UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2007/2008 –2nd Year Examination – Semester 3

IT3503: Web Development Techniques

Part 1: Multiple Choice Question Paper

16th March, 2008
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour.**
- The medium of instruction and questions is English.
- The paper has **25 questions** and **7 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

10)

(a) Java is a client-side scripting language.
(b) A JavaScript is pre-compiled by the web browser before being executed.
(c) Enclosing script with script (<script>) tags is the only method that is available for inserting JavaScript into an HTML document.
(d) The script tag can be placed only within the <head> section of the document.
(e) Implementation of JavaScript is not consistent across all web browsers.

11)

(a) Multiline comments in JavaScript are inserted by prefixing the comments with a double-slash (//).
(b) JavaScript syntax is case sensitive.
(c) In JavaScript, variables declared within a function always get global scope.
(d) All the variables in JavaScript must be declared before use.
(e) JavaScript variable names are case sensitive.

12) Consider the following JavaScript code.

```
<script language="JavaScript" type="text/JavaScript">
<!--
var x = 5;
y = 23;
document.write(x*y);
-->
</script>
```

(a) The output is “x*y”.
(b) The output is “5*23”.
(c) The JavaScript code produces an error message.
(d) The output is “115”.
(e) The output is “523”.

13)

(a) In JavaScript, 5 % 2 returns 0.
(b) In JavaScript, 5 >= 5 returns true.
(c) In JavaScript, 5 == 5 returns false.
(d) In JavaScript, 23>>2 returns 7.
(e) In JavaScript 9 | 5 returns true.

14) Consider the following JavaScript code.

```
<script language="JavaScript" type="text/JavaScript">
<!--
msg = "mm";
for (i=1;i<12;i++) {
      if (i==5) break;
      document.write(i);
      msg+="m";
}
document.write(msg);
-->
</script>
```

(a) The output is “01234mm”.
(b) The output is “01234mmmmmm”.
(c) The output is “1234mmmmm”.
(d) The output is “1234mmmmmm”.
(e) The JavaScript code produces an error message.

16)

(a) PHP belongs to the category of software known as free open source software (FOSS).
(b) PHP is a server-side scripting language, whereas JSP is a client-side scripting language.
(c) PHP language does not support objects.
(d) PHP language is based on Java.
(e) PHP runs only on Linux based operating systems.

17)

(a) Resource is not a PHP data type.
(b) All variables in PHP start with an ampersand (&) sign.
(c) PHP variables are case sensitive.
(d) PHP variables are declared using the var statement.
(e) PHP does not require variables to be declared before being initialized.

18) In PHP, session variables are accessed through

(a) session() function.
(b) $_REQUEST
(c) $_GET
(d) $_SESSION
(e) getSession() function.

19) The following PHP code segment is included in the file named testscript.php.

```
<?php
function process($val) {
        if ($val=="1") {
                return $_GET['id'];
        } else {
                return $_GET['num'];
        }
}
echo process(1);
?>
```

The above code produces the following output:

Hello world

(a) The URL is: testscript.php?num=123&id=Hello%20world.
(b) The URL is: testscript.php?num=Hello world.
(c) The URL is: testscript.php?id=Hello%20world.
(d) The URL is: testscript.php?id=Hello&num=world.
(e) The URL is: testscript.php?num=123,id=Hello%20world.

20) Consider the following PHP code.

```
<?php
        $a = 11;
        $b = 15;
        $c = 2;
        $d = 30;

        $e = $b + $a * $c;
        $f = $e % $c;
        $g = $e >> $f;

        print $f.$g;
        echo $e;
?>
```

The output is

(a) 118$e
(b) 17437
(c) 11837
(d) 174$e
(e) 11819

21)

(a) mysql_connect() function is used to open a connection to MySQL database from PHP.
(b) mysql_query() function sends a query from PHP to the database and returns a result object.
(c) After connecting to mysql, mysql_select_db() function is used to select a database in PHP.
(d) mysql_fetch_array() can be used in PHP to fetch the resulting rows as an array.
(e) It is not possible to connect to DBMSs other than MySQL from PHP.

22)

(a) Zend and Mambo are PHP web application frameworks.
(b) Macromedia Dreamweaver is not an HTML editor.
(c) Notepad can be used to create web pages.
(d) Macromedia Dreamweaver is a WYSIWYG HTML editor.
(e) Emacs is not a PHP web application framework.

23) In 3-tier architecture,

(a) data tier coordinates logical decisions.
(b) the main function of the presentation tier is to translate tasks and results to something the user can understand.
(c) session tier is implemented as a front end web server serving static pages.
(d) data tier is the middle.
(e) presentation tier coordinates logical decisions.

24)

(a) AJAX stands for Asynchronous Java And XML.
(b) AJAX uses GET method to send a request to the server.
(c) AJAX enables getting data from the server without reloading the web page.
(d) AJAX uses POST method to send a request to the server.
(e) AJAX is a new technology for creating web applications.

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2008/2009 –2nd Year Examination – Semester 3

IT3503: Web Development Techniques

Part 1: Multiple Choice Question Paper

22nd March, 2009
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour.**
- The medium of instruction and questions is English.
- The paper has **25 questions** and **7 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
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2)

(a) A web browser is a client application.
(b) Mozilla Firefox is an example for a web server.
(c) Web browsers cannot handle more than one simultaneous connection to web servers.
(d) Web browsers do not support protocols other than HTTP.
(e) A web server does not need an IP address.

8) Consider the following HTML code.

```
<form method="post" action="process.asp" name="form1">
  <input name="password" type="text">
  <input value="Submit" type="submit">
</form>
```

(a) The form has two text input fields.
(b) When submitted the form, the data will be passed to 'process.asp'.
(c) One of the input fields in the form is a button.
(d) When submitted the form, the data will be passed to its handler as specified by the URL
(e) One of the input fields in the form is a text field and it does not contain a default value

13)

(a) JavaScript is used to validate HTML forms before data being sent to the server.
(b) JavaScript can capture events, such as mouse clicks and key presses.
(c) JavaScript does not recognize document object model (DOM) of an HTML document.
(d) JavaScript is a server side scripting language.
(e) Some JavaScript code does not work the same way in a different web browser.

14) Consider the following code fragment.

```
<script language="JavaScript" type="text/JavaScript">
<!--
x = 10;
y = 6;
x += 10;
y %= 4;
z = x - y;
-->
</script>
```

(a) The value of z is 18.5
(b) The value of z is 8
(c) The value of z is 4
(d) The value of z is 18

(e) The JavaScript code produces an error message.

15) Consider the following code fragment.

```
<script language="JavaScript" type="text/JavaScript">
<!--
x = 2;
for (i=1;i<10;i++) {
      if (i>5) break;
      j = i+1;
      while (j<10) {
            x = x + i;
            j += 1;
      }
}

document.write(x);
-->
</script>
```

(a)	The output is *82*
(b)	The output is *122*
(c)	The output is *62*
(d)	The output is *2*
(e)	The JavaScript code produces an error message.

16) Consider the following JavaScript code and HTML form definition.

```
<script language="JavaScript" type="text/JavaScript">
<!--
function msg() {
      // missing code here
}
-->
</script>

<form name="form1" method="post" action="">
  <input name="name" type="text">
  <input type="submit" name="Submit" value="Submit"
onClick="JavaScript:msg()">
</form>
```

When the user presses the submit button after entering a name, (e.g. Saman) in the input box, a message should be displayed saying "Hello Saman". Which of the following should be the missing code in the above function *msg*?

```
(a)   alert("Hello" + name);
(b)   alert("Hello +document.form1.name.text");
(c)   alert("Hello "+document.form1.name.value);
(d)   alert("Hello "+window.form1.name.text);
(e)   alert("Hello "+ form1.name);
```

17) Consider the following code fragment.

```
<?php
      $a = 10;
      $b = 13;
      $c = 6;

      $d = $b + $a % $c;
      $e = $d << $c;

      print $d.$e;
      echo $e;
?>
```

(a)	The output is *1710881088*
(b)	The output is *171717*
(c)	The output is *1700*
(d)	The output is *5320320*
(e)	The PHP code produces an error message.

18)

(a)	PHP is an interpreted language.
(b)	PHP script is compatible with the Internet Explorer web browser only.
(c)	Both PHP and JSP are server side scripting languages.
(d)	Object oriented programming is not available in PHP 3.0.
(e)	PHP variables are case sensitive.

19) Consider the following code fragment.

```
<?php
      $x = "Dec";

      $months = array("Apr","Nov","Dec", "May");
      foreach $value in $months {
            if ($value == $x)
                  print $value;
      }
?>
```

(a)	The output is *Apr*
(b)	The output is *Nov*
(c)	The output is *Dec*
(d)	The output is *May*
(e)	The PHP code produces an error message.

Answer questions (21) and (22) using the following code fragment.

```
<?php
class Student {
      private $name; // Student's name

      function setName($name) {
            $this->name = $name;
      }
}

$student1 = new Student();
?>
```

21) Which of the following makes the name of the instance of Student to "Kamal"?

```
(a)   $student1.setName("Kamal");
(b)   $student1->$setName("Kamal");
(c)   $student1->setName("Kamal");
(d)   $Student.setName("Kamal");
(e)   $this.setName("Kamal");
```

22) Which of the following return(s) the name of the student?

```
(a)   function getName() {return $name; }
(b)   function getName() {return $this.name; }
(c)   function getName() {return $this.$name; }
(d)   function getName() {$name; }
(e)   function getName() {return $this->name; }
```

25)

(a) The 3-tier architecture has nothing to do with client-server architecture.
(b) LAMP solution stack does not support 3-tier web applications development.
(c) The 3-tier architecture of application development separates interfaces, business logic and data in web applications.
(d) LAMP is a free and open-source software combination for the development of web applications.
(e) AJAX applications work seamlessly even if the JavaScript is disabled in the web browser.

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DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2009/2010 –2nd Year Examination – Semester 3

IT3503: Web Development Techniques

Part 1: Multiple Choice Question Paper

21st March, 2010
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour.**
- The medium of instruction and questions is English.
- The paper has **20 questions** and **6 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
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9)

(a) In JavaScript, 10%2 returns 5.
(b) In JavaScript, 5!=8 returns true.
(c) In JavaScript, 5<<2 returns 20.
(d) In JavaScript, 13>>2 returns 3.
(e) In JavaScript, 5>=8 returns true.

10) Consider the following JavaScript code.

```
<script language="JavaScript" type="text/JavaScript">
<!--
var x=8+"8";
document.write(x);
-->
</script>
```

The output of the above is

(a) 88.
(b) 16.
(c) 8.
(d) Error.
(e) "8".

11) Consider the following JavaScript code.

```
<script language="JavaScript" type="text/JavaScript">
<!--
for (i=0;i<3;i++){
    for(j=0; j<5; j++) {
       if (j==3) break;
       document.write(j);
    }
}
-->
</script>
```

The output of the above is

(a) 012.
(b) 012012012.
(c) 012012012012012.
(d) 012012012.
(e) Error.

