SCHEME OF VALUATION
(Scoring Indicators)

Revision : 2015 Course Code : 5133

Course Title : WEB PROGRAMMING

Qst. No.	Scoring Indicator	Split up score	Sub Total	Total
		2	2	10
I.1	<a> anchor tag. Eg: CLICK ME 	½ x 4	2	
I.2	<b> - Bold Text - Important text <i> - italic text <u> - underlined text - emphasized text <mark> - marked text <small> - small text <del> - deleted text <ins> - inserted text <sup> - superscripted text <sub> - subscripted text			
I.3	text-align : The text-align property is used to align the text of a document. text-indent : The text-indent property is used to specify the indentation of the first line of text text-shadow : The text-shadow property adds shadow to text. color : The color property is used to set the color of a text. text-decoration : The text-decoration property is used to specify some special features of text. The available values are line-through, overline, underline and none (default). (any two)	1 x 2	2	
I.4	A session is the time span during which a browser interacts with a particular server. A session begins when a browser becomes connected to a particular server. It ends when the browser ceases to be connected to that server because either it becomes connected to a different server or it is terminated.	2	2	
I.5	mysql_query()	2	2	
II.1	**Internet**: • Internet is a massive network of networks, a networking infrastructure. • It connects millions of computers together globally forming a network in which any computer can communicate with any other computer as long as both are connected to internet. • Information that travels over the internet does so via a variety of protocols • It does not utilize web browsers. It is the structure on which WWW is based. • No particular creator **World Wide Web:** • WWW is a way of accessing information over the medium of the internet • It is an information sharing model that is built on the top of Internet. • The WWW uses HTTP to transmit data • It utilizes web browsers such as Internet Explorer or Firefox to access	3 + 3	6	30

	web documents called web pages that are linked via hyperlinked. • It was created by Tim Berners Lee in 1992		
II.2	**1. Simple selector** The simplest selector form is a single element name, such as h1. In this case, the property values in the rule apply to all occurrences of the named element. The selector could be a list of element names, separated by commas, in which case the property values apply to all occurrences of all of the named elements. Eg: h1 {font-size: 24pt;} h2, h3 {font-size: 20pt;} **2. Class Selector** Class selectors are used to allow different occurrences of the same tag to use different style specifications. A style class is defined in a style element by giving it a name, which is attached to the tag's name with a period. Eg: p.normal {color: blue;} p.warning {color: red;} Within the document body, the particular style class that we want is specified with the class attribute of the affected tag. A paragraph of text that we want to be presented in normal presentation style A paragraph of that is a warning to the reader **3. Generic Selector** To apply a class of style specifications that applies to the content of more than one kind of tag, a generic class is used. The generic class is defined without a tag name in its name Eg: .normal { color:blue;} Now, in the body of a document, we could have the following: <h3 class="normal"> Heading </h3> This is a paragraph with normal class specification. **4. id Selectors** An id selector allows the application of a style to one specific element. The general form of an id selector is as follows: #specific-id { property-value list} The style specified in the id selector applies to the element with the specific id. Eg: #section14 {font-size: 24pt;} specifies a font size of 24 points to the element <h2 id="section14"> Calico Cats </h2> **5. Universal selectors** The universal selector, denoted by an asterisk (*), applies its style to all elements in the document. Eg: * {color: red;} makes all elements in the document red. The universal selector is not often useful.	3 x 2	6

II.3	<html>
	<head>
	<title> Simple Calculator </title>
	<script type="text/javascript">
	function add()
	{
	var fno=parseInt(document.getElementById("firstno").value);
		3 + 3
		
		scriptin g & form design
			6

```
            var sno=parseInt(document.getElementById("secondno").value);
            var result=fno+sno;
            document.getElementById("result").value=result;
        }
    </script>
</head>
<body>
    <table border="1">
      <tr>
        <td colspan="2" style="text-align:center"> Simple Calculator </td>
      </tr>
      <tr>
        <td>Enter first Number</td>
        <td><input type="text" name="firstno" id="firstno">
      </tr>
      <tr>
        <td>Enter Second Number</td>
        <td><input type="text" name="secondno" id="secondno">
      </tr>
      <tr>
        <td>Result</td>
        <td><input type="text" name="result" id="result">
      </tr>
      <tr>
      <td colspan="2" style="text-align:center"> <input type="button"
value="SUM" name="sum" onclick="add()">
      </td>
    </tr>
</table>
</body>
</html>
```

