology and its applications-18CS63																	
CO-PO Mapping Table (In a scale of 3)												CO-PSO Mapping Table					
CO/PO	1	2	3	4	5	6	7	8	9	10	11	12	CO/PSO	1	2	3	4
C401.1	3	2	2										C401.1	3			
C401.2	3	2	1										C401.2	3			
C401.3	3	2	3										C401.3	3	2		
C401.4	3	2	2										C401.4	3	2		
C401.5	3	3	2										C401.5	3	2		
C401.6	3	3	2										C401.6	3	2		
Avg	3	2.3	2										Avg	3	2		

Web Technology and its applications-18CS63		
MAPPING	LOW/MEDIUM/HIGH	JUSTIFICATION
C401.1 - PO1	HIGH	Highly mapped as the students need the knowledge of basic HTML and CSS syntax and semantics to build web pages.
C401.1- PO2	MEDIUM	Moderately mapped as the students analyze web page using HTML and CSS.
C401.1 - PO3	MEDIUM	Moderately mapped as the students to develop the basics using html programs.
C401.1 - PSO1	HIGH	Highly mapped as students apply the concepts of web development while building web pages using HTML and CSS.
C401.2- PO1	HIGH	Highly mapped as the students to build web pages, construct and visually format tables and forms using HTML and CSS
C401.2- PO2	MEDIUM	Moderately mapped as the students analyze development of HTML tables, Forms.
C401.2- PO3	LOW	Slightly mapped as the students to develop the tables using htm programs and CSS Sheets.
C401.2- PSO1	HIGH	Highly mapped as students use the concepts in writing the HTML and CSS programs to build web pages
C401.3- PO1	HIGH	Highly mapped as the students are able to build Client-Side Scripts using JavaScript and Server-Side Scripts - PHP
C401.3- PO2	MEDIUM	Moderately mapped as the students are able to analyze Client-Side Scripts using JavaScript and Server-Side Scripts - PHP
C401.3- PO3	HIGH	Highly mapped as the students are able to develop Client-Side Scripts using JavaScript and Server-Side Scripts using PHP to generate and display the contents dynamically.
C401.3- PSO1	HIGH	Highly mapped as students develop Client-Side Scripts in PHP.
C401.3- PSO2	MEDIUM	Moderately mapped as the students are able to implement PHP to develop applications
C401.4- PO1	HIGH	Highly mapped as the students are able to understand Object Oriented Concepts of PHP programs.

C401.4-PO2	MEDIUM	Moderately mapped as the students to analyze Object Oriented Concepts of PHP programs.
C401.4-PO3	MEDIUM	Moderately mapped as the students are able to implement Object Oriented Programming using PHP to generate and display the contents.
C401.4-PSO1	HIGH	Highly mapped as the students make use or principles of object-oriented development using PHP.
C401.4-PSO2	MEDIUM	Moderately mapped as the students are able to implement PHP to develop applications
C401.5-PO1	HIGH	Highly mapped as the students use basic engineering knowledge to build JavaScript frameworks
C401.5-PO2	HIGH	Highly mapped as the students analyze basic engineering knowledge to build JavaScript frameworks
C401.5-PO3	MEDIUM	Moderately mapped as the students are able to develop jQuery and Backbone which facilitates developer to focus on core features
C401.5-PSO1	HIGH	Highly mapped as the students use jQuery and Backbone which facilitates developer to focus on core features.
C401.5-PSO2	MEDIUM	Moderately mapped as the students are able to implement PHP to develop applications
C401.6-PO1	HIGH	Highly mapped as the students use basic engineering knowledge to build JavaScript frameworks
C401.6-PO2	HIGH	Highly mapped as the students analyze basic engineering knowledge to build JavaScript frameworks
C401.6-PO3	MEDIUM	Moderately mapped as the students are able to develop jQuery and Backbone which facilitates developer to focus on core features
C401.6-PSO1	HIGH	Highly mapped as the students develop applications using web technology.
C401.6-PSO2	MEDIUM	Moderately mapped as the students are able to implement PHP to develop applications