12) A JavaScript array can be written as,

```
(a) var months = new Array="Jan","Feb","Mar"
(b) var months = new Array:1=("Jan")2=("Feb")3=("Mar")
(c) var months = new Array("Jan", "Feb ", "Mar")
(d) var months = new Array(1:"Jan",2:"Feb",3:"Mar")
(e) var months = new Array=("Jan"),("Feb"),("Mar")
```

13) Consider the following PHP code.

```
<?php
      $a = 10;
      $b = 20;
      $c = 4;
      $d = 8;
      $e = 1.0;

      $f = $c + $d*3;
      $g = $f % 30;
      $h = $b - $a + $c + 2;
      $i = $h >> $c;
      $j = $i * $e;

      print $j;
      echo $g;
?>
```

The output of the above is

```
(a) 32.
(b) 132.
(c) 1.
(d) 28.
(e) 128.
```

14) Consider the following PHP code.

```
<?php
      for ($i=1; $i<=10; $i++) {
            if ($i==5) continue;
            print($i);
      }
?>
```

The output of the above is

```
(a) 1245678910.
(b) 123456789.
(c) 12345678910.
(d) 1234678910.
(e) 12345.
```

15) Consider the following PHP function.

```
<?php
      function my_func($variable) {
            return (is_numeric($variable) && $variable % 2 == 0);
      }
?>
```

It tests whether

(a) `$variable` is a number and ends in 2.
(b) `$variable` ends in 2.
(c) `$variable` is a number and contains 2.
(d) `$variable` is an even number.
(e) `$variable` is a number.

16) Consider the following fragment of PHP code.

```
If(! isset($_SESSION['user'])) header("Location :login.php");
```

(a) The header() function sets the HTML header of the resulting Web page.
(b) This code contains a syntax error.
(c) The header() function sets the HTTP header of the response.
(d) The isset($var) function returns true if $var is an already existing variable.
(e) Value stored in $_SESSION['user'] is accessible only from the PHP page containing the above line.

17)

(a) mysql_connect() function is used to open a connection to MySQL database from PHP.
(b) It is not possible to connect to DBMS other than MySQL from PHP.
(c) mysql_query() function is used to select a database.
(d) mysql_fetch_array() function is used to fetch the resulting rows as an array.
(e) mysql_close() function is used to close the connection to MySQL database in PHP.

18)

(a) Two primary types of HTML editors are Text –based HTML editors and WYSIWYG HTML editors.
(b) Adobe Dreamweaver and Microsoft Expression Web are WYSIWYG HTML editors.
(c) Zend and PRADO are PHP Web application frameworks.
(d) JOOMLA is not a PHP Web application framework.
(e) Macromedia HomeSite is a Text-based HTML editor.

19)

(a) Authorization means verifying the identity of all parties involved in a web transaction.
(b) Authentication means determining whether the requested party has the permission to access the requested resource.
(c) Auditing means recording who did what and when they did it.
(d) Privacy means ensuring that the sender cannot deny sending and the receiver cannot deny receiving a message.
(e) Non-Repudiation means ensuring that messages are safe from eavesdropping.

20)

(a) AJAX stands for Asynchronous JavaScript And XML.
(b) Interactivity is a disadvantage of AJAX applications.
(c) AJAX applications are cross-platform compliant.
(d) Portability is a disadvantage of AJAX applications.
(e) AJAX enables getting data from the server without reloading the Web page.

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DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)
Academic Year 2010/2011 –2nd Year Examination – Semester 3

IT3504: Web Development Techniques

Part 1: Multiple Choice Question Paper

27th February, 2011
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour.**
- The medium of instruction and questions is English.
- The paper has **20 questions** and **6 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
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8)

(a) JavaScript is a loosely typed language.
(b) JavaScript variables are not case sensitive.
(c) JScript is not a client-side Scripting Language.
(d) JavaScript is a client-side Scripting Language.
(e) JavaScript cannot contain multi-line comments.

9)

(a) In JavaScript, 5%2 returns 1.
(b) In JavaScript, 5/2 returns 2.5.
(c) In JavaScript, 5<=8 returns false.
(d) In JavaScript, 9^5 returns 12.
(e) In JavaScript, 5<<2 returns 20.

10) Consider the following HTML code segment.

```
<body onLoad="hi()" onUnload="bye()">
<script language=javascript>
  var nm = "";
  function hi() {
   nm=prompt("Hello! Your name?","");}
  function bye() { alert("Goodbye " + nm);}
</script>
</body>
```

Which of the following is/are **true** about the above code?

(a) Function hi() contains a syntax error.
(b) It welcomes the user and asks for a name after the document loads.
(c) It says Goodbye if the page is refreshed by the user.
(d) It does nothing, since all functions must be in the <head> section of the document.
(e) When the user requests another URL, he will be asked to enter his name.

11) Consider the following JavaScript code.

```
<script language="JavaScript" type="text/JavaScript">
<!--
top:
for (i=0; i<5; i++) {
    for (j=0; j<5; j++) {
       if (j==3) break top;
          document.write(j);
    }
}
-->
</script>
```

The output is

(a) 012
(b) 01201
(c) 012012012012012
(d) 012012012
(e) 012012

12)

(a) DOM stands for Document Object Model.
(b) JavaScript does not recognize DOM of an HTML document.
(c) The HTML DOM is platform and language independent.
(d) The HTML DOM is a W3C standard.
(e) JavaScript is used to validate HTML forms before data being sent to the server.

13) Consider the following PHP code.

```
<?php
      $x = $y = $z = -1;
      switch ($y) {
      case 1:
        echo "Number 1";
        break;
      case 2:
        echo "Number 2";
        break;
      default:
        echo "Number is not between 1 and 2";
      }
?>
```

The output is

(a) Number 2.
(b) Number 1.
(c) Number which is not between 1 and 2.
(d) Does not display anything.
(e) Error.

14) Consider the following PHP code.

```
<?php
      $a =11;
      $b =15;
      $c =2;
      $d=30;

      $e=$b+$a*$c;
      $f=$e%$c;
      $g=$e<<$f;

      print $f.$g;
      echo $e;
?>
```

The output is

(a) 174437
(b) 17437
(c) 12757
(d) 11873
(e) 1118377

15) Consider the following code fragment.

```
<?php
      $x = "May";

      $months = array("Apr","Nov","Dec", "May");
      foreach $value in $months {
            if ($value == $x)
                  print $value;
      }
?>
```

The output is

(a) An error message.
(b) Apr.
(c) Nov.
(d) Dec.
(e) May.

16)
(a) Session handling for all pages is always enabled in PHP.
(b) The function session_save() can be used to save a variable in the current session in PHP.
(c) If a web browser has disabled accepting cookies, session handling is disabled for requests coming from that browser.
(d) To add to or read a variable from the session, the $_SESSION superglobal can be used.
(e) Session handling for a particular page can be enabled by calling the session_start() function in PHP.

17)
(a) If $array is an array, $array(1) refers to its second element.
(b) The PHP fopen() function allows files to be accessed.
(c) The PHP array() function can be used to create an array.
(d) The PHP email() function is used to send emails.
(e) The PHP open_file() function allows files to be accessed.

18)
(a) Interactivity is an advantage of AJAX.
(b) The database is a major component of a dynamic website.
(c) LAMP is a free and open-source software combination for the development of web applications.
(d) The most widely used multi-tier architecture is referred to as 3-tier architecture where it consists of Presentation, Business logic and Database tiers.
(e) Portability is a disadvantage of AJAX.

19)
(a) It is legal for someone to copy web content from another site and use it on his own sites without permission.
(b) The term defamation refers to a false statement made about someone or some organization that is damaging to its reputation.
(c) Web content cannot be copyrighted.
(d) It is legal for someone to copy content from a book or a journal and use it on his own sites without permission.
(e) A trademark is a word, image, slogan, or other device designed to identify the goods or services of a particular party.

20)
(a) HTTPS connections use the server port 443.
(b) HTTPS connections use the server port 80.
(c) SSL does not provide secure communications over the Internet.
(d) SSL provides endpoint authentication.
(e) SSL provides communication privacy.

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DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2011/2012 –2nd Year Examination – Semester 3

IT3504: Web Development Techniques

Part 1: Multiple Choice Question Paper

26th February, 2012
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour.**
- The medium of instruction and questions is English.
- The paper has **30 questions** and **8 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
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- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

7) Consider the following JavaScript code.

```
<script language="JavaScript" type="text/JavaScript">
<!--
var x=10+"5";
document.write(x);
-->
</script>
```

What is the output of the above code?

(a) 10
(b) 15
(c) 105
(d) 50
(e) 10

11) Given that a=6 and b=5, select the correct statement(s) about the outputs using javaScript,

(a) a+=b the value of "a" is equal to 12
(b) a-=b the value of "a" is equal to 1.
(c) a=b the out put is equal to true.
(d) a*=b the value of "a" is equal to 30.
(e) a==b gives error.

Consider the following JavaScript code when answering question 12 ,13 and 14.

```
<script language="JavaScript" type="text/JavaScript">
<!--
top:
      for (i=7; i>5; i--) {
        for (j=2; j<5; j++) {
          for (k=1 ;k<4;k++){
                document.write(j);
                document.write(k);
                if (k==3) break top;
                }
          }
      }
-->
</script>
```

12) The final value of i is

(a) 5
(b) 7
(c) 6
(d) 4
(e) 3

13) The final value of k is

(a) 1
(b) 2
(c) 3
(d) 5
(e) 7

14) The final output is

(a) 777.
(b) 123123.
(c) 322212.
(d) 212223.
(e) Error.

15) Which of the following is/are correct?

(a) AJAX provides data updates to the user without reloading the whole page.
(b) The database is a major component of a dynamic website.
(c) Portability is a disadvantage of AJAX.
(d) LAMP is a free and open-source software combination for the development of web applications.
(e) The most widely used multi-tier architecture is referred to as 2-tier architecture where it consists of Presentation and Business logic.

Consider the following PHP code when answering question 16 ,17 and 18.

```
<html>
<body>
<?php
$i=5;
       while($i<=7)
       {
       for ($j=2; $j<=4; $j++)
            {
            $k=$i%$j;
            if ($k==2) echo $i ." ".$j." ";
            }

       $i++;
       }?>
</body>
</html>
```

16) What is the output of the above code?

(a) 5 3 6 4
(b) 4 6 3 5 7 2
(c) 3 4 5 6
(d) 5 7 2 4 2 3
(e) error

17) What is the final value of $k?

(a) 3
(b) 2
(c) 1
(d) 5
(e) 7

18) What is the final value of $i?

(a) 3
(b) 2
(c) 1
(d) 8
(e) 7

19) What is the final value of $j?

(a) 3
(b) 5
(c) 1
(d) 8
(e) 7

21) Which of the following is/are correct?

(a) Zend is a PHP Web application frame works.
(b) Adobe Photoshop is a WYSIWYG HTML editor.
(c) Two primary types of HTML editors are Text –based HTML editors and WYSIWYG HTML editors.
(d) Wordpress is a Text-based HTML editor.
(e) Drupal is not a PHP Web application framework.

24) Which of the following is/are correct regarding events as defined in HTML?

(a) "onload" is an event that can be used in <body> <frame set> .
(b) "onforcus" is an event which can be used with form element.
(c) :onchange" is a image event.
(d) "onabort" is a event associate with <body>.
(e) "onkeyup" is not a valid event associate with keyboard key press events.

27) Consider the following JavaScript code

```
<script type="text/javascript">
        var a=5+5
        var b=5+"5"
        document.write(a);
        document.write(a+b);
</script>
```

What is the output of above script.

