



UNIVERSITY OF COLOMBO, SRI LANKA



UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

BACHELOR OF SCIENCE IN INFORMATION SYSTEMS

Academic Year 2013/2014 – Second Year Examination – Semester I – 2014

IS 2004 – Web Application Development

TWO (2) HOURS

To be completed by the candidate

Examination Index No: _____

Important Instructions to candidates:

1. The medium of instruction and questions is **English**.
2. This paper has **4** questions and **12** pages.
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 question paper.
6. Answer **ALL** questions. All questions carry equal marks (**25** marks).
7. Any electronic device capable of storing and retrieving text including electronic dictionaries and mobile phones are **not allowed**.
8. No calculators are **allowed**.
9. Your answer should be ***precised*** according to the given space.

**For Examiner's use
only**

Question No	Marks
1	
2	
3	
4	
Total	

1. (a) State whether the following HTML and CSS code is syntactically correct or will generate an error or will not produce the desired output. If the code generate an error or not produces the desired output, debug it.

[Marks: 1 1/2 x 12=18]

- (i) `Introduction`
`<h1>Introduction</h1>`
`Top`

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- (ii) `<frame set rows = "159","*"> <frameset columns =12,10>`

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- (iii) `<h1 style="colour:red";font-type="arial" "font-size:12px">`

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- (iv) ` - - - <map name=car> - - - </map>`

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- (v) `<areashape=rect ahref=a.html alt=home>`

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- (vi) `<body><style type = "text/css"> h1{color:red;font-size:20px}`
`</style></body>`

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- (vii) `<body> <link rel=style sheet type= css src=style.css> </body>`

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- (viii) `h1,h2,h3{font-type=arial}`

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(ix) #para2 ul li {border-style : double }

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(x) Download your application

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(xi) <iframe name="abc" href="Habitat.html" width=300 height=200>

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(xii) <body bgcolor=#ae3355> -- <bgsound src=a.wav> -- </body>

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(b) List five different HTML tags that has "src" as an attribute?

[Marks: = 5]

- 1.....
- 2.....
- 3.....
- 4.....
- 5.....

(c) List four (4) types of event handlers supported by JavaScript?

[Marks: = 2]

- 1.....
- 2.....
- 3.....
- 4.....

(d) Which of the following statement(s) is/are correct?

- (i). In PHP, a variable does not need to be declared before adding a value to it.
- (ii). PHP automatically converts the variable to the correct data type, depending on its value.
- (iii). A variable name must start with a letter or an underscore "_" but not with number
- (iv). A variable name can only contain alpha-numeric characters, underscores (a-z, A-Z, 0-9, and _)
- (v). \$_POST and \$_GET are form variables

(e) What would be the output of the following code?

```
<?php
    $txt1="Today is Monday";
    $txt2="Have a nice day !";
Echo $txt1 . " " . $txt2;
?>
```

- (i). "Today is Monday" "Have a nice Day !"
- (ii). "Today is Monday Have a nice Day !"
- (iii). Today is Monday Have a nice Day !
- (iv). Today is Monday. Have a nice Day !
- (v). Have a nice Day ! Today is Monday.

(f) Which of the following statement(s) is/are correct regarding the PHP operators?

- (i). $x+=y$ can be written as $x=x+y$
- (ii). In `"5!=8 return true"`, `"!="` can be considered as a Comparison operator
- (iii). $X=6$
 $y=3$
In `"(x< 10 && y>1) return true"`, `"x< 10 && y>1"` can be considered as a logical operator
- (iv). The result of $5 \% 2$ is 1.
- (v). $x\%=y$ can also be written as $x=x\%y$

[Marks: 2 x 3=6]

(g) Write the proper PHP coding to create the following output using three nested "for" loops.

