



SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Information Technology

Second Year, Second Semester Examination – 2016

HNDIT2413- Web Application Development

Instructions for Candidates:
Answer any five (05) questions.

No. of questions: 06
No. of pages : 08
Time : Three (03) hours

1)

- i. What do the following acronyms stand for? [02 Marks]
 - a. HTTP
 - b. W3C
- ii. Write three main functions of client server system. [03 Marks]
- iii. Briefly explain the difference between ordered and unordered list with a suitable example. [05 Marks]
- iv. Write the HTML code for the following output. [10 Marks]

Name	Telephone		Preferred ATIs
Andrew	092-2345657	071-5557785	ATI-Jaffna
			ATI-Vavuniya
			ATI-Trincomalee
Ferdinande	093-7765657	077-7113478	ATI-Galle
			ATI-Tangalle

2)

- i. What is meant by CSS? Briefly explain it. [02 Marks]
- ii. Give (03) three ways of inserting styles in to HTML page. [03 Marks]
- iii. What are the effects you can get by using the following styles in a HTML page? [05 Marks]
 - a. Color
 - b. Padding
 - c. margin
 - d. Font-style
 - e. List-style-type
- iv. By considering the following web page and its HTML code, complete the following CSS style definitions by filling the missing code segments at the given placeholders to get the following appearance of the HTML page. [10 Marks]

Technosoft 2017

Advanced Technological Institute -Gampaha

Sri Lanka Institute of Advanced Technological Education

Category 01

Web Application

Technosoft 2015 is a software competition organized under the Higher National Diploma in Information Technology (HNDIT) program in SLIATE. This is conducted by the Department of Information Technology of the ATI annually. This is one of the best opportunities to improve software engineering knowledge of the students.

Category 02

Robotics

Technosoft 2015 is a software competition organized under the Higher National Diploma in Information Technology (HNDIT) program in SLIATE. This is conducted by the Department of Information Technology of the ATI annually. This is one of the best opportunities to improve software engineering knowledge of the students.

Category 03

Desktop Application

Technosoft 2015 is a software competition organized under the Higher National Diploma in Information Technology (HNDIT) program in SLIATE. This is conducted by the Department of Information Technology of the ATI annually. This is one of the best opportunities to improve software engineering knowledge of the students.

Index.html

```
<html>
</head>
<body>
<h1>Technosoft 2017</h1>
<h2>Advanced Technological Institute -Gampaha</h2>
<h3>Sri Lanka Institute of Advanced Technological Education</h3>
<hr>
<div class="cat1">
<h3> Category 01 </h3>
<h3> Web Application </h3>
<p>Technosoft 2015 is a software competition organized under the Higher
National Diploma in Information Technology (HNDIT) program in SLIATE. </p>
</div>
<div class="cat2">
<h3> Category 02 </h3>
<h3> Robotics </h3>
<p>Technosoft 2015 is a software competition organized under the Higher
National Diploma in Information Technology (HNDIT) program in SLIATE. </p>
</div>
<div class="cat3">
<h3> Category 03 </h3>
<h3> Desktop Application </h3>
<p>Technosoft 2015 is a software competition organized under the Higher
National Diploma in Information Technology (HNDIT) program in SLIATE.
```

```

</p>
</div>
</body>
</html>

```

Style.css

```

body{
    (1).....;           //set full width of the (any) display for webpage
    (2).....;           //set margin 0px
    (3).....; }         // set center alignment for body text
h1{    }
h2{
    (4).....;           // set font size to 30px
    }
h3{    }
hr{
    (5).....;           // set horizontal line height to 10
    }
div{
    (6).....;           //set bottom padding 30 px.
    (7).....;           //set width of div section to 30.5% from whole display
    float:left;
    position: relative;
    min-height:1px;
    (8).....; }         // set 5px margin in left side of div section
.cat1 {
    (9).....;           //set background color of div section (cat1) to #d9edf7
    (10).....; }        //border color of div section (cat1) to #bce8f1
.cat2 {    }
.cat3 {    }