II.4	• Open Source, PHP is completely free. • PHP can be easily embedded directly into HTML. • Platform independent can run on Windows Linux or Mac servers. • Run faster on the internet and easily integrate AJAX, Callback etc. • Interfaces very easily with Apache/MySQL • Lots of good books and on-line help. • It's available with documentation in many languages. • Easy to learn compared to many other scripting languages. It has a syntax that is easy to parse and is actually rather human-friendly. • Lots of hosting services have it ready to use, no special configuration. • Pretty easy to access other web-based tools through PHP i.e. google maps, etc. • Lots of good source code out there to use and/or learn from, as well as many useful libraries for working with PDFs, graphics, etc.	6 x 1	6
II.5	**The GET Method** The GET method sends the encoded user information appended to the page request. The page and the encoded information are separated by the **?** character. `Localhost/wplab/second.php?name1=value1&name2=value2` • The GET method produces a long string that the browser attaches the form data to the URL that is specified in the action attribute, so the form	3 + 3	6

	data is transmitted to the server with the URL. • The GET method is restricted to send upto 1024 characters only. • Never use GET method if you have password or other sensitive information to be sent to the server. • GET can't be used to send binary data, like images or word documents, to the server. • The PHP provides **$_GET** associative array to access all the sent information using GET method. **The POST Method** The POST method transfers information via HTTP headers. The information is encoded as described in case of GET method and put into a header called QUERY_STRING. • The POST method does not have any restriction on data size to be sent. • The POST method can be used to send ASCII as well as binary data. • The data sent by POST method goes through HTTP header so security depends on HTTP protocol. By using Secure HTTP you can make sure that your information is secure. • The PHP provides **$_POST** associative array to access all the sent information using POST method. If the form was submitted via POST method, the data entered in the username text box will be stored in the $_POST['username']. If the form was submitted via GET, the data will be in $_GET['username']. In either case, the data will also be available in $_REQUEST['username'].			
II.6	Hosting a website means making a website available to public worldwide. When we create website, it is composed of web pages having text, images, videos and other content for people to see them. However, people can see our website only when it is available on the Internet. To make our website available on the Internet, we have to store it on a computer called web server. When we buy some space on a web server and store our webpages there, our website becomes hosted and can be seen by anyone.	6	6	
II.7	• Quick development and deployment time: Using a CMS can drastically speed up the process of developing a site; • Open source CMSs are free to download and install; • Advanced site functionality: Most systems allow the implementation of functionalities (forms, polls, quizzes, event calendars, etc.) that would otherwise be extremely hard to achieve; • User-friendly: Gives people with little or no technical skills the ability to create, update or modify content; • Reduces costs: Implementing an out-of-the-box CMS is definitely less costly than a custom one. Also, after users have learned some of the ins and outs of the CMS, they will be able to handle the basic functions on their own, and this reduces the costs of outside technical assistance as well; • Easy maintenance and updates: Most CMSs are developed to be easy to maintain and update. • Huge development communities for open source CMSs;	6 x 1	6	
III.a	The browser display window can be used to display more than one document at a time. The window can be divided into rectangular areas, each of which is a frame. The number of frames and their layout in the browser window are specified with the <frameset> tag. A frameset element takes the place of the body	5 + 3 expl. + Eg	8	15