## DELIVERY PLAN WITH DETAILS

MODULE - 1							
Lecture #	Topic	Mode of Delivery (Pls Tick -)				Date of Delivery	COs Covered
		1	2	3	4		
1	Introduction to Module 1 - Introduction to HTML, What is HTML and Where did it come from?, HTML Syntax, Semantic Markup, Structure of HTML Documents	✓	✓			22/04/2023	CO 1
2	Quick Tour of HTML Elements	✓	✓			26/04/2023	CO 1
3	HTML5 Semantic Structure Elements	✓	✓			27/04/2023	CO 1
4	Introduction to CSS, What is CSS,	✓	✓		✓	28/04/2023	CO 1
5	CSS Syntax	✓	✓			29/04/2023	CO 1
6	Location of Styles	✓	✓	✓	✓	04/05/2023	CO 1
7	Selectors	✓	✓	✓	✓	05/05/2023	CO 1
8	The Cascade: How Styles Interact	✓	✓		✓	06/05/2023	CO 1

9	The Box Model	✓	✓			30/05/2021	CO 1
10	CSS Text Styling, Conclusion of Module-1	✓	✓		✓	22/05/2021	CO 1

Textbook and chapter : Randy Connolly, Ricardo Hoar, "Fundamentals of Web Development", 1st Edition, Pearson Education India. (ISBN:978-9332575271).  
Chapter 1, Chapter 2.

Signatures	Faculty: <i>Surbhendra K. H.</i>	#HOURS	Allotted	Taken
	HoD: <i>S. Reddy</i>		10	10

Remarks: *Executed as per plan*

### MODULE - 2

Lecture #	Topic	Mode of Delivery (Pls Tick →)				Date of Delivery	COs Covered
		1	2	3	4		
1	Introduction to Module 2 - HTML Tables and Forms, Introducing Tables, Styling Tables	✓	✓	✓	✓	22/05/2021	CO 2
2	Introducing Forms	✓	✓	✓	✓	13/05/2021	CO 2
3	Form Control Elements	✓	✓	✓	✓	17/05/2021	CO 2
4	Table and Form Accessibility, Microformats	✓	✓	✓	✓	18/05/2021	CO 2
5	Advanced CSS: Layout, Normal Flow, Positioning Elements	✓	✓	✓	✓	19/05/2021	CO 2
6	Floating Elements	✓	✓	✓	✓	20/05/2021	CO 2
7	Constructing Multicolumn Layouts	✓	✓	✓	✓	24/05/2021	CO 2
8	Approaches to CSS Layout	✓	✓	✓	✓	25/05/2021	CO 2
9	Responsive Design	✓	✓	✓	✓	31/05/2021	CO 2
10	CSS Frameworks, Conclusion of Module-2	✓	✓	✓	✓	02/06/2021	CO 2

Textbook and chapter : Randy Connolly, Ricardo Hoar, "Fundamentals of Web Development", 1st Edition, Pearson Education India. (ISBN:978-9332575271).  
Chapter 4, Chapter 5.

Signatures	Faculty: <i>Surbhendra K. H.</i>	#HOURS	Allotted	Taken
	HoD: <i>S. Reddy</i>		10	10

Remarks: *Executed as per plan*

### MODULE - 3

Lecture #	Topic	Mode of Delivery (Pls Tick →)				Date of Delivery	COs Covered
		1	2	3	4		
1	Introduction to Module 3 - JavaScript: Client-Side Scripting	✓	✓			02/06/2021	CO 3
2	What is JavaScript and What can it do?	✓	✓			03/06/2021	CO 3
3	JavaScript Design Principles	✓	✓			07/06/2021	CO 3

4	Where does JavaScript Go?, Syntax	✓	✓			08/06/2021	CO 3
5	JavaScript Objects, The Document Object Model (DOM)	✓	✓			09/06/2021	CO 3
6	JavaScript Events, Forms	✓	✓	✓		10/06/2021	CO 3
7	Introduction to Server-Side Development with PHP	✓	✓			16/06/2021	CO 3
8	What is Server-Side Development	✓	✓			17/06/2021	CO 3
9	A Web Server's Responsibilities	✓	✓			18/06/2021	CO 3
10	Quick Tour of PHP, Program Control, Functions, Conclusion of Module-3	✓	✓	✓		20/06/2021	CO 3

**Textbook and chapter** : Randy Connolly, Ricardo Hoar, *Fundamentals of Web Development*", 1<sup>st</sup> Edition, Pearson Education India. (ISBN:978-9332575271).