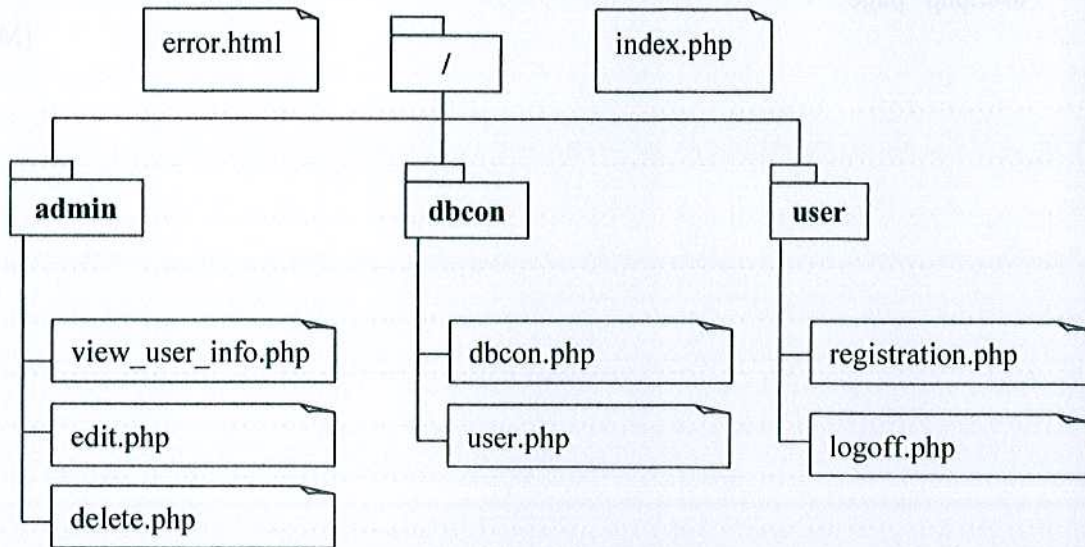
[Marks: =5]

```
A holds:2, B holds: 2, C holds:6
A holds:2, B holds: 2, C holds:5
A holds:2, B holds: 5, C holds:6
A holds:2, B holds: 5, C holds:5
A holds:3, B holds: 2, C holds:6
A holds:3, B holds: 2, C holds:5
A holds:3, B holds: 5, C holds:6
A holds:3, B holds: 5, C holds:5
```

[Marks: =5]

```
The number is: 3
The number is: 4
The number is: 5
The number is: 6
The number is: 7
```

[illegible]

3. Answer the questions using the given details

A Web developer plans to create a web site according the above folder structure for the relevant files and he has collected necessary information in order to develop it. That information is as follows;

Web Serve IP address : 172.16.10.1
 Database server host name : abc.com
 Database user name : uoc
 Database Password : uoc123
 Database name : uocinfo
 Table name : student

The system was planned to support data insertion, retrieval, deletion and edit. He also has an idea to change the sever host name, server IP address, and database name in future for some other reasons. The information he wants to include are student's identity card number(st_id), student's name (st_name), password (st_pw), country, gender and hobbies.

- (a) The "dbcon.php" page contains the code to connect to the database server using variables since he wants to change those information from time to time. Write down the complete php coding to fulfill the above requirement.

[Marks: =3]

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- (b) "user.php" includes some necessary information such as values for the variables used by "dbcon.php". Write down the complete PHP code including relevant information for the "user.php" page

[Marks = 3]

A series of horizontal dotted lines for writing.

- (c) Write down the SQL query to create the table according to the relevant details given in the scenario using necessary key constraints and data types.

[Marks =3]

[illegible]

(d) Write the PHP code ("registration.php") to feed data into the relevant table using "dbcon.php" and "user.php" to connect to the database.

[Marks: =3]

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(e). Write the PHP code and SQL query to add data into the relevant table.

[Marks: =3]

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(f). Write the HTML coding to create the browser interface according to the relevant information and appropriate forms. There should also be "send" and "cancel" buttons to send data to the database or cancel.

[Marks: =5]

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(g). Write the PHP code to display data on the browser page.

[Marks: =5]

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4. (a) What is meant by Web 2.0? Explain using appropriate example web applications. [5 marks]

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- (b) Explain what is meant by Web3D using an appropriate example. [5 marks]

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(c) Briefly explain the legal issues related to web publishing using appropriate examples.

[5 marks]

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(d) What are the basic user roles and their responsibilities in maintaining Content Management Systems?

[6 marks]

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(e) List four (4) types of Content Management Systems.

[4 marks]

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