	element in a document. A document has either a body or a framesset but cannot have both. The <frameset> tag must have either a rows or a cols attribute, and often they have both. The rows attribute specifies the number of rows of frames that will occupy the window. There are three kinds of values for rows: numbers, percentages, and asterisks. Eg: <frameset rows ="200,300,400"> <frameset rows ="22%, 33%, 45%"> <frameset rows =22%, 33%, * "> <frameset rows = "33%, 33%, 33%" cols="25%, *"> The content of a frame is specified with the <frame> tag, which can appear only in the content of a frameset element. The content of a frame is specified as the value of the src attribute in the <frame> tag. Eg: <frame src ="second.html" > If a <frame> tag has no src attribute, the browser displays an empty frame.			
III.b.	Uniform Resource Locators (URL) are used to identify documents (resources) on the Internet. All URLs have the same general format: **scheme:object-address** The scheme is often a communication protocol. Common schemes include http, ftp, telnet, file HTTP scheme is used to request and sent eXtensible Hypertext Markup Language (XHTML) documents. In the case of HTTP scheme, the form of object address of a URL is as follows: **//fully-qualified-domain-name/path-to-document** Optionally, after the domain, a URL can also specify: • a path to a specific page or file within a domain; • a network port to use to make the connection; • a specific reference point within a file, such as a named anchor in an HTML file; and • a query or search parameters used -- commonly found in URLs for search results. HTTPS uses TCP/IP port 443 by default, whereas HTTP uses port 80. Eg: http://www.google.com/default.htm http://www.google.com/some-page?search=hello `http://www.example.com:1030/software/index.html`	7	7	
IV.a	HTML offers three ways for specifying lists of information. All lists must contain one or more list elements. : An unordered list. This will list items using plain bullets. : An ordered list. This will use different schemes of numbers to list your items. <dl> : A definition list. This arranges your items in the same way as they are arranged in a dictionary. **Unordered Lists** An unordered list is a collection of related items that have no special order or sequence. This list is created by using HTML tag. Each	3	8	15

item in the list is specified with an <li> tag. When displayed, each list item is implicitly preceded with a bullet.

Example:

```
<!DOCTYPE html>
<html>
  <head>
    <title>HTML Unordered List</title>
  </head>
  <body>
    <ul>
      <li>Beetroot</li>
      <li>Ginger</li>
      <li>Potato</li>
      <li>Radish</li>
    </ul>
  </body>
```

This will produce the following result:

- Beetroot
- Ginger
- Potato
- Radish

3

Ordered Lists

Ordered lists are those in which the order of items is important. This order of a list is shown in the display of the list by the implicit attachment of a sequential value to the beginning of each item. The default sequential values are Arabic numerals, beginning with 1.

An ordered list is created within the block tag <ol>. Each list items are specified with <li> tag.

Example:

```
!DOCTYPE html>
<html>
  <head>
    <title>HTML Ordered List</title>
  </head>
  <body>
    <ol>
      <li>Beetroot</li>
      <li>Ginger</li>
      <li>Potato</li>
      <li>Radish</li>
    </ol>
  </body>
</html>
```

This will produce the following result:

1. Beetroot
2. Ginger
3. Potato
4. Radish

Definition Lists

Definition lists are used to specify lists of terms and their definitions. A definition list is given as the content of a <dl> tag. Each term to be defined in the definition list is given as the content of a <dt> tag. The definitions themselves are specified as the content of <dd> tags. The defined terms of a definition list are usually displayed on the left margin; the definitions are usually shown on the lines following the term, which are intended.

Example:

```
<!DOCTYPE html>
<html>
  <head>
    <title>HTML Definition List</title>
  </head>
  <body>
    <dl>
      <dt><b>HTML</b></dt>
      <dd>This stands for Hyper Text Markup Language</dd>
      <dt><b>HTTP</b></dt>
      <dd>This stands for Hyper Text Transfer Protocol</dd>
    </dl>
  </body>
</html>
```

This will produce the following result:

HTML
This stands for Hyper Text Markup Language

HTTP
This stands for Hyper Text Transfer Protocol

2

IV.b	**Web Browser** Web Browser is an application software that allows to view and explore information on the web. User can request for any web page by just entering a URL into address bar. Web browser can show text, audio, video, animation and more. It is the responsibility of a web browser to interpret text and commands contained in the web page. Earlier the web browsers were text-based while now a days graphical-based or voice-based web browsers are also available. Eg:Internet Explorer, Google Chrome, Mozilla Firefox, Safari, Opera **Web Server** Web servers are programs that provide documents to requesting browsers. They act only when requests are made to them by browsers running on other computers on the Internet. Eg: Apache, Internet Information Server (IIS), and SunONE Web browsers initiate communications with servers by sending them URLs. A URL can specify one of two different things: the address of a data file stored on the server that is to be sent to the client, or a program stored on the server that the client wants executed, with the output of the program returned to the client.	2+1 expl & eg 3 + 1 expl. & eg	7