**Chapter 6, Chapter 8.**

Signatures	Faculty: <i>Sunheerama . b H</i>	#HOURS	Allotted	Taken
	<i>22/06/2021</i>		10	10
HoD:	<i>S. Reddy 22/6/21</i>			
Remarks	<i>Executed as per plan</i>			

### MODULE - 4

Lecture #	Topic	Mode of Delivery (Pls Tick →)				Date of Delivery	COs Covered
		1	2	3	4		
1	Introduction to Module 4 - PHP Arrays and Superglobals- Arrays, \$_GET and \$_POST Superglobal Arrays	✓	✓			22/06/2021	CO 4
2	\$_SERVER Array, \$_FILES Array	✓	✓			23/06/2021	CO 4
3	Reading/Writing Files, PHP Classes and Objects	✓	✓			24/06/2021	CO 4
4	Object-Oriented Overview	✓	✓			01/07/2021	CO 4
5	Classes and Objects in PHP	✓	✓			03/07/2021	CO 4
6	Object Oriented Design	✓	✓			04/07/2021	CO 4
7	Error Handling and Validation	✓	✓			05/07/2021	CO 4
8	What are Errors and Exceptions?	✓	✓			06/07/2021	CO 4
9	PHP Error Reporting	✓	✓			07/07/2021	CO 4
10	PHP Error and Exception Handling, Conclusion of Module-4	✓	✓			08/07/2021	CO 4

**Textbook and chapter** : Randy Connolly, Ricardo Hoar, *Fundamentals of Web Development*", 1<sup>st</sup> Edition, Pearson Education India. (ISBN:978-9332575271).

**Chapter 6, Chapter 8.**

Signatures	Faculty: <i>Sunheerama . b H</i>	#HOURS	Allotted	Taken
	<i>12/07/2021</i>		10	10
HoD:	<i>S. Reddy 12/7/21</i>			
Remarks	<i>Executed as per plan</i>			

## MODULE - 5

Lecture #	Topic	Mode of Delivery (Pls Tick →)				Date of Delivery	COs Covered
		1	2	3	4		
1	Introduction to Module 5 - Managing State, The Problem of State in Web Applications	✓	✓			18/07/2021	CO 5
2	Passing Information via Query Strings	✓	✓			14/07/2021	CO 5
3	Passing Information via the URL Path	✓	✓			15/07/2021	CO 5
4	Cookies, Serialization, Session State	✓	✓	✓		20/07/2021	CO 5
5	Advanced JavaScript and jQuery	✓	✓			22/07/2021	CO 5
6	JavaScript Pseudo-Classes, jQuery Foundations, AJAX,	✓	✓			26/07/2021	CO 5
7	Asynchronous File Transmission, Animation, Backbone MVC Frameworks	✓	✓			27/07/2021	CO 5
8	XML Processing and Web Services	✓	✓			28/07/2021	CO 5
9	JSON, Overview of Web Services. Conclusion of Module-5	✓	✓			29/07/2021	CO 5
10		✓	✓			29/07/2021	CO 5

**Textbook and chapter :** Randy Connolly, Ricardo Hoar, *Fundamentals of Web Development*, 1<sup>st</sup> Edition, Pearson Education India. (ISBN:978-9332575271).  
**Chapter 13, Chapter 15, Chapter 17.**

Signatures	Faculty: <i>S. Subramanian</i> 01/07/2021	#HOURS	Allotted	Taken
	HoD: <i>S. Reddy</i>		10	10

30/7/21

Remarks: *Executed as per plan*

### Text Books:

1. Michael J. Folk, Bill Zoellick, Greg Riccardi: *File Structures-An Object Oriented Approach with C++, 3<sup>rd</sup> Edition*, Pearson Education, 1998. (Chapters 1 to 12 excluding 1.4, 1.5, 5.5, 5.6, 8.6, 8.7, 8.8)

### Reference Books:

1. K.R. Venugopal, K.G. Srinivas, P.M. Krishnaraj: *File Structures Using C++, Tata McGraw-Hill, 2008.*
2. Scot Robert Ladd: *C++ Components and Algorithms*, BPB Publications, 1993.
3. Raghu Ramakrishnan and Johannes Gehrke: *Database Management Systems, 3<sup>rd</sup> Edition*, McGraw Hill, 2003.