(a) 105510
(b) 101055
(c) 555555
(d) 155
(e) 551550

28) Which of the following is/are correct regarding PHP string functions

(a) strspn("Hello world!","Hell") return 4.
(b) strrpos("Hello world!","Hell") return 1.
(c) strrpos("Hello world!","l") return 9.
(d) stristr("Hello world!","WORLD") return 0.
(e) stristr("Hello world!","WORLD") return world.

30) Select the correct way(s) of enabling error messages on PHP code for debugging the source code.

(a) ini_set('display_errors',1)
(b) ini_set('display_errors',0)
(c) $display_errors=1
(d) ini_set(display_errors,1)
(e) ini_set 'display_errors'=1

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DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2012/2013 – 2nd Year Examination – Semester 3

IT3504: Web Development Techniques

Part 1: Multiple Choice Question Paper

3rd March, 2013
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour.**
- The medium of instruction and questions is English.
- The paper has **30 questions** and **7 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

1) Identify the correct statement(s) regarding 3 tier architecture.

(a) Presentation tier identifies and makes logical decision to the data .
(b) The logic tier performs all necessary calculation and evaluation of the data.
(c) Database tier handles all data retrievals based on given criterias.
(d) Presentation tier interprets data into a user understandable format.
(e) Database tier coordinates the application process commands.

11) Identify the correct statement(s) regarding JavaScript

(a) JavaScript is a loosely typed language.
(b) JavaScript variables are case sensitive.
(c) JavaScript is a server-side scripting language.
(d) JavaScript is a client-side scripting language.
(e) JavaScript cannot contain multi-line comments.

Consider the following JavaScript code when answering questions 13 to 16

```
<script language="JavaScript" type="text/JavaScript">
<!--
top:
      for (x=8; x>6; x--) {
        for (y=2; y<5; y++) {
          for (z=3 ;z<8;z++){
                document.write(y);
                document.write(z);
                if (z==5) break top;
                }
          }
      }
-->
</script>
```

13) The final value of x is

(a) 5.
(b) 8.
(c) 6.
(d) 7.
(e) 3.

14) The final value of y is

(a) 1.
(b) 2.
(c) 3.
(d) 5.
(e) 7.

15) The final value of z is

(a) 1.
(b) 2.
(c) 3.
(d) 5.
(e) 7.

16) The final output on the page is.

(a) 827364.
(b) 123123.
(c) 323335.
(d) 232425.
(e) Error.

Consider the following JavaScript code to answer Questions 17 to 19.

```
var txt01="Hello World !";
var txt02='2013';
txt02=txt01+13;
document.write(txt02.length);
```

17) What is the value of txt01?

(a) Hello World!
(b) Hello World!2013
(c) 2013
(d) Hello World !13
(e) Hello World 13

18) What is the value of txt02?

(a) Hello World!
(b) Hello World!2013
(c) 2013
(d) Hello World!13
(e) Hello World 13

19) What is the value display on page?

(a) 13
(b) 14
(c) 2013
(d) 0
(e) 12

Consider the following PHP code to answer question 23 to 26

```
<?php
      $Mystring = "0812345 Predeep Jayantha 872462523V";
      echo $Mysrting ;
      $strarr = explode(" ",$Mystring);
       foreach($strarr as $k => $Myw){
           if(is_numeric($Myw)){
                     $a = $Myw ;
                     echo $a.' ';
             }else{
                      switch ($k){
                          case 1:
                              $b = $Myw;
                               break;
                         case 2:
                                $c = $Myw;
                                break;
                         case 3:
                                $d = $Myw;
                                 break;
                           }
                 }
           }
   $c=$c.' '.$b;
   echo $d.' '.$c;
 ?>
```

23) What is the value of $d?

(a) 0812345
(b) Predeep
(c) Jayantha
(d) 872462523V
(e) Predeep Jayantha

24) What is the value of $a?

(a) 0812345
(b) Predeep
(c) Jayantha
(d) 872462523V
(e) Predeep Jayantha

25) What is the value of $c?

(a) 0812345
(b) Predeep
(c) Jayantha Predeep
(d) Jayantha
(e) Predeep Jayantha

26) What is the output on the screen?

(a) 0812345 Predeep Jayantha 872462523V 872462523V Jayantha
(b) 0812345 Predeep Jayantha 872462523V Jayantha Predeep
(c) Jayantha Predeep 0812345 Predeep Jayantha 872462523V
(d) 0812345 872462523V Jayantha Predeep
(e) 0812345 Predeep Jayantha 872462523V

Answer questions number 28 to 30 by considering the following PHP code

```
<html>
<body>
<?php
$x=6;
        while($x<=9)
        {
        for ($y=2; $y<=5; $y++)
            {
            $z=$x%$y;
            if ($z==3) echo $x." ".$y." ";
            }

        $x++;
        }
        echo $x." ".$y." ".$z." ";
?>
</body>
</html>
```

28) What is the final value of $x?

(a) 3
(b) 2
(c) 10
(d) 5
(e) 7

29) What is the final value of $y?

(a) 8
(b) 2
(c) 5
(d) 6
(e) 7

30) What is the final value of $z?

(a) 3
(b) 2
(c) 6
(d) 4
(e) 7

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DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2013/2014 –2nd Year Examination – Semester 3

IT3504: Web Development Techniques

PART 1 - Multiple Choice Question Paper

2nd March, 2014
(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour.**
- The medium of instruction and questions is English.
- The paper has **25 questions** and **7 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

3) Consider the following JavaScript code.

```
<script language="JavaScript" type="text/JavaScript">
<!--
var x=55+"5";
document.write(x);
-->
</script>
```

What is/are the output(s) of this code?

(a) 5
(b) 55
(c) 60
(d) 555
(e) 50

5) Which is/are the correct statement(s) regarding JavaScript?

(a) JavaScript is a tightly typed language.
(b) JavaScript is a client-side Scripting language.
(c) JavaScript variables are not case sensitive.
(d) JavaScript can be used as a server-side and client-side scripting language.
(e) You can use multi-line commenting in JavaScript.

Answer questions number 6 to 9 by considering the following PHP code

```
<html>
<body>
<?php
$a=40;
        while($a<=45)
        {

            for ($b=3; $b<=6; $b++)
            {
                  $c=$a%$b;
                  if ($c==5)
                        {
                        $d=$a*$b;
                        }
            }
            $a++;
        }
        echo $a." ".$b." ".$c." ".$d;
?>
</body>
</html>
```

6) What is/are the final value(s) of $a?

(a) 40
(b) 42
(c) 46
(d) 45
(e) 43

7) What is/are the final value(s) of $b?

(a) 3
(b) 8
(c) 7
(d) 8
(e) 4

8) What is/are the final value(s) of $c?

(a) 9
(b) 3
(c) 6
(d) 8
(e) 4

9) What is/are the final value(s) of $d?

(a) 240
(b) 276
(c) 270
(d) 246
(e) 336

12) Which of the following statement(s) is/are true?

(a) MSFrontPage is a WYSIWYG HTML editor.
(b) Microsoft Outlook is a Text-based HTML editor.
(c) WordPress is a CMS used to manage web content.
(d) PHP is a technology used for developing client side dynamic content.
(e) Moodle is a PHP based Web application development framework.

18) Which of the following statement(s) is/are true?

(a) AJAX cannot update data displayed on a web page to the user without reloading the whole page.
(b) In Multi-tier architecture the Business logic is always implemented using client side scripting techniques.
(c) The WYSIWYG type editors cannot be used in creating dynamic web pages as they do not support CSS.
(d) Client side scripts can be used as the first level data validation to eliminate typing errors.
(e) The most widely used multi-tier architecture is referred to as 2-tier architecture where it consists of Presentation and Business logic layers.

Consider the following JavaScript code when answering questions numbers 20 to 25.

```
<script language="JavaScript" type="text/JavaScript">
<!--
  var k=2;
  topLA:
     for (i=7; i>5; i--)
       {
       while ( k<=5){
           k++ ;
           for (j=2; j<=3; j++)
                {
                document.write(i);
                   document.write(j);
                if (k==4){ break topLA;}
                }
            }
  }
      document.write(k)

  -->
  </script>
```

20) What is/are the final value(s) of i ?

(a) 5
(b) 7
(c) 6
(d) 4
(e) 3

21) What is/are the final value(s) of j?

(a) 1
(b) 2
(c) 3
(d) 5
(e) 7

22) What is/are the final value(s) of k?

(a) 1
(b) 4
(c) 3
(d) 5
(e) 7

23) What is/are the final output(s) of this code?

(a) 5375.
(b) 723623.
(c) 72724.
(d) 7273724.
(e) 5352724.

24) What would be the final output/s if “var k=2” was replaced with “var k=3”?

(a) 537.
(b) 723.
(c) 724.
(d) 727.
(e) 534.

25) What would be the final value(s) of i if “var k=2” was replaced with “var k=3”?

(a) 7.
(b) 3.
(c) 4.
(d) 6.
(e) 5.

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DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2014/2015 – 2nd Year Examination – Semester III

IT3505 – Web Application Development II

PART I - Multiple Choice Question Paper

1st March, 2015

(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- The paper has **20 questions** and **8 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 (*All the incorrect choices are marked & no correct choices are marked*) to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

1) Which of the following file extension a typical HTML page with embedded PHP scripts should have?

(a) .html	(b) .xml	(c) .htm
(d) .php	(e) Any extension	

2) In web programming, the acronym AJAX Stands for

(a) Another Java and XML Library.
(b) Another Java Abstraction for X-Windows.
(c) Abstract JSON and XML.
(d) Asynchronous Java and XML Library.
(e) Asynchronous Javascript and XML.

3) Which of the following commands can be used to compile a Java applet named “test” with the proper file extension.

(a) javac test.java
(b) appletviewer test.html
(c) javac test
(d) appletviewer test.java
(e) java test

4) Consider the following tags.

i) < php > and < php > respectively.
ii) < ? and php?> respectively
iii) <? and > respectively.
iv) <?php and ?> respectively

Which of the above tags can be used to embed a PHP script in an HTML document?

(a) ii) and iv) only	(b) iii) and iv) only
(c) i) and iv) only	(d) iv) only
(e) i) only	

5) Consider the following PHP statements.

i) int $no1,no2 = 2,3;
ii) int no1 = 2; int no2 = 3;
iii) $no1 = 2; $no2 = 3;
iv) $no1, $no2 = 2,3;

Which of the above statements will store the values 2 and 3 in the variables "no1" and "no2" respectively?

(a) i) only	(b) ii) only
(c) iii) only	(d) i)and ii) only
(e) iii) and iv) only	

6) Consider the following PHP script.

```
<?php
a = 1;
b = 2;
echo "a/b";
?>
```

What would be the output of the script when it is executed?

(a) 0.5	(b) 0	(c) a/b
(d) 1/2	(e) Error Message	

7) Consider the following PHP script.

```
<?php
$val1  = "4";
$val2 = "5";
print $val1+$val2;
?>
```

What would be the output of the script when it is executed?

(a) 9	(b) 4+5	(c) $val1+$val2
(d) 45	(e) Error Message	

8) Consider the following PHP script.

```
<?php
    $light= "red";
    switch ($light) {
    case "red":
          echo "Stop!!";
    case "yellow":
          echo "Get ready";
            break;
    case "green":
          echo "Go..";
}
?>
```

What would be the output of the script when it is executed?