	All the communications between a Web client and a Web browser use the standard web protocol, HyperText Transfer Protocol (HTTP).			
V.a	Three levels of style sheets: **Inline :** Inline style sheets apply to the content of a single element. **Document level (Internal) :** Document-level style sheets apply to the whole body of a document. **External :** External style sheets can apply to the bodies of any number of documents Inline style sheets have precedence over document style sheets, which have precedence over external style sheets. Inline style specifications appear as values of the **style** attribute of a tag, the general form of which is as follows: style= "*property_1:value_1; property_2:value_2; ....; property_n:value_n*" eg: This is a heading Document style specifications appear as the content of a style element within the header of a document. The general form of the content of a style element is as follows: <style type="text/css"> rule_list </style> Each style rule in a rule list has two parts: • A selector, which indicates the tag or tags affected by the rule • A list of property/value pairs The form of a style rule is as follows: selector { property_1:value_1; property_2:value_2; ….; property_n:value_n; } External style sheets have a form similar to that of document style sheets. The external file consists of a list of style rules. External style sheets are stored in .css files. <link> tag is used to specify external style sheets. Eg:<link rel="stylesheet" type="text/css" href="sample.css">	2 2 2 2	8	15

V.b.	An event that can be handled is something happening in a browser window, including a document loading, the user clicking a mouse button, the user pressing a key, and the browser screen changing size. When a function is assigned to handle an event type, the function is run when an event of the event type occurs.
	An event handler can be assigned in the following ways:
	1. Via an element attribute directly in HTML: <body onload="alert('Hello World!');">
	2. Via JavaScript assigning to element attribute: document.onclick = clickHandler;
	3. Via JavaScript by calling addEventListener() method of an element.
	A handler that is assigned from a script used the syntax '[element].[event] = [function];'
	Eg: document.onclick = clickHandler;
	This handler will cause the function clickHandler() to be executed whenever the user clicks the mouse anywhere on the screen.
	The clickHandler() function is defined like this:
	function clickHandler(event) {
	//some code here
	}
		7	7	

VI.a **font-family :** The font-family property is used to specify specify a list of font names. The browser will use the first in the list that it supports. 4 x 2 = 8 | 15

Eg: font-family : Arial, Helvetica, Futura

If a font name has more than one word, the whole name should be delimited by single quotes.

Eg: font-family : 'Times New Roman'

font-size : The font-size property is used to set the size of the font used.

Eg: font-size:10pt

font-style : The font-style property is most commonly used to specify italic.

Eg: font-style : italic

font-weight : The font-weight property is used to specify the degree of boldness.

Eg: font-weight : bold

Besides **bold**, the values **normal** (default), **bolder**, and **lighter** can be specified.

font : If more than one property must be specified, the values can be stated in a list as the value of the font property.

Eg; font : bold 14pt 'Times New Roman'

VI.b **Client-side scripting** 7 | 7

The client-side environment used to run scripts is usually a browser. The processing takes place on the end users computer. The source code is transferred from the web server to the users computer over the internet and run directly in the browser. The scripting language needs to be enabled on the client computer. Eg: **Javascript, VBScript**

Server-side Scripting

A server is a computer system that serves as a central repository of data and programs and is shared by clients. The server-side environment that runs a scripting language is a web server. A user's request is fulfilled by running a script directly on the web server to generate dynamic HTML pages. This HTML is then sent to the client browser. It is usually used to provide interactive web sites that interface to databases or other data stores on the server. Eg: **PHP, Perl, Ruby, ASP.net, Python**

VII.a 8 | 8 | 15

1. Install Apache

To install Apache we must install the Metapackage apache2. This can be done by searching for and installing in the Software Centre, or by running the following command.

sudo apt-get install apache2

2. Install MySQL

To install MySQL we must install the Metapackage mysql-server. This can be done by searching for and installing in the Software Centre, or by running the following command.

sudo apt-get install mysql-server

3. Install PHP

To install PHP you must install the Metapackages php5 and libapache2-mod-php5. This can be done by searching for and installing in the Software Centre, or by running the following command.

sudo apt-get install php5 libapache2-mod-php5

4. Restart Server

The server should restart Apache automatically after the installation of both MySQL and PHP. If it doesn't, execute this command.

sudo /etc/init.d/apache2 restart

5. Check Apache

Open a web browser and navigate to http://localhost/. You should see a message

saying It works!

