



UNIVERSITY OF COLOMBO, SRI LANKA

University of Colombo School of Computing

BACHELOR OF SCIENCE IN INFORMATION SYSTEMS

First Year Examination – Semester II – 2021/2022

IS1109 – Programming for Web Application Development

(Part A)

TWO (2) HOURS (for both parts A & B)

100

To be completed by the candidate

Examination Index No:

Important Instructions to candidates:

1. The medium of instruction and question is **English**.
2. Write your answers in **English**.
3. If a page or a part of this question paper is not printed, please inform the supervisor immediately.
4. Note that questions appear on both sides of the paper. If a page is not printed, please inform the supervisor immediately.
5. Write your index number on each and every page of the answer paper.
6. This paper has **3** questions in **09** pages.
7. Answer **ALL** questions. All questions carry equal marks (**25** marks).
8. **This paper consists of two parts, Part A (Question No 1, Question No 2 and Question No 3) and Part B (Question No 4) and submit separately.**
9. Any electronic device capable of storing and retrieving text including electronic dictionaries and mobile phones are not allowed.
10. calculators are **not** allowed.

For Examiner's use only

Question No	Marks
1	
2	
3	
4	
Total	

Part A**Question 1**

State whether the following parts of the HTML, CSS and JavaScript code segments are syntactically **correct or wrong**. If they are wrong, then make necessary changes to correct them.

[2.5 x 10=25 Marks]

1. `<p><blockquote cite="http://www.abc/index.html"> For 50 years, WWF has been protecting the future of nature. WWF's goal is to: <q>Build a future where people live in harmony with nature. </q> </blockquote> </p>`

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2. `<p>The <text abbr="World Health Organization">WHO</abbr> was founded in 1948.</p> <marquee dir = "right">This text will scroll from left to right</marquee>`

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3. `<figcaption> <figure> Fig.1 - Trulli, Puglia, Italy.</figcaption> </figure>`

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4. ` <usemap name="Rose"> < shape="rectagular" coords="8,38,87,63" a href="comet01.html" alt=Bud> </usemap>`

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5. `<form action="action_page.php"> Quantity: <input type="number" name="points" min="0" max="100" step="10" value="30"> <input type="submit"> <input type="text" name="fname" placeholder="First name"> </form>`

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6. `<body> <base_target="self"> </head> <body> <p> - - - - - - </p> <p> - - - - - -. </p> </body> </html>`

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7. `<head> <style type="css/text"> a:link{color:yellow; font-size:large} a:visited{"color:blue; font-size:small"} </style> </head><body> Back to top </body> </html>`

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8. `<p onclick = "javascript:window.open ('abc.html' , 'NewWindow' , 'WIDTH=400, height=400');" style="cursor:hand"> 1. <u>Activist</u> </p>`

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9. `<script language="javascript"> function winopen1() { window.open("new.html","new", "menubar=yes, scrollbars=yes, width=300 , height=400").moveTo(200,200); } </script>`

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10. `.small-heading { .large-heading;font-size:14px;}`

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Question 2

Write down the output of the following codes

[5 x 5=25 Marks]

1.

```
<?php
$n=4;
for($i=1; $i<=$n; $i++) {
    for($j=1; $j<=$i; $j++) {
        echo ' 2 ';
    }
    echo '<br>';
}
for($i=$n; $i>=1; $i--) {
    for($j=1; $j<=$i; $j++) {
        echo ' 3 ';
    }
    echo '<br>';
}
?>
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2.

```
<?php
$index = 6;
while ($index >= 0)
{
    echo "The index is ".$index.".\n <br />" ;
    $index--;
}
?>
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3.

```
<?php
$Marks = array("Susi"=>"45", "Nihal"=>"86", "Kamal"=>"57");
arsort($Marks);
foreach($Marks as $x => $x_value) {
    echo "Name=" . $x . ", Marks=" . $x_value;
    echo "<br>";
}
?>
```

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4.

```

<html><head>
<style>
div + h3 {
    border: dotted;
}
</style> </head><body> <div>
<h3>Part A</h3> <h2>Part B</h2>
<span><h3>Part C</h3></span>
</div> <h3>Part D</h2>
<h2>Part E</h3> </body></html>

```

5.

```

<li>Colombo</li>
<ul style="list-style-type:disc;">
    <li>Colombo 1</li>
    <li>Colombo 2</li></ul>
    <li>Colombo 3</li>
<ol type="a" start="10">
    <li>Colombo 5</li>
    <li>Colombo 6</li></ol>
<li>Colombo 7</li>
</ol>

```

Question 3

You are asked to create a web application for an internet service provider. The main requirement is to keep track of the usage. The folder structure database, tables and other relevant information of a customer order management system is given below. **The server host name, server IP address and database name may change in future.**

Folder Structure:

```
C:\xampp\htdocs\ucsc\index.php
C:\xampp\htdocs\ucsc\error\error.php
C:\xampp\htdocs\ucsc\con\data\data.php
C:\xampp\htdocs\ucsc\con\connection.php
C:\xampp\htdocs\ucsc\admin\user\logoff.php
```

Other Necessary Information:

Web server IP : 198.16.10.14

Your computer IP address that can connect to the Internet : 198.168.1.14

Database server IP: 198.16. 10.17

Database root user password : xyz

You are given a database (abc) and a few tables to get started. There are three (3) tables as follows

1. users - a table to keep user details
2. packages - a table to keep package details
3. usage - a table to keep usage

Users Table (users)

user_id	first_name	last_name	email
1	Haran	Shivanan	haran@gmail.com
2	Meenakshi	Sundaram	meenakshi@gmail.com
3	Kesara	Milinda	kesara@gmail.com
4	Shanika	Jayasooriya	shanika@gmail.com

Packages Table (packages)

package_id	package_name	limit	price
1	Work From Home	40	2000
2	Student	40	1500
3	Facebook & Youtube	30	1500

Usage Table (usage)

id	user_id	package_id	usage
1	u_01	p_01	30
2	u_02	p_01	39
3	u_03	p_02	20
4	u_04	p_03	25

Answer the following questions based on the tables given above.

1. Write SQL query to create the above “users” table with appropriate key constraints (primary key foreign key).

[3 Marks]

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2. The “connection.php” page contains only the code to connect to the database server. Write down the complete PHP coding to fulfill the above requirement and to display the error message in case of a failure.

[3 Marks]

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3. “data.php” holds some necessary information such as values for the variables in “connection.php”. Write down the complete PHP code including relevant information for the “data.php” file.

[3 Marks]

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Index No:

4. Write the relevant PHP and SQL codes to insert a new user into the **users'** table. Assume you have already created a user interface to get all the relevant data. Use appropriate variables and create the database connection in the same file.

[4 Marks]

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5. Write the SQL query to update the price of the “Student” package to 1300.

[3 Marks]

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6. The client has requested that they wish to see the usage of all users. Write the appropriate PHP and SQL codes to show the usage of all users. Required fields are first_name, email, package_name, limit, and usage. Use connection.php to connect to the database and usage.php to list the usage.

[3 Marks]

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Index No:

7. Write the relevant PHP and SQL codes to get the first_name and email address of the users who use the “Work From Home” package and has usage of more than 35.

[6 Marks]

This image shows a full page of a handwriting practice worksheet. It features 20 evenly spaced horizontal dotted lines across the entire width of the page, providing a guide for letter height and placement. The background is plain white, and there are no margins or additional markings.