(a)	Stop!!	(b)	Stop!!Get ready
(c)	Stop!!Get readyGo..	(d)	Stop!!Go..
(e)	Error Message		

9) Consider the following PHP script.

```
<?php
$name1 = "Nimal";
$name2 = "Kamal";
echo "$name1".'$name2';
?>
```

What would be the output of the script when it is executed?

(a) $name1$name2	(b) Nimal$name2	(c) $name1Kamal
(d) NimalKamal	(e) Error Message	

10) Which one of the following is a syntactically valid definition of a PHP function?

(a) `function {echo "123";}`
(b) `function test{echo "123";}`
(c) `void function test{echo "123";}`
(d) `function test($a){echo "123";}`
(e) `void function test(){echo "123";}`

11) Consider the following PHP script.

```
<?php
function foo() {
static $count1 = 0;
 $count2 = 0;
echo $count1++; echo ++$count2;
}
foo();
foo();
?>
```

What would be the output of the script when it is executed?

(a) 0011	(b) 0111	(c) 0101
(d) 1011	(e) 1111	

12) Consider the following PHP script.

```
<?php
$x = 2*(3-1)+ 4/2**2;
echo $x;
?>
```

What would be the output of the script when it is executed?

(a) 8	(b) 6	(c) 5
(d) 36	(e) 0	

13) Which of the following PHP statements is/are syntactically correct?

(a) `for(){ echo "123";}`
(b) `for(;){ echo "123";}`
(c) `for(;;){ echo "123";}`
(d) `for(;;){}`
(e) `for(;;);`

14) Which of the following statements about PHP statements is/are correct?

(a) A connection to a MySQL database can be established by using the PHP command **mysqli_connect(host,username,password,dbname);**
(b) A connection to a MySQL database can be established by using the PHP command **mysqli_open(host,username,password,dbname);**
(c) A connection to a MySQL database can be established by using the PHP command **mysqli_link(host,username,password,dbname);**
(d) An SQL query can be executed on a MySQL database by using the PHP statement mysqli_query(mySQLConnection,SQLQuery);
(e) An SQL query can be executed on a MySQL database by using the PHP statement mysqli_execute(mySQLConnection,SQLQuery);

15) Which of the following statements about JQuery is/are correct?

(a) JQuery is a JavaScript library.
(b) JQuery is a JSON library.
(c) JQuery uses CSS selectors to select elements in HTML pages.
(d) JQuery uses the symbol **$** as a shortcut for JQuery.
(e) JQuery is a library for server side scripting.

16) Which of the following JQuery statements will return all **div** elements in an HTML document?

(a) `var divs = $(div);`
(b) `var divs = jQuery("div");`
(c) `var divs = #("div");`
(d) `var divs = $("div");`
(e) `var divs = divs();`

17) Which of the following statements is/are true ?

(a) $_POST is a PHP global variable.
(b) The $_GET variable can be used by a PHP program to retrieve data from an HTML form, submitted by using the “get” method.
(c) When the “post” method is used to submit an HTML form, the form variables become visible in the URL.
(d) When the “get” method is used to submit an HTML form, the form variables become visible in the URL.
(e) In a PHP program a file named “data.txt” can be opened for reading data by using the command open(“data.txt”,”r”);

18) Which of the following statement about PHP frameworks is/are correct?

(a) JQuery is a PHP web application framework.
(b) CodeIgniter is a PHP web application framework.
(c) JQuery is based on the MVC design pattern.
(d) CodeIgniter is based on the MVC design pattern.
(e) In a typical CodeIgniter installation, the PHP script index.php serves as the front controller, initializing the base resources needed to run CodeIgniter.

19) Consider the following PHP script.

```
<?php
class Student{
      private $id = null;
      public $name = null;

      function __construct($name,$id=0){
            $this->id = $id; $this->name = $name;
      }
      public function set_id($id){
            $this->id = $id;
      }

}
?>
```

Which of the following PHP codes will create a PHP object named $x with values for its attributes $id and $name as 1 and "Nimal" respectively?

(a) $x = new Student();
(b) `$x = new Student("Nimal")`
(c) `$x = new Student("Nimal",1)`
(d) `$x = new Student("Nimal"); $x->set_id(1);`
(e) `$x = new Student("Nimal"); $x->id = 1;`

20) Consider the following HTML document:

```
<!DOCTYPE html>
<html>
<body>
<p id="title">My name</p>
<p id="myID"></p>
<script>
var x = document.getElementById("title");
document.getElementById("myID").innerHTML = x.innerHTML + " is
Kamal" ;
</script>
</body>
</html>
```

What will be the output if the above HTML document is rendered through a web browser?

(a) My name
(b) is Kamal
(c) Kamal
My name
(d) My name is Kamal
(e) My name
My name is Kamal

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DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2015/2016 – 2nd Year Examination – Semester III

IT3505 – Web Application Development II

PART I - Multiple Choice Question Paper

8th May, 2016

(ONE HOUR)

Important Instructions :

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- The paper has **20 questions** and **10 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 (*All the incorrect choices are marked & no correct choices are marked*) to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

1) Which of the following statements about PHP programming language is/are true?

(a) It is a server side programming language.
(b) It is a client side programming language.
(c) It is a free software.
(d) It is a free format language.
(e) PHP scripts in an HTML document should be coded within <php> and </php> tags.

2) Which of the following PHP statements is/are syntactically valid?

(a) define("constant", "This is a constant");
(b) define constant = "This is a constant";
(c) $constant = "This is a constant";
(d) constant = "This is a constant";
(e) $constant = 'This isn\'t valid';

3) Which of the following PHP scripts is/are syntactically valid?

(a)
```
<?php
 if(true){
  echo "True";
}
?>
```

(b)
```
<?php
 if(2 != 3)
  echo "In if part";
 else
  echo "In else part";
?>
```

(c)
```
<?php
 if 2 != 3
  echo "In if part";
 else
  echo "In else part";
?>
```

(d)
```
<?php
 if(2 != 3){
  echo "In if part";
 } else {
  echo "In else part";
}
?>
```

(e)
```
<?php
 If 2 != 3{
  echo "In if part";
 } else {
  echo "In else part";
}
?>
```

4) Consider the following PHP script:

```
<?php
    //
    echo "Hello";
    //echo "World";
?>
```

What is the output of the above PHP Script?

(a) Hello	(b) World
(c) Hello World	(d) HelloWorld
(e) Hello World	

5) Which of the following PHP scripts produce(s) the output "**Nice Day**"?

(a)
```
<?php
$a = "Nice";
$b = "Day";
echo $a . $b;
?>
```

(b)
```
<?php
/*
$a = "Nice";
$b = "Day";
echo $a . $b;
*/
?>
```

(c)
```
<?php
$a = "Nice";
$b = " Day";
echo $a , $b;
?>
```

(d)
```
<?php
$a = "Nice";
$b = "Day";
echo $a ," ", $b;
?>
```

(e)
```
<?php
$a = "Nice";
$b = " Day";
echo $a + $b;
?>
```

6) Which of the following PHP scripts print(s) the value 3 when executed?

(a)
```
<?php
echo 7/4;
?>
```

(b)
```
<?php
echo 7%4;
?>
```

c)
```
<?php
echo -1*3+12/2;
?>
```

(d)
```
<?php
echo b11;
?>
```

(e)
```
<?php
echo 0b11;
?>
```

7) Consider the following PHP declaration.

```
$a = array("abc",array(1,2,3),"cde","def");
```

Which of the following statements is/are true?

(a) The value of $a[3] is the string **cde.**
b) The value of $a[3] is the string **def.**
(c) The value of count($a) is 4.
d) The value of count($a) is 6.
(e) The value of count($a) is 0.

8) Consider the following PHP script.

```
<?php
    $light = array("red","yellow","green");
    $colourNo= 1;
    switch ($light[1]) {
    case "red":
          echo "Stop!! ";
          break;
    case "yellow":
          echo "Get ready ";
    case "green":
          echo "Go.. ";
          break;
    default:
          echo "Color not defined";
}
?>
```

What would be the output of the script when it is executed?

(a) Stop!!
(b) Color not defined
(c) Go..
(d) Get ready
(e) Get ready Go..

9) Which of the following PHP function definitions is/are syntactically correct?

(a)

```
function f1(){
  echo "hello";
}
```

(b)

```
function f1(){
  echo $abc;
}
```

(c)

```
function f1($abc){echo $abc;}
```

(d)

```
function f1($abc,abc){
  echo $abc;
}
```

(e)

```
void function f1($abc,$_abc){
  echo $abc,$_abc;
}
```

10) Consider the following PHP function definition:

```
function f1($name, sex="m",$age=0){
  echo $name,"<br>",$sex,"<br>",$age;
}
```

Which of the following function calls are syntactically correct?

(a) f1()
(b) F1("saman");
(c) F1("saman","anura","gamini");
(d) f1("kmala","f",20,13);
(e) f1("kmala","f",20+13);

11) Consider the following PHP statement;

$f = fopen("mydata.txt","a");

Which of the following statements is/are true about this statement?

(a) It always creates a file named "mydata.txt".

(b) It returns the Boolean value "TRUE" if the fopen() is successful.

(c) It returns the Boolean value "FALSE" if the fopen() fails.

(d) If the fopen() is successful, the file pointer is always placed at the beginning of the file.

(e) If the fopen() is successful, the file pointer is always placed at the end of the file.

12) Which of the following statements is/are true ?

(a) Cookies typically save data at the user's (client) computer.

(b) Cookies typically save data at the web server.

(c) Most popular Web Browsers provide facilities to enable or disable Cookies.

(d) In PHP scripts, data stored by Cookies can be accessed by using the global array $_POST.

(e) The PHP command **setcookie("abc","def")** sends a Cookie with the name **def** to the browser.

13) Which of the following statements is/are true?

(a) Web Becons can be used to find out whether a user has accessed the content of a web page or not.
(b) Web Becon is another name for Cookie.
(c) Web Becons can be implemented only by using JavaScript.
(d) Web Becons cannot be implemented through images.
(e) Web Becons can store data only at the client's machine as Cookies.

14) Which of the following statements about HTML Document Object Model (DOM) is/are correct?

(a) It is an application programming interface for valid HTML.
(b) It is a language dependent interface.
(c) It defines the logical structure of HTML documents.
(d) A JavaScript program must always be written to create a DOM of an HTML document
(e) It is organized as a tree of objects.

15) Which of the following statements about JQuery is/are correct?

(a) JQuery is a JavaScript library.
(b) JQuery is a Java library.
(c) JQuery is a PHP library.
(d) JQuery $('#id') selector and Javascript document.getElementById('id') produce the same result.
(e) The JQuery selector #('div #id01') select all HTML elements with **div** tag and id **id01**.