6. Check PHP

We can check your PHP by executing any PHP file from within /var/www/.

VII.b **Numeric array** – An array with a numeric index. Values are stored and accessed in linear fashion. 7 7

Associative array – An array with strings as index. This stores element values in association with key values rather than in a strict linear index order.

Multidimensional array – An array containing one or more arrays and values are accessed using multiple indices

Numeric Array

These arrays can store numbers, strings and any object but their index will be represented by numbers. By default array index starts from zero.

Example:

Following is the example showing how to create and access numeric arrays.

Here we have used **array()** function to create array.

```
<?php
   /* First method to create array. */
   $numbers = array( 1, 2, 3, 4, 5);

   foreach( $numbers as $value ) {
      echo "Value is $value <br />";
   }
```

Associative Arrays

The associative arrays are very similar to numeric arrays in term of functionality but they are different in terms of their index. Associative array will have their index as string so that you can establish a strong association between key and values.

To store the salaries of employees in an array, a numerically indexed array would not be the best choice. Instead, we could use the employees names as the keys in our associative array, and the value would be their respective salary.

```
<?php
/* First method to associate create array. */
$salaries = array("mohammad" => 2000, "qadir" => 1000);

echo "Salary of mohammad is ". $salaries['mohammad'] . "<br />";
echo "Salary of qadir is ".  $salaries['qadir']. "<br />";
/>";
?>
```

Multidimensional Arrays

A multi-dimensional array each element in the main array can also be an array. And each element in the sub-array can be an array, and so on. Values in the multi-dimensional array are accessed using multiple index.

Example

In this example we create a two dimensional array to store marks of three students in three subjects

This example is an associative array, you can create numeric array in the same fashion.

```
<?php
$marks = array("mohammad" => array (
      "physics" => 35,"maths" => 30,"chemistry" => 39),
       qadir" => array ("physics" => 30,"maths" => 32,
       "chemistry" => 29)
         );

       /* Accessing multi-dimensional array values */
       echo "Marks for mohammad in physics : " ;
       echo $marks['mohammad']['physics'] . "<br />";

?>
```

VIII.a To open a file in PHP, we use the fopen() function. When we open the file, we need to specify the intended use. This is known as the file mode.

Mode	Mode Name	Meaning
r	Read	Open the file for reading, beginning from the start of the file
r+	Read	Open the file for reading and writing, beginning from the start of the file
w	Write	Open the file for writing, beginning from the start of the file. If the file already exists, delete the existing contents. If it does not exist, try to create it.
w+	Write	Open the file for writing and reading, beginning from the start of the file. If the file already exists, delete the existing contents. If it does not exists, try to create it.
a	Append	Open the file for appending(writing) only, starting from the end of the existing contents, if any. If it does not exist, try to create it.
a+	Append	Open the file for appending (writing) and reading, starting from the end of the existing contents, if any. If it does not exist, try to create it.

8 8 15

fopen() - to open a file
syntax:
fopen("file name", "mode")
eg: $fp=fopen("sample.txt","w");

VIII.b A cookie is set in PHP with the **setcookie** function. This function takes one or more parameters. The first parameter, which is mandatory, is the cookie's name. The second, if present, is the new value for the cookie. If the value is absent, setcookie undefines the cookie. The third parameter, when present, is the expiration time in seconds for the cookie. 7 7

Eg:

setcookie("voted","true",time()+60*60*24*5);

This call creates a cookie named "voted" whose value is "true" and whose lifetime is 5 days.

In PHP, cookie values are treated much like form values. All cookies that arrive with a request are placed in the implicit $_COOKIES array, which has the cookie names as keys and the cookie values as values.

IX.a The basic PHP library for connecting to the MySQL is called mysqli. The I stands for improved,as there was an older library called mysql. 8 8 15

Syntax:
connection variable = mysqli_connect (server, username, password, database_name);
eg: $db = mysqli_connect ('localhost', 'user1', 'password', 'books');
This function returns a resource that represents the connection to the database, and we will need to pass this resource in to all the other mysqli functions.