(Note: Mode of Delivery :

1: Black Board

2: PPT

3: Video

4: Demo/Hands-on)

### INTERNAL/ASSIGNMENT/QUIZ SCHEDULE

TEST and QUIZ		COs and Portions Covered		ASSIGNMENT	
Test# and Quiz#	DATE	CO	Modules	Assessment	DATE
T1 & Q1	28/05/2021	CO-1, CO-2	MODULE-1 & MODULE-2 (HALF)	A1 [One Assessment - Program Executives]	26/07/2021
T2 & Q2	29/06/2021	CO-2, CO-3	MODULE-2 (HALF) & MODULE-3		
T3 & Q3	07/08/2021	CO-4, CO-5	MODULE-4 & MODULE-5		

### SUMMARY

Signatures With Date	Faculty: <i>Suhelena K. H.</i>	Total #HOURS	Allotted	Taken
	30/07/2021			
	HoD: <i>S. Reddy</i>		50	50
	30/7/21			
Remarks	<i>Syllabus completed as per plan</i>			

### ENCLOSURES

1. Syllabus
2. CO Attainment
3. Gap Analysis
4. Special lectures/talks arranged if any

Feedback by PAC

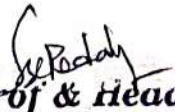
*Suhelena K. H.*  
Faculty 30/07/2021

Course coordinator

PAC

*S. Reddy*  
HOD

WEB TECHNOLOGY AND ITS APPLICATIONS (Effective from the academic year 2018 -2019) SEMESTER – VI			
Course Code	18CS63	CIE Marks	40
Number of Contact Hours/Week	3:2:0	SEE Marks	60
Total Number of Contact Hours	50	Exam Hours	03
CREDITS –4			
<b>Course Learning Objectives:</b> This course (18CS63) will enable students to:			
<ul style="list-style-type: none"> <li>• Illustrate the Semantic Structure of HTML and CSS</li> <li>• Compose forms and tables using HTML and CSS</li> <li>• Design Client-Side programs using JavaScript and Server-Side programs using PHP</li> <li>• Infer Object Oriented Programming capabilities of PHP</li> <li>• Examine JavaScript frameworks such as jQuery and Backbone</li> </ul>			
Module 1	Contact Hours		
Introduction to HTML, What is HTML and Where did it come from?, HTML Syntax, Semantic Markup, Structure of HTML Documents, Quick Tour of HTML Elements, HTML5 Semantic Structure Elements, Introduction to CSS, What is CSS, CSS Syntax, Location of Styles, Selectors, The Cascade: How Styles Interact, The Box Model, CSS Text Styling. Textbook 1: Ch. 2, 3 RBT: L1, L2, L3	10		
Module 2	Contact Hours		
HTML Tables and Forms, Introducing Tables, Styling Tables, Introducing Forms, Form Control Elements, Table and Form Accessibility, Microformats, Advanced CSS: Layout, Normal Flow, Positioning Elements, Floating Elements, Constructing Multicolumn Layouts, Approaches to CSS Layout, Responsive Design, CSS Frameworks. Textbook 1: Ch. 4,5 RBT: L1, L2, L3	10		
Module 3	Contact Hours		
JavaScript: Client-Side Scripting, What is JavaScript and What can it do?, JavaScript Design Principles, Where does JavaScript Go?, Syntax, JavaScript Objects, The Document Object Model (DOM), JavaScript Events, Forms, Introduction to Server-Side Development with PHP, What is Server-Side Development, A Web Server's Responsibilities, Quick Tour of PHP, Program Control, Functions Textbook 1: Ch. 6, 8 RBT: L1, L2, L3	10		
Module 4	Contact Hours		
PHP Arrays and Superglobals, Arrays, \$_GET and \$_POST Superglobal Arrays, \$_SERVER Array, \$_FILES Array, Reading/Writing Files, PHP Classes and Objects, Object-Oriented Overview, Classes and Objects in PHP, Object Oriented Design, Error Handling and Validation, What are Errors and Exceptions?, PHP Error Reporting, PHP Error and Exception Handling Textbook 1: Ch. 9, 10 RBT: L1, L2, L3	10		
Module 5	Contact Hours		
Managing State, The Problem of State in Web Applications, Passing Information via Query Strings, Passing Information via the URL Path, Cookies, Serialization, Session State, HTML5 Web Storage, Caching, Advanced JavaScript and jQuery, JavaScript Pseudo-Classes, jQuery Foundations, AJAX, Asynchronous File Transmission, Animation, Backbone MVC Frameworks, XML Processing and Web Services, XML Processing, JSON, Overview	10		

  
**Prof. & Head**  
 Department of Information Science & Eng  
**SJC Institute of Technology**  
 Chickballapur-562101.