Questions 16) and 17) are based on the following HTML code. The dotted line indicates a missing line of code.

```
<!DOCTYPE html>
<html>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js">
</script>
<script>
function add(){
  value1 = document.getElementById("value1").value;
  value2 = document.getElementById("value2").value;
  ------------------------------------------------------------
  document.getElementById("resultSection").innerHTML =
                        "The result is = " + sum
}
</script>
<body>
<h1>Simple page</h1>
<div id = "formSection">
<form name="myForm" action="form01.php" method="POST">
Enter value 1:
<input type="text" id="value1" value ="0" class = "number"/><br/>
Enter value 2:
<input type="text" id="value2" value = "0" class="number"/><br/>
</div>
<div id="resultSection" class="result"></div>
<button id="button1" type="button" class="button" onclick = "add()">Add
Numbers </button>
</form>
</body>
</html>
```

16) Which of the following statements is/are correct about the code?

(a) When the page is rendered, there would be a single text box on the page.
(b) When the page is rendered, there would be two text boxes on the page.
(c) When the page is rendered, there would be a button with the label **Add Numbers** on the page.
(d) When the page is rendered, there would be a button with the label **button** on the page.
(e) When the user clicks on the button, the page would be submitted to the server.

17) Which of the following lines should replace the dotted line to print the sum of the two values entered at the text boxes?

(a) sum = $_POST[“value1”] + $_POST[“value2”]
(b) sum = value1 + value2;
(c) sum = int(value1) + int(value2);
(d) sum = parseInt(value1) + parseInt(value2);
(e) sum = $_POST[value1] + $_POST[value2]

18) Which of the following statements has/have the same effect as the statement

value1 = document.getElementById("value1").value;

(a) value1 = $("value1").value;
(b) value1 = $("value1").val();
(c) value1 = $("#value1").val;
(d) value1 = $("#value1").val();
(e) value1 = $("#value1").value;

Questions 19) and 20) are based on the following script. Assume that the name of this script file is "app.php".

```
<html>
<body>
<h1>Simple application</h1>
<?php
if( (isset($_POST['name'])) and ($_POST['name'] != "")){
  $std = new Student($_POST['name'],$_POST['age']);
}
?>
<form name="myForm" action="app.php" method="POST">
name:
<input type="text" name="name"  value = ""/><br/>
age:
<input type="text" name="age"  value = "0"/><br/>
<input type="hidden" name="code" value="app01">
<input type="submit" value="Send" />
</form>
<?php

class Student{

      function __construct($name,$age){
              $f = fopen("data.txt","a");
              fwrite($f,$name.",".$age."\n");
              fclose($f);
      }
}

?>
</body>
</html>
```

19) Which of the following statements about the script is/are correct?

(a) Each time a user clicks the button with the label **Send**, a new file with the name **data.txt** is created and a record is added to it.
(b) Each time a user clicks the button with the label **Send**, a new record is appended to the text file with the name **data.txt.**
(c) When a user clicks the button with the label **Send**, a script named **app.php** is executed.
(d) The values of the text boxes on the page can be accessed at the server end by the respective PHP script by using the $_POST global array.
(e) The hidden input value on the page **cannot** be accessed at the server end by the respective PHP script by using the $_POST global array.

20) Which of the following statements about the script is/are correct?

(a) The class **Student** has a constructor method.
(b) The method **__construct** in the class **Student** is executed every time an instance of the class is created.
(c) The final effect of the script will not change when the statement
```
$std = new Student($_POST['name'],$_POST['age']);
```
is replaced with the new statement
```
new Student($_POST['name'],$_POST['age']);
```
(d) The final effect of the script will not change when the segment
```
if( (isset($_POST['name'])) and ($_POST['name'] != ""))
```
is replaced with the new segment
```
if(($_POST['name'] != "")  and (isset($_POST['name'])))
```
(e) The final effect of the script will not change when the statement
```
$f = fopen("data.txt","a");
```
is replaced with the new segment
```
$f = fopen("data.txt","w");
```

****

IT3503 Answers – 2008

1	●	b	c	●	e	21	●	●	●	●	e
2	a	b	●	●	●	22	●	b	●	●	●
3	●	●	c	d	●	23	a	●	c	d	e
4	a	●	c	●	●	24	a	b	●	d	e
5	●	●	c	d	e	25	●	b	●	d	●
6	a	b	●	d	e						
7	●	b	c	d	e						
8	●	b	●	d	e						
9	a	●	c	●	e						
10	a	b	c	d	●						
11	a	●	c	d	●						
12	a	b	c	●	e						
13	a	●	c	d	e						
14	a	b	c	●	e						
15	a	b	●	●	●						
16	●	b	c	d	e						
17	a	b	●	d	●						
18	a	b	c	●	e						
19	●	b	●	d	e						
20	a	b	●	d	e						

Bachelor of Information Technology

Academic Year 2008/2009 – 2nd Year Examination – Semester 3

IT3503-Web Development Techniques – Answers 2009

| | | |

Bachelor of Information Technology
Academic Year 2009/2010 – 2nd Year Examination – Semester 3

IT3503 – Web Development Techniques - Answers
Year 2010

	1	●	b	●	d	e		21	a	b	c	d	e		41	a	b	c	d	e							
	2	a	b	●	●	●		22	a	b	c	d	e		42	a	b	c	d	e							
	3	a	b	c	●	e		23	a	b	c	d	e		43	a	b	c	d	e							
	4	a	●	c	d	e		24	a	b	c	d	e		44	a	b	c	d	e							
	5	a	b	c	d	●		25	a	b	c	d	e		45	a	b	c	d	e							
	6	●	b	c	d	e		26	a	b	c	d	e		46	a	b	c	d	e							
	7	a	b	●	d	e		27	a	b	c	d	e		47	a	b	c	d	e							
	8	●	b	c	●	e		28	a	b	c	d	e		48	a	b	c	d	e							
	9	a	●	●	●	e		29	a	b	c	d	e		49	a	b	c	d	e							
	10	●	b	c	d	e		30	a	b	c	d	e		50	a	b	c	d	e							
*	11	a	●	c	●	e		31	a	b	c	d	e		51	a	b	c	d	e							
	12	a	b	●	d	e		32	a	b	c	d	e		52	a	b	c	d	e							
	13	a	b	c	d	●		33	a	b	c	d	e		53	a	b	c	d	e							
	14	a	b	c	●	e		34	a	b	c	d	e		54	a	b	c	d	e							
	15	a	b	c	●	e		35	a	b	c	d	e		55	a	b	c	d	e							
	16	a	b	●	●	e		36	a	b	c	d	e		56	a	b	c	d	e							
	17	●	b	c	●	●		37	a	b	c	d	e		57	a	b	c	d	e							
	18	●	●	●	d	●		38	a	b	c	d	e		58	a	b	c	d	e							
	19	a	b	●	d	e		39	a	b	c	d	e		59	a	b	c	d	e							
	20	●	b	●	d	●		40	a	b	c	d	e		60	a	b	c	d	e							

* Answer to question 11 is either (b) or (d)

Bachelor of Information Technology
Academic Year 2010/2011 – 2nd Year Examination – Semester 3

IT3504 – Web Development Techniques - Answers
Year 2011

| | | |

Bachelor of Information Technology
Academic Year 2011/2012 – 2nd Year Examination – Semester 3

IT3504 – Web Development Techniques - Answers
Year 2012

| | | |

Bachelor of Information Technology
Academic Year 2012/2013 – 2nd Year Examination – Semester 3

IT3504 Web Development Technique – Answers
Year 2013

| | | |

Bachelor of Information Technology
Academic Year 2013/2014 – 2nd Year Examination – Semester 3

IT3504 – Answers
Year 2014

| | | |

Bachelor of Information Technology
Academic Year 2014/2015 – 2nd Year Examination – Semester 3

IT3505 – Answers
Year 2015

1	a	b	c	**d**	e	21	a	b	c	d	e	41	a	b	c	d	e
2	a	b	c	d	**e**	22	a	b	c	d	e	42	a	b	c	d	e
3	**a**	b	c	d	e	23	a	b	c	d	e	43	a	b	c	d	e
4	a	**b**	c	d	e	24	a	b	c	d	e	44	a	b	c	d	e
5	a	b	**c**	d	e	25	a	b	c	d	e	45	a	b	c	d	e
6	a	b	c	d	**e**	26	a	b	c	d	e	46	a	b	c	d	e
7	a	b	c	**d**	e	27	a	b	c	d	e	47	a	b	c	d	e
8	a	**b**	c	d	e	28	a	b	c	d	e	48	a	b	c	d	e
9	a	**b**	c	d	e	29	a	b	c	d	e	49	a	b	c	d	e
10	a	b	c	**d**	e	30	a	b	c	d	e	50	a	b	c	d	e
11	a	**b**	c	d	e	31	a	b	c	d	e	51	a	b	c	d	e
12	a	b	**c**	d	e	32	a	b	c	d	e	52	a	b	c	d	e
13	a	b	**c**	**d**	**e**	33	a	b	c	d	e	53	a	b	c	d	e
14	**a**	b	c	**d**	e	34	a	b	c	d	e	54	a	b	c	d	e
15	**a**	b	c	**d**	e	35	a	b	c	d	e	55	a	b	c	d	e
16	a	b	c	**d**	e	36	a	b	c	d	e	56	a	b	c	d	e
17	**a**	**b**	c	**d**	e	37	a	b	c	d	e	57	a	b	c	d	e
18	a	**b**	c	**d**	**e**	38	a	b	c	d	e	58	a	b	c	d	e
19	a	b	**c**	**d**	e	39	a	b	c	d	e	59	a	b	c	d	e
20	a	b	c	d	**e**	40	a	b	c	d	e	60	a	b	c	d	e

Bachelor of Information Technology
Academic Year 2016 – 2nd Year Examination – Semester 3

IT3505 – Answers
Year 2016

| | | |

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2004/2005 – 2nd Year Examination – Semester 3

IT3502: Web Development Techniques

PART 2 - Structured Question Paper

6th March, 2005

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: _____

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **3 questions** and **11 pages**.
- **Answer question 1** (70% marks) **and any 1 of the other questions** (30% marks each) **only**.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

1.

(b) Consider the following html code and fill in the blanks in the following paragraph.

```
<html>
<body>
<h1>Star Sport's Club- Online login</h1>
<h2>Please enter your login information</h2>
<form name="form1" method="get" action="handle_login.php">
  <table border="0">
    <tr>
      <td>User Name:</td>
      <td><input type="text" name="username"></td>
    </tr>
```

Continued..

```
    <tr>
      <td>Password:</td>
      <td><input type="password" name="passwd"></td>
    </tr>
    <tr>
      <td> </td>
      <td><input type="submit" name="sub1" value="Login"></td>
    </tr>
  </table>
</form>
</body>
</html>
```

The web page defined by the above html code will contain an HTML .....(1)..... , with three input controls, a text box, a .....(2)..... box and a .....(3)..... button. It is used to get input of the user of a web page. Its name is .....(4)..... . The .....(5)..... attribute of the form tag specifies where the form data will be submitted. Therefore, when the button labelled .....(6)..... is pressed, the form data will be submitted to the .....(7)..... script, which is a .....(8)..... web page, as opposed to a static web page.

There are two methods by which form data can be submitted. This form uses the GET method. An alternative is to use the .....(9)..... method.

If the first method is used, the .....(10)..... can be seen in the URL. The URL together with the name - .....(11)..... pairs is called the .....(12)..... string.

(24 marks)

ANSWER IN THIS BOX

(c) Submitting an HTML form is one way of sending data from one webpage to another. Another is by clicking on an HTML link.
With the aid of an example, describe this second technique.