IX.b	Domain registration is the process of registering a domain name, which identifies one or more IP addresses with a name that is easier to remember and use in URLs to identify particular Web pages. The person or business that registers domain name is called the domain name registrant. Domain registration requires utilizing the services of a domain name registrar, an Internet Corporation for Assigned Names and Numbers (ICANN) or national ccTLD (country code top-level domain) accredited company that has the authority to register domain names.	7	7	
		4 x 2	8	15

X.a

1. User Management:

Joomla has a registration system that allows users to configure personal options. There are nine different user groups with various types of permissions on which users are allowed to access, edit, publish and administrate. Authentication is an important part of user management and Joomla support multiple protocols, including LDAP, OpenID, and even Gmail.

2. Search:

Help navigate users to most popular search items and provide the admin with search statistics.

3. Language Manager:

There is international support for many world languages and UTF-8 encoding. If you need your Web site in one language and the administrator panel in another, multiple languages are possible.

4. Content Management:

Joomla's simplified three-tiered system of articles makes organizing your content easier. You can organize your content any way you want and not necessarily how it will be on your Web site. Your users can rate articles, e-mail them to a friend, or automatically save a PDF (with UTF-8 support for all languages). Administrators can archive content for safekeeping, hiding it from site visitors.

5. Media Manager :

The Media Manager is the tool for easily managing media files or folders and you can configure the MIME type settings to handle any type of file. The Media Manager is integrated into the Article Editor tool so you can incorporate images and other files at any time.

6. Polls :

In order to seek the feedback from the users, you can conduct polls with multiple options.

7. Web Link Management :

Providing link resources for site users is simple and you can sort them into categories, even count every click.

8. Banner Management :

It's easy to set up banners on your Web site using the Banner Manager.

9. Syndication and Newsfeed Management :

With Joomla, it's easy to syndicate your site content, allowing your users to subscribe to new content in their favorite RSS reader. It's equally easy to integrate RSS feeds from other sources and aggregate them all on your site.

10. Integrated Help System:

Joomla has a built-in help section to assist users with finding what they need. A glossary explains the terms in plain English, a version checker makes sure you're using the latest version, a system information tool helps you troubleshoot, and, if all else fails, links to a wealth of online resources for additional help and support.

11. System Features :

FTP Layer allows file operations (like installing Extensions) without having to make all the folders and files writable, making your site administrator's life easier and increasing the security of your site. Administators quickly and efficiently communicate with users one-on-one through private messaging or all site users via the mass mailing system.

12. Web Services :

With Web services, you can use Remote Procedure Calls (via HTTP and XML). You can also integrate XML-RPC services with the Blogger and Joomla APIs.

13. Powerful Extensibility :

These are just some of the basic Joomla features and the real power is in the way you customize Joomla. Visit the Joomla Extensions Directory to see thousands of ways to enhance Joomla to suit your needs.

14. Template Management:

Templates in Joomla are a powerful way to make your site look exactly the way you want and either use a single template for the entire site or a separate template for each site section.

7 7

X.b

```
<html>
<head>
        <title>Display Student Registration Details</title>
</head>

<body>
<?php


        $conn=mysql_connect("localhost","user","password");
        if(!$conn)
        {
                die("Database Connection Failed".mysql_error());
        }
        mysql_select_db("student");

        $sql="Select * from STUDENT";

        $ret_val=mysql_query($sql,$conn);

        if(!ret_val)
        {
                die("Data read failed".mysql_error());
        }
```

```
echo "<table width='500px'  align='center' border='1'>";
echo "  <tr> <th colspan='4' > STUDENT DETAILS </th> </tr>";
echo "  <tr><td > Name </td>          <td > Reg No </td> <td> Branch </td>
</tr>";
while($row1=mysql_fetch_array($ret_val))
{
echo "  <tr>
<td > {$row1['name']}</td>
<td > {$row1['regno']} </td>
<td> {$row1['branch']} </td>
</tr>";
}
echo "</table>";
mysql_close($conn);
?>
</body>
</html>
```