```

3)

- i. Give (02) two examples for client side scripting language. [02 Marks]
- ii. Write (03) three usages of the client side scripting language. [03 Marks]
- iii. Write a JavaScript code segment to calculate and display the summation of 1 to 100. [05 Marks]

- iv. Considering the following HTML form, write one JavaScript function for following data validation.
- Full Name is not empty
 - Nine (09) digits in NIC number

[10 Marks]

Technosoft-2017

Application Form

Full Name Chanu Amodhani 1

NIC 818042385 2

Address Kurunegala 3

Gender Male ☐ Female ☒ 4

category Desktop Application Development 5

☒ I agree with term and conditions 6

No.	Element	Attribute values	
		Name	id
1	Text box	fullname	
2	Text Box	nic	
3	Text Area	address	
4	Radio Button	gender	
5	List box	category	
6	Check box	agree	
	form	frmtechno	

4)

- i. Define the server side scripting language. [02 Marks]
- ii. Briefly explain the difference of the outputs of the following two programs. [03 Marks]

a.

```
<?php
$x = 5;
while($x < 4) {
    echo "The number is: $x <br>";
    $x++;
}
?>
```

b.

```
<?php
$x = 5;
do {
    echo "The number is: $x <br>";
    $x++;
} while ($x < 4);
?>
```

- iii. Write the output of following PHP script. [05 Marks]

a.

```
<?php
$colors = array("red", "green", "blue");
foreach ($colors as $value) {
    echo strtoupper("$value")."<br>";
}
?>
```

- iv. Write a PHP script to calculate factorial value for a given number using while loop. (Hint. Factorial value of 5 = 5*4*3*2*1) [10 Marks]

5)

- i. Briefly explain the usage of cookies and sessions in a web page. [02 Marks]
- ii. Write (03) three differences between GET and POST methods. [03 Marks]
- iii. Write the output of the following PHP script. [05 Marks]

```
<?php
    class vehicle
    {
        var $brand;
        var $model;
        var $colour;

        function vehicle($b,$m,$c)
        {
            $this->brand = $b;
            $this->model = $m;
            $this->colour = $c;
        }

        function start(){
            echo $this->colour." Coloured ".$this->brand." ".$this->model." is
            started...";
        }
    }

    $carone = new vehicle("Nissan","Car","Brown");
    $carone->start();
?>
```

- iv. Write a PHP function to display the inserted data, by considering the following HTML form.

(Hint : Function name should be **funcDisplay()**)

[10 Marks]

Technosoft-2017

Application Form

Full Name Chanu Amodhani ← 1

NIC 818042385 ← 2

Address Kurunegala ← 3

Gender Male Female ☒ ← 4

category Desktop Application Development ← 5

☒ I agree with term and conditions ← 6

submit

No.	Element	Attribute values	
		Name	id
1	Text box	fullname	
2	Text Box	nic	
3	Text Area	address	
4	Radio Button	gender	
5	List box	category	
6	Check box	agree	
	Form	frmtechno	

- 6) This form is used to store the Technosoft application data in the MYSQL database server using PHP.

Technosoft-2017

Application Form

Full Name	
NIC	
Address	Type your text here...
Gender	Male Female
category	Web Development
<input type="checkbox"/> I agree with term and conditions	
<div>DisplayInsertEditDelete</div>	

Database Server = Localhost
Username = ATIGAMPAHA
Password = ATI@2017
Database name = TECHNOSOFT
Table Name = TECHNO

- Write the code segment to create the connection to MYSQL database. [02 Marks]
- Write the code segment to check the connection and display any MYSQL connection error. [03 Marks]
- Write the complete code segment to insert a record to the table. [05 Marks]
- Write the complete code segment to display the database record of applicant's NIC number 81804238 in the form. [10 Marks]