(06 marks)

ANSWER IN THIS BOX

(d) In JavaScript, user interactivity is accomplished through *events* and *event handlers*. Using a simple example, very briefly explain these two concepts.

(07 marks)

ANSWER IN THIS BOX

Continued..

(e) With the aid of a diagram, briefly describe the interaction among the web-browser, web-server and PHP.

(07 marks)

ANSWER IN THIS BOX

2) Consider the following HTML/JavaScript code, where the numbers from 1-25 on the left do not form a part of the code.

```
1   <html>
2   <head>
3   <script language="JavaScript">
4   <!--
5       function validateForm(){
6           formObj = document.f1;
7           if (formObj.name.value == "") {
8              alert("You have not filled in the name field.");
9              formObj.name.focus();
10             return false;
11          }
12      }
13  -->
14  </script>
15  </head>
16  <body>
17  <form name="f1" onsubmit="return validateForm()"
    action="p5.php" method="get">
18   Name : <input size="30" name="name"><br>
19   Age : <input size="3" name="age"><br>
20   DOB : <input size="10" name="dob"><br>
21  <input name="submit" type="submit" value="Submit"> 
22  <input name="reset" type="reset" value="Reset">
23  </form>
24  </body>
25  </html>
```

(a) Fill in the blanks in the following paragraph.

The above code displays an HTML form with three text boxes, a submit button and a reset button. The JavaScript code contains a ……(1)…… named validateForm. This is called in the ……(2)…….. event of the form. This form is named ……(3)…… .

JavaScript exposes the elements in the webpage as DOM (DOM stands for ……(4)……) objects. Therefore, we can access the form object defined above by using the syntax document.f1
Similarly, the first text field of the form is ……(5)…… .
To get the text which is entered in the first text field, we can use the syntax ……(6)…… .

(12 marks)

ANSWER IN THIS BOX

(b) What is meant by the term 'form validation', and why is it necessary?

(03 marks)

ANSWER IN THIS BOX

(c) Why is client-side validation more suitable than server-side validation?

(03 marks)

ANSWER IN THIS BOX

(d) Briefly describe the functionality of the above code.

Hint 1: It is enough to only describe the functionality of code in lines 6, 7, 8, 9, 10, 17 and 22.
Hint 2: Mention what happens to the submission of the form when validateForm() returns false. What happens when it returns true?

(07marks)

ANSWER IN THIS BOX

(e) Add code between line 11 and line 12 so that,

if the third text field in the form is left blank or the value entered is less than 12, the following things happen.

1) A message is displayed saying 'Age needs to be filled and should be 12 or more',
2) The third text field is automatically filled-in with the value 12, and
3) The cursor is placed at the third text field.

(05 marks)

ANSWER IN THIS BOX

Continued..

3) Consider the following PHP code.

```
1    <?php
2       session_start();
3       $username = $_REQUEST["username "];
4       $password = $_REQUEST["passwd"];
5       $con1 = mysql_connect("localhost","root","");
6       mysql_select_db("db1", $con1);
7       $sql = "SELECT * FROM user WHERE name = '" . $username
     . "'";
8       $recordset = mysql_query($sql, $con1) or die("Databse
     error!");
9       $rowcount = mysql_num_rows($recordset);
10      if ($rowcount>0){
11         $row = mysql_fetch_assoc($recordset);
12         if($row["pwd"]==$password){
13            $_SESSION["user"]["name"] = $username;
14            $_SESSION["user"]["type"] = $row["type"];
15            $_SESSION["user"]["email"] = $row["email"];
16            header("Location: home.php");
17         } else {
18            header("Location: error_login.php");
19         }
20      } else {
21                  header("Location: error_login.php");
               }
     ?>
        <?php
```

(a) Fill in the blanks in the following paragraph.

At line 4, $password is a PHP ……(1)…… and it is assigned the value of $_REQUEST["passwd"]. $_REQUEST is a PHP built in variable which happens to be an associative array. The difference between a normal array and an associative array is that in the associative array the elements can be accessed using a ……(2)…… value as the index. $_REQUEST has elements which correspond to the form-data that has been submitted.

Consider the HTML code given in Page 2 and 3 of Question 1(b).

Continued..

Suppose someone typed *Yasith* in the textbox, and *boo123* in the password box. Then the value of ……(3)…… will be *Yasith* while the value of $password will be ……(4)…… .

In line 5, mysql_connect is a PHP ……(5)…… which has three parameters where the first parameter is the database server name, the second is the username used to connect to that database server and the last parameter is the ……(6)…… to use.

(06 marks)

ANSWER IN THIS BOX

(b) Assuming $username = *Yasith,* write down the value of $sql.

(05 marks)

ANSWER IN THIS BOX

(c) In line 8, if an error occurred in executing the function *mysql_query()*, the ***or die("msg")*** construct will display a message and terminate the execution of the PHP script.
Modify line 8, so that when an error occurs, the error message which is printed includes the value of $sql as well.

(05 marks)

ANSWER IN THIS BOX

(d) Fill in the blanks in the following paragraph.

The above PHP code accesses a database table called ……(1)…… . By looking at this code, we can deduce that this table has at least four fields; I) name II) ……(2)…….. III) ……(3)……. IV) ……(4)…… .

In line 13, $_SESSION["user"]["name"] = $username creates a ……(5)…… variable with the name ***user***. It is a/an ……(6)…… array.

(06 marks)

Continued..

ANSWER IN THIS BOX

(e) In line 16, what is accomplished by calling the function: header("Location: home.php") ?

(04 marks)

ANSWER IN THIS BOX

Consider the following PHP code found at the start of home.php. It can be used to restrict access to a web page.

```
<?php
    session_start();
    if (!isset($_SESSION["user"])){
        header("Location: error.php");
    }
?>
```

(f) What does **isset**($_SESSION["user"]) do?

(04 marks)

ANSWER IN THIS BOX

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UCSC

UNIVERSITY OF COLOMBO, SRI LANKA

BIT

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2005/2006 – 2nd Year Examination – Semester 3

IT3502: Web Development Techniques

PART 2 - Structured Question Paper

12th March, 2006

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: _____

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **3 questions** and **14 pages**.
- **Answer question 1** (70% marks) **and any 1 of the other questions** (30% marks each) **only**.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

2) Answer all sections in this question referring to the following segment of code, where the numbers from 1-38 on the left do not form a part of the code.

```
1   <html><head><title>Worldcup History</title>
2   <script language="javascript">
3     var years = new Array(4);
4     years[0] = "2002";
5     years[1] = "1998";
6     years[2] = "1994";
7     years[3] = "1990";
8     var winners = new Array(4);
9     winners[0] = "Brazil";
10    winners[1] = "France";
11    winners[2] = "Brazil";
12    winners[3] = "West Germany";
13    function getWinner(){
14      var selectedYear = document.lookupForm.year.value;
15      var results = document.lookupForm.results;
16      var found = false;
17      for(var i=0; i < years.length; i++)
18      if(years[i] == selectedYear){
19        found = true;
20        break;
21      }
22      if(found) results.value = 'Winner in '
          + years[i] + ' is ' + winners[i];
21      }
22      if(found) results.value = 'Winner in '
          + years[i] + ' is ' + winners[i];
23    }
24    function validate(){
25      if(document.lookupForm.year.value == ""){
26        alert("Please enter the year");
27        document.lookupForm.year.focus();
28      }
29    }
30  </script>
31  </head>
32  <body onLoad="document.lookupForm.year.focus()">
33  <form name='lookupForm'>
34    Select Year: <input type='text' name='year' size=4
            onBlur="validate()"><br>
35    <input type='button' value='Lookup Winner'
            onClick='getWinner()'><hr>
36    <input type='text' name='results' size=50>
37  </form>
38  </body></html>
```

(a) Fill in the blanks of the following paragraph.

The HTML/JavaScript source code given above displays an input form with two textboxes and a button. Using JavaScript, the value entered in the textbox named 'results' can be accessed using the syntax ..... (1)..... . The .....(2)..... event of the webpage happens just after the webpage has completed loading in the browser. In the above code, getWinner() and validate() are JavaScript .....(3)..... . The keyword var is used to declare a JavaScript .....(4)..... .

ANSWER IN THIS BOX

(b) What is the result of the JavaScript code that executes just after the web page is loaded in the browser?

(02 marks)

ANSWER IN THIS BOX

(c) Suppose the user enters 1998 in the textbox named 'year' and clicks on the button. What will be displayed in the textbox named 'results'?

(02 marks)

ANSWER IN THIS BOX

(d) Suppose that the user, immediately after carrying out the above step, enters 98 in the textbox named 'year' and clicks on the button. What will be displayed in the textbox named 'results'?

(02 marks)

ANSWER IN THIS BOX

(e) What does the break statement do on line 20?

(02 marks)

ANSWER IN THIS BOX

(f) Suppose you want to record the fact that the world cup winner for the year 1986 was Argentina.
What is the JavScript code that should be added?
Where should that code be added to?

(03 marks)

ANSWER IN THIS BOX

(g) Suppose you want to display a message saying 'Data unavailable' in the textbox named 'results' whenever the user enters a year for which data is not stored in the JavaScript arrays.
Write down how you would modify the statement on line 22 to make this happen.

(04 marks)

ANSWER IN THIS BOX

(h) (i) Can a user of the web page move the cursor to the textbox named 'results' when the textbox with the name 'year' is empty?

(01 mark)

ANSWER IN THIS BOX

(ii) Explain your answer.

(06 marks)

ANSWER IN THIS BOX

3) Answer all sections in this question referring to the following segment of code, where the numbers from 1-28 on the left do not form a part of the code.

```
1   <html>
2   <head>
3   <title>Guest Book</title>
4   </head>
5   <body>
6   <?php
7   if(isset($_REQUEST['send'])){
8      $name = $_REQUEST['name'];
9      $email = $_REQUEST['email'];
10     $comment = $_REQUEST['comment'];
11     $con = mysql_connect('localhost','root','')
          or die('Connection Failed');
12     mysql_select_db('it3502',$con);
13     $sql = "INSERT INTO comments (name, email, comment)
          VALUES ('$name', '$email', '$comment')";
14     mysql_query($sql,$con) or die(
          "Failed to insert comment.<br>" .
          "<a href='guestbook.php'>Back</a>");
15     echo "Your comment was added to the Guest Book<br>";
16     echo "<a href='guestbook.php'>Back</a>";
17  } else {
18  ?>
19  <h1>Write to our Guest Book</h1>
20  <form method="POST" action="guestbook.php">
21     Your Name: <input name="name" type="text"
          size="50"><br>
22     Your Email: <input name="email" type="text"
       size="50"><br>
23     Your Comment: <textarea name="comment"
       cols="50" rows="4"></textarea><br>
24     <input name="send" type="submit" value="Send Comment">
25  </form>
26  <?php } ?>
27  </body>
28  </html>
```

(a) Fill in the blanks of the following paragraph.

The HTML/PHP source code given above displays an input form and when it is submitted, write an entry to a database table. The database name is ……(1)…… and the table name is ……(2)…… .
The PHP ……(3)…… isset() checks for the existence of a variable. At line 7, it is used to check if a request variable with the name ……(4) …… is present. At line 11, we try to connect to the ……(5)…… database server at ……(6)…… using the PHP function mysql_connect(). If an error occurred in executing that function, the message ……(7)…… is displayed and the PHP script terminates. At line 13, The variable $sql stores the ……(8)…… that will insert a new record to the database table.

