



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 – 2019
HNDIT2413-Web Application Development

Instructions for Candidates:

Answer five (5) questions only.

All questions carry equal marks

No. of questions : 06

No. of pages : 06

Time : Three (3) hours

01.

- i. What is web Application? [02 marks]
- ii. Explain the functions of the following terms.
 - a. DNS server
 - b. IP address
- iii. Write two advantages and disadvantages of client server architecture. [04 marks]

- iv. Write the output of the following HTML code. [04 marks]

```
<html>
<head><title>HND Courses</title></head>
<body>
<h1><U>Our Courses</U></h1>
<ol type="1">
<li>HNDA</li>
<ul type="square">
<li>Full Time Course</li>
<li>Part Time Course</li>
</ul>
<li>HNDIT</li>
<ul type="circle">
<li>Full Time Course</li>
<ol type="A">
<li>Admin Track</li>
<li>Developer Track</li>
</ol>
<li>Part Time Course</li>
</ul></ol> </body> </html>
```

- v. Write HTML codes to create the following table.

[06 marks]

HNDIT 1st year Semester I		
Module Code	Module Type	Credits
HNDIT 1201	Database Management Systems	02
HNDIT 1202	Computer Hardware	02
Total		04

[Total 20 marks]

- 02.
- What are the benefits of using CSS for a web site?
 - What is the difference between external and inline CSS?
 - What is the usage of selectors in CSS?
 - Explain the following selectors in CSS with an example.
 - CSS Universal Selector
 - CSS element Selector
 - CSS Grouping Selector

[02 marks]

[02 marks]

[02 marks]

[06 marks]

- v. Fill in the blanks of the following HTML page which is created by using the instructions given below.

Instruction for formatting

The background color of the page is blue.

There are two headings in maroon color and font size is 20.

Paragraph is left align from 15px.

Link is available on the page with following two properties.

- link color is green
- visited color is yellow

[08 marks]

```

<html>
<head>
    <style type=".....(1).....">
        Body{.....(2).....}
        h1,h2 {.....(3).....;
            .....(4).....;}
        p {font-size:11pt;.....(5).....;}
        a:link {.....(6).....;}
        a:.....(7)..... {.....(8).....;}
    </style>
  
```

```

<body>

<h1>SLIATE</h1>

</hr>

<h2>HND courses for Students</h2>

<p>New intake for 2020 will call soon</p>

<p>link for <a href="http://www.sliate.ac.lk/" target="_blank"> SLIATE Web
site</a></p>

</body>

```

[Total 20 marks]

03.

- i. What is the difference between client-side script and server-side script?
- ii. Write three uses of client-side scripting languages.
- iii. Write the outputs of the following java script codes.

[02 marks]

[03 marks]

a.

```

var linebreak = "<br />";
top:
  for(i = 0; i < 5; i++){
    for(j = 0; j < 5; j++){
      if (j==3) break top;
      document.write(j);
      document.write(linebreak);}
  }

```

[02 marks]

b.

```

var text=new String("JAVA SCRIPT")
document.write(text.length);
document.write("<br>");
document.write(text.toLowerCase());
document.write("<br>");
document.write(text+" Introduction");

```

[03 marks]

iv.

- a. Write an HTML code to create the following HTML form.

[04 marks]

The image shows a rectangular box representing an HTML form. Inside the box, the title 'Application Form' is at the top. Below it, there are two labels: 'Name:' and 'Age:'. Each label is followed by a text input field. At the bottom of the form, there are two buttons: 'Submit' and 'Reset'.

- b. write a Java script function for the following data validations When click the submit button.
- Name and age fields are not empty.
 - The age must be a number between 1 and 100

[06 marks]

[Total 20 marks]

04.

- i. Write three server-side scripting technology.
ii. Illustrate "how does PHP work?" with a diagram.
iii. Write the output of following PHP codes.

[03 marks]

[06 marks]

```
<?php
$a = 10;
echo ++$a;
echo $a++;
echo $a;
echo ++$a;
?>
```

[02 marks]

```
<?php
$first = array("A", "B", "C");
$second = array(1,2,3);
$third = array_merge( $first, $second );
foreach ( $third as $val )
{
    print "$val<BR>";
}
?>
```

[03 marks]

Exam Application Form

Name :

password :

Select Subject :
 Mathematics
 Statistics
 Biology

[Total 20 marks]

06.

Student Registration Form

Name :

Address :

NIC :

The above form is used to store data into the MYSQL database server using PHP.

Database server: localhost

Usr Name: root

Password: srs123

Database Name: student_Infor

Table Name: Student

- i. Write HTML code to create the above form. [06 marks]
 - ii. Write PHP code segment to do the following
 - a. Create the connection to the MYSQL database. [02 marks]
 - b. Check the connection and display any MYSQL connection error. [02 marks]
 - c. Select the database student_Infor and insert one record from the above form to the student table. [05 marks]
 - d. Display the database record of student whose Name is "Kamal". [05 marks]
- [Total 20 marks]

iv. Write PHP code segments to do the following tasks.

a. Hold five numeric values as single variable using this numbers- 5,6,15,36 and 10.

[02 marks]

b. Count the number of elements of the above.

[01 mark]

c. Find the minimum value of the above elements.

[01 mark]

d. Sort the values in ascending order of the above elements.

[02 marks]

[Total 20 marks]

05.

i. Define cookies and Session.

[04 marks]

ii. Write the output of following PHP code segment.

[04 marks]

```
<?php
class fruit{
    var $name, $color;
        function fruit($n,$c) {
            $this->name=$n;
            $this->color=$c;}
    function taste(){
        echo $this->name." fruit is taste...<br/>";}
    }
class Strawberry extends fruit{
    function message(){
        echo $this->name." is a berry ...";}
    }
    $strawberry = new strawberry("Strawberry", "red");
    $strawberry->message();
    $strawberry->taste();
?>
```

iii. What is the difference between \$_GET Function and \$_POST function in PHP?

[04 marks]

iv. Considering the following HTML form write PHP codes to do following tasks.

a. If name is "kamal" and password is "1234" display message as "welcome Kamal" if not, display the message as "Access denied"

[04 marks]

b. Once student selects the subjects, display the message as "Your Subject combination is (name of selected subjects)"

[04 marks]