(16 marks)

ANSWER IN THIS BOX

(b) Suppose line 7 is changed to: `if(isset($_POST['send'])){`

Will this web page function as before? (Yes/No).

(02 marks)

ANSWER IN THIS BOX

(c) Suppose line 7 is changed to: `if(isset($_GET['send'])){`

Will this web page function as before? (Yes/No).

(02 marks)

ANSWER IN THIS BOX

(d) Suppose that the line 12 was removed?

Will this web page function as before? (Yes/No).

(02 marks)

ANSWER IN THIS BOX

(e) Suppose that the user submitted the form and a new record was successfully inserted into the database table. Will a blank form be displayed for entering another entry? (Yes/No)

(02 marks)

ANSWER IN THIS BOX

(f) Suppose line 24 is changed to:

```
<input name="submit" type="submit" value="Send Comment">{
```

Briefly describe and explain the resulting change in the operation of this web page.

(06 marks)

ANSWER IN THIS BOX

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2006/2007 – 2nd Year Examination – Semester 3

IT3502: Web Development Techniques

PART 2 - Structured Question Paper

4th March, 2007

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **3 questions** and **7 pages**.
- **Answer question 1 (**70% marks**) and any 1 of the other questions (**30% marks each**) only**.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

2) Answer all sections in this question referring to the following segment of code, where the numbers from 1-16 on the left do not form a part of the code.

```
1   <html><body>
2   <script language="javascript">
3   function calc(x) {
4      alert("Factorial of " + x + " is " + factorial(x));
5   }
6   function factorial(n) {
7      if(n<0) return 0;
8      if(n==0) return 1;
9      return n * factorial(n-1);
10  }
11  </script>
12  <form name="form1">
13     <input name="number" type="text" size="4" maxlength="3" /><br />
14     <input name="Calc" type="button" value="Calculate"
            onClick="calc(document.form1.number.value);" />
15  </form>
16  </body></html>
```

(a) Fill in the blanks of the following paragraph.

This HTML web page contain ……(1)……. code. When it is open in a web browser, a form with a single ……(2)…. and a button will be displayed.
The two functions defined are calc() and ……(3)……. The second one is a recursive function. The text box is …(4)… character positions in length but will allow input of …(5)… characters. When a number is entered in the text box and the button is clicked, a/an …(6)….. box is displayed showing the result of a certain calculation.

(12 marks)

ANSWER IN THIS BOX

(b) What is displayed in the message box when the button is clicked after entering the number '3' in the text box?

(03 marks)

ANSWER IN THIS BOX

(c) What is displayed in the message box when the button is clicked after entering the number '-2' in the text box?

(03 marks)

ANSWER IN THIS BOX

(d) Is it possible to enter the number '1234' in the text box? (YES or NO)
If your answer is YES, what happens when the button is clicked?
If your answer is NO, explain.

(05 marks)

ANSWER IN THIS BOX

(e) Modify the code in the 'onClick' event handler of the button so that it first checks to see if the textbox is empty.

(07 marks)

ANSWER IN THIS BOX

3) Answer all sections in this question referring to the following segment of code, where the numbers from 1-12 on the left do not form a part of the code.

```
1   <?php
2   if ( array_key_exists('msg', $_REQUEST) ){
3       $to = "admin@bit.lk";
4       $subject = "Message from IP " . $_SERVER['REMOTE_ADDR'] . "<br />";
5       $body = "Name = {$_REQUEST['name']}<hr>" . $_REQUEST['msg'];
6       $headers  = "MIME-Version: 1.0\r\n";
7       $headers .= "Content-type: text/html; charset=iso-8859-1\r\n";
8       $headers .= "From: Bit Online <web@bit.lk>\r\n";
9       @mail($to,$subject, $body, $headers);
10      header("Location: confirmation.php");
11  }
12  ?>
```

(a) Fill in the blanks of the following paragraph.

This PHP web page does not produce any visible output. It looks for a request parameter named …(1)…., and if found, uses that parameter, and another parameter named …(2)… to send an email. This email is sent to the address ……(3)….. and the format of the email is ……(4)…… .

This email will appear to have originated from the email address ……(5).. . After sending the email, the request is redirected to the web page named …(6)…… .

(12 marks)

ANSWER IN THIS BOX

(b) To what does $_SERVER['REMOTE_ADDR'] evaluate to?

(04 marks)

ANSWER IN THIS BOX

(c) In line 9, what is the purpose of the @ symbol preceding the call to the mail() function?.

(05 marks)

ANSWER IN THIS BOX

(d) If the values of request parameters were *name=Amal* and *msg=I was here*, roughly sketch how the body of the sent email will look like when displayed in an email reader.

(04 marks)

ANSWER IN THIS BOX

(e) Between line 11 and 12, insert code to do the following.
If the parameter named 'msg' is not found in the request, redirect to 'contact.php' web page.

(05 marks)

ANSWER IN THIS BOX

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UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2007/2008 – 2nd Year Examination – Semester 3

IT3503: Web Development Techniques

PART 2 - Structured Question Paper

16th March, 2008

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **4 questions** and **8 pages**.
- **Answer all questions**
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g [X]) the numbers of the questions answered.

	Question numbers				
To be completed by the candidate by marking a cross (×).	1	2	3	4	
To be completed by the examiners:					

3) Consider the following HTML document.

```
<html>
<head>
<title>Division Example</title>
<script language="JavaScript" type="text/JavaScript">
function divit()
{
     var x = parseInt(document.frmdiv.a.value);
     var y = parseInt(document.frmdiv.b.value);
     var z = x / y;
     document.frmdiv.c.value = z;
}
</script>
</head>

<body>
<form action="" method="post" name="frmdiv">
  <input name="a" type="text" size="4" maxlength="4">
  /
  <input name="b" type="text" size="4" maxlength="4">
  =
  <input name="c" type="text" size="5">
  <input type="button" name="Button" value="Division"
onClick="divit()">
</form>
</body>
</html>
```

The above document displays a form in a browser where, once the user enters two numbers and presses the "Division" button, it will calculate and display the division of the first number by the second number. The following shows one such instance.

The JavaScript function has to be extended in the following manner:

- If the user enters anything other than numbers, the function will detect it and display "Please enter a number" while displaying "Error" in the answer box.
- If the user enters 0 (zero) in the second input box (denominator), the function will detect it and display "Division by zero?" while displaying "Error" in the answer box.

Give the modified code for the function `divit()`

Hint:
Use the PHP function isNaN() to test a value to see if it is NaN (Not a Number).

(25 marks)

Continued…

ANSWER IN THIS BOX

4) Suppose you are creating a dynamic website. The login page of the website asks the username and password as shown below:

Once a user presses the Login button, the form action will be submitted to processlogin.php. The PHP code of that page validates the user against authorized users list in a database and creates a session and redirects the user to home.php if that user is a valid user. Otherwise, the page displays the message "You are not a valid user".

The following gives the implementation of processlogin.php, However it has some mistakes.
Note: line numbers in the front are not part of the code.

```
01. <?php
02. // Defines the constants HOSTNAME, DATABASE, USERNAME, and PASSWORD
03. require_once 'dbconninfo.php';
04.
05. $conn = mysql_pconnect(HOSTNAME,USERNAME,PASSWORD)
06.   or die("Could not connect to server!");
07. mysql_select_db(DATABASE,$conn)
08.   or die("Could not select database!");
09.
10. if (!empty($_POST["username"])) {
11.   $username = $_POST['username'];
12.   $password = $_POST['password'];
13.
14.   $query = "SELECT * FROM logininfo WHERE username='$username' AND
password='$username'";
15.   $result = mysql_query($query)
16.         or die("Could not perform query!");
17.
18.   if ($row = mysql_fetch_array($result,MYSQL_ASSOC)) {
19.         session_start();
20.         $_SESSION['username'] = $username;
21.   } else {
22.         echo "You are not a valid user";
23.         header('Location:home.php');
24.   }
25. }
26. mysql_close($conn);
27. ?>
```

The page produces the following output.

You are not a valid user
Warning: Cannot modify header information - headers already sent by in **processlogin.php** on line **23**

Continued…

a.) List down the mistakes which prevent the desired functionality of the page (indicate the line numbers of code where appropriate).

(13 marks)

ANSWER IN THIS BOX

b.) In addition to that, if a user who has already signed in tries to access this page, such user has to be automatically redirected to home.php. Give the PHP code for this functionality.

(12 marks)

ANSWER IN THIS BOX

*****

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2008/2009 – 2nd Year Examination – Semester 3

IT3503: Web Development Techniques

PART 2 - Structured Question Paper

22nd March, 2009

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is 1 (one) hour.
- The medium of instruction and questions is English.
- This paper has 4 questions and 9 pages.
- Answer all questions
- Write your answers in English using the space provided in this question paper.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers				
To be completed by the candidate by marking a cross (×).	1	2	3	4	
To be completed by the examiners:					

3) The following shows an HTML form and a message displayed when the submit button is pressed.

When the user clicks the submit button, the function `validateOnSubmit()` is called. The message mentions number of empty fields to be completed if at least one field is empty, otherwise displays a message saying "Submitting the form".

Complete the following JavaScript code to get the above functionality.

(25 marks)

Continued…

4) Suppose you are creating a dynamic website using PHP. When you enter your name and select your favourite colour from the drop down menu, the heading displays “Hello <your name>” changing the background colour to the colour you selected.

Continued…

The following gives the code of the HTML form.

```
<form action="test.php" method="post" name="details">

<label for="user">Your Name :</label>
<input type="text" name="name" value="" /><br />

<label for="emailaddress">Favourite Color :</label>
<select name="colorval">
  <option value="0">Red</option>
  <option value="1">Green</option>
  <option value="2">Blue</option>
  <option value="3">Black</option>
  <option value="4">White</option>
</select>
<br />

<input type="submit" name="submitbutton" id="submitbutton"
value="Submit"/>
</form>
```

The PHP code contains an array (given below) that returns the colour rgb value given the colour index. Give the complete PHP code for the above requirement.

(25 marks)

ANSWER IN THIS BOX

Continued…

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2009/2010 – 2nd Year Examination – Semester 3

IT3503: Web Development Techniques

PART 2 - Structured Question Paper

21st March, 2010

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **3 questions** and **10 pages**.
- **Answer all questions**
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

2) The following shows an HTML form and the messages displayed when the submit button is pressed.

Name (max 10 characters):

Age (between 25 to 75):

E-mail :

Submit

When the user clicks the submit button, the function `validateOnSubmit()` is called. The above messages are displayed when the name exceeds 10 characters, when the age is not between 25 to 75 or when the email address is not valid.

Fill in the blanks of the given HTML code with appropriate JavaScript code in order to get the same functionality given above.

(25 marks)

Continued…

3) Suppose you have to create a dynamic Website using PHP. When the user presses the "Login" button after entering the username and the password, the entered username and the password is displayed on the screen as shown below.

Give the complete code (HTML+PHP) for the above requirement.

(25 marks)

ANSWER IN THIS BOX

Continued…

*****

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)
Academic Year 2010/2011 – 2nd Year Examination – Semester 3

IT3504: Web Development Techniques

PART 2 - Structured Question Paper

27th February, 2011
(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **3 questions** and **11 pages**.
- **Answer all questions.** All questions **do not** carry similar marks.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

2) The following shows an HTML form and the messages displayed when the submit button is pressed.

Following is the HTML code for the above Web page.

```
<html>

<body>
<form action="hadler.php" onSubmit="return validate()">
   <p><h2> Enter Your Details : </h2></p>
   <p>Nationality : <input type="text" id="national"
size="20"></p>
   <p>Age : <input type="text" id="age" size="20"></p>
   <input type="submit" value="Submit">
</form>
</body>

</html>
```

Write the JavaScript code to be embedded in the above HTML code for the click event of the button which will display the alert message "**Eligible for Voting**" if the following validations are true:

- The age should be numeric and be > 18
- The nationality should be "Sri Lankan"

The alert message "**Not eligible to vote**" should be displayed if any of the above mentioned validations is false.

(25 marks)

Continued…

ANSWER IN THIS BOX

3) Suppose you are creating a dynamic website. The login page of the website asks the username and password as shown below:

Once a user presses the Login button, the form action will be submitted to processlogin.php. The PHP code of that page validates the user against authorized users list in a database and creates a session and redirects the user to home.php if that user is a valid user. Otherwise, the page displays the message “You are not a valid user!”.

Write the PHP code for the implementation of processlogin.php page.
Note :- assume that you already have a working database connection ,the user name and password is stored on a table called “logininfo” having two fields “username” and “password”.

(25 marks)

Continued…

ANSWER IN THIS BOX

Continued…

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2011/2012 – 2nd Year Examination – Semester 3

IT3504: Web Development Techniques

PART 2 - Structured Question Paper

26th February, 2012

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is 1 (one) hour.
- The medium of instruction and questions is English.
- This paper has 3 questions and 10 pages.
- Answer all questions. All questions do not carry equal marks.
- Write your answers in English using the space provided in this question paper.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [×]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

2) Area of a rectangle can be calculated by multiplying width into length of the rectangle. Write a suitable JavaScript code with a function to calculate the area for a given rectangle.

- The function must accept form object as a passing in parameter.
- Make all default values of text box to 0 when loading the form.

Continued…

(20 marks)

ANSWER IN THIS BOX

3) Suppose you are creating a dynamic webpage (displayres.php) to display results of a selection test for students where, the result is given as selected or not selected. Write the PHP code for the above purpose.

Consider following when writing the code.

Once a user fills the Index number and presses “Display Result” button, the form needs to submit data to “displayres.php”. The PHP code of that page validates the Index number with the database and displays the result as “Selected” or “Not selected”. If the Index number is wrong, the page must display the message “Wrong Index, Please enter correct Index number!”

Write the PHP code for the implementation of displayres.php page.
Note: - assume that you already have a working database connection (connection name “$MYSQL_CONN”). The index number and result is stored in a table (name of the table “Results”) having two fields “IndexNo” and “selection”.

Continued…

(30 marks)

ANSWER IN THIS BOX

Continued…

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2012/2013 – 2nd Year Examination – Semester 3

IT3504: Web Development Techniques

PART 2 - Structured Question Paper

3rd March, 2013

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **3 questions** and **12 pages**.
- **Answer all questions.** All questions **do not** carry similar marks.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

2) Assume that you have 3 different paragraphs where you have to change the colour of the font as mentioned below through the active link ("Change Colour") on the page. When the link is clicked the paragraphs colour must be changed. Write all required code (HTML, Java Script function/s) based on styles for this task

- the first paragraph must be in red colour
- the second paragraph must be in green colour
- the third paragraph must be in Blue colour

The page must appear as given below and must be titled as "Change Font Color"

(20 marks)

ANSWER IN THIS BOX

Continued…

3) Suppose you are creating a dynamic web page to display results for the examination consisting of 3 subjects. The user will enter the Index number with the ID number for verification to a form as shown below:

Note:-Form variable name for Index Number and ID number is " indexno", "idno" respectively.

Once a user presses the display button, the form action will be submitted to DisplayRes.php. The PHP code of the page validates the information against data in the result table with the structure given below.

Table Name :-`st_marks`

Field	Type	description
indexno	varchar(8)	Primary key, not Null
st_name	varchar(100)	not Null
idno	varchar(10)	Not null
Sub1res	varchar(5)	Not null
Sub2res	varchar(5)	Not null
Sub3res	varchar(5)	Not null

If a valid entry is found, the results should be displayed. Otherwise display the following error message.

"No Results Found for the Index No! Please verify the Index Number and ID number"

Write the PHP code for the DisplayRes.php to quarry and display the results.

Assume that you already have a user account (user name:"WebUser", password:"Pw123") to connect to MySQL database ('student_db) on the same server running the web service. Results must be displayed in a simple table as shown in the example below.

Name:	ABC Perera
Index No	121342
Subject 1	S-Pass

Continued…

Subject 2	D-Pass
Subject 3	Fail

(30 marks)

ANSWER IN THIS BOX

Continued…

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2013/2014 – 2nd Year Examination – Semester 3

IT3504: Web Development Techniques

PART 2 - Structured Question Paper

2nd March 2012

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **3 questions** and **8 pages**.
- **Answer all questions.** All questions **do not** carry equal marks.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers			
To be completed by the candidate by marking a cross (×).	1	2	3	
To be completed by the examiners:				

2) Suppose you are required to display the current price list for an online shop where items are categorised and organized as given below.

Table ItemsData
- ItemNo (primary Key)
- ItemName
- ItemCategory
- Unit
- PriceCode

Table PriceData
- PriceCode (primary Key)
- UnitPrice
- EffDate

Write HTML/PHP code to display a price list consisting of item number , item name and effective unit price , for an online shop. Items must be ordered according to item category in a tabulated format.

Note: - assume that you already have a working database connection (connection name "$MYSQL_CONN").

(25 marks)

ANSWER IN THIS BOX

;

Continued

3) Write a Java Script code to validate following conditions of a phone number for a web application

- Only numbers are allowed
- Can start with country code(94)or 0 with area or operator code (validating operator or area codes is not required)
- Total length must be 10 (without country code) or 11 (with country code)

Note:- you may call your function as "`validate`"

(25 marks)

ANSWER IN THIS BOX

Continued

UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2014/2015 – 2nd Year Examination – Semester 3

IT3505: Web Development Techniques II

PART 2 - Structured Question Paper

1st March, 2015

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **2 questions** and **6 pages**.
- **Answer all questions.** All questions **may not** carry equal marks.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers		
To be completed by the candidate by marking a cross (×).	1	2	
To be completed by the examiners:			

Index No …….

1) (a) Write a PHP script to print the string “Hello World” on the screen.

(10 Marks)

ANSWER IN THIS BOX

(b) Write a PHP script to print all odd integers from 1 to 50.

(10 Marks)

ANSWER IN THIS BOX

c) Name two different techniques that can be used in web programming to retain data among multiple HTML sessions. Give a main difference between these two techniques.

(10 marks)

ANSWER IN THIS BOX

d) **Explain what will happen when the following HTML is rendered through a web browser.**

```
<!DOCTYPE html>
<html>
<body>
<FORM>
<INPUT TYPE="text" VALUE= "20"
onChange= "alert('Please dont change this value')">
</FORM>
</body>
</html>
```

(20 marks)

ANSWER IN THIS BOX

2 Few rows of a table named "**student**" in a MySQL database named "**school**" is given below. Assume that the database can be accessed by using the use id "**root**" with the password "**root123**".

id	name	date_of_birth	sex	class
95001	Saman	2008-01-10	m	2A
95002	Kamala	2007-12-22	f	2D
94001	Sunil	2006-06-18	m	4B
94002	Wasantha	2006-03-05	m	4A
94003	Wasana	2006-10-10	f	4A

a) Give PHP statements required to establish a connection to this MySQL database "school". Clearly state all your assumptions, if any.

(10 marks)

ANSWER IN THIS BOX

b) How do to you verify that the connection you have tried to establish in part a) above had been established without any error? Write PHP code necessary to display the errors encountered if the connection attempt failed.

(10 marks)

ANSWER IN THIS BOX

c) Write a PHP script named "**tools.php**" which contains a function named "**list_students**" that accepts a connection to the database "**student**" and prints only the "**ids**" and "**names**" of all students in the table "**school**".

(15 marks)

ANSWER IN THIS BOX

d) Write a PHP script named "list.php" to print only the ids and names of all students in the table "school" by calling the function you have developed in part c) of this question .

(15 marks)

ANSWER IN THIS BOX

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UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2015/2016 – 2nd Year Examination – Semester 3

IT3505: Web Application Development II

PART 2 - Structured Question Paper

8th May, 2016

(ONE HOUR)

To be completed by the candidate

BIT Examination Index No: .....

Important Instructions:

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **2 questions** and **9 pages**.
- **Answer all questions.** All questions **do not** carry equal marks.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered

Indicate by a cross (×), (e.g. [X]) the numbers of the questions answered.

	Question numbers		
To be completed by the candidate by marking a cross (×).	1	2	
To be completed by the examiners:			

1) (a) Identify the syntax errors in the following PHP script, which is coded to output the text "Hello World". Rewrite the code by removing all syntax errors to produce the expected output.

```
<php
a = "Hello"
b = 'World"
echo a + b
>
```

(10 Marks)

ANSWER IN THIS BOX

(b) Consider the following JavaScript object definition.

```
function student(name,age){
    this.name = name;
   this.age = age;
  };
```

Give JavaScript commands required to

i) Instantiate a student object with values for the properties **name** as "Kamala" and **age** as 15.

ii) Display the values of all the properties of the newly created object by using the command **alert** .

(10 Marks)

ANSWER IN THIS BOX

c) Consider the following PHP script.

```
<?php
    setcookie("name","saman",time()+3600);
 ?>
```

i) Write a PHP script to change the value of this cookie to “Gamini”.
ii) Write a PHP script to delete this cookie.

(10 marks)

ANSWER IN THIS BOX

d) Consider the following PHP script.

```
<?php
$f = fopen("data.txt","w");
$c = 0;
$c += fwrite($f,"My name is saman");
echo $c;
fclose($f);
?>
```

Assume that a non-empty file with the name “data.txt” exists in the same directory (folder) where this script is stored.

i) Explain the effect of each statement of the script.

ii) After executing this script what will be the content of the file “data.txt”?

iii) What output would appear on the screen after the execution of this script?

(20 marks)

ANSWER IN THIS BOX

2

a) What is the difference between the following JQuery selectors?

a) $('#01')

b) $('ul #01')

c) $('ul, #01')

(10 marks)

ANSWER IN THIS BOX

Parts b) and c) are based on the following MySQL database table "**student**". The name of the database is '**school**'.

Assume that the database can be accessed by using the use id "**root**" with the password "**root123**".

id	name	sex	class
95001	Saman	m	2A
95002	Kamala	f	2D
94001	Sunil	m	4B
94002	Wasantha	m	4A
94003	Wasana	f	4A

b) Give an HTML script with a form element to gather data required to create a new record in the table . You must state your assumptions clearly, if any.

(20 marks)

ANSWER IN THIS BOX

c) Write a PHP script which is executed from the script you have given in part b) that adds records to the "**student"** table from the information gathered.

(20 marks)

ANSWER IN THIS BOX

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