

## Jumail -0039

#### 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, First Semester Examination - 2022 **HNDIT3022-Web Programming**

Instructions for Candidates: Answer any five (5) Questions All questions carry equal marks. No. of questions: 06 No. of pages Time : 03 hours

Ouestion1

1. Describe WWW in brief.

[02 Marks]

2. Mention three (03) syntactic components used in WWW.

[03 Marks]

Illustrate the client-server architecture in the context of web application development.

[04 Marks]

4. State whether the following statements are true or false.

[05 Marks]

a. PHP stands for Personal Home Page.

b. define is a function used in PHP to create constants.

★ c. PHP arrays have fixed size once it defined.

d. PHP's == operator checks for both value and type equality.

e. PHP is support for both procedural and object-oriented programming paradigms.

5. Write down the output of the following code segments.

[06 Marks]

<?php Snum1=40; \$num2=20; \$answer= \$num1++-\$num2; echo \$answer;

20

b.

?>

<?php

\$color=array("red","yellow","white");

\$x=in\_array("black",\$color);

if(x==0)

echo "good bye";

if(\$x==1) echo "Hello";

?>

```
LITTP
```

#### [Total 20 Marks]

#### Question 2

- 1. What is a scripting language? [02 Marks]
  2. List down three server-side scripting languages. [03 Marks]
  3. Explain the Ternary Operator using an appropriate example. [04 Marks]
  4. Write down a PHP code to print the first 10 Fibonacci numbers. [05 Marks]
  [Hint: The Fibonacci sequence is a type series where each number is the sum of the
  - [Hint: The Fibonacci sequence is a type series where each number is the sum of the two that precede It. 0, 1, 1, 2, 3, 5, 8, 13, 21, and 34]
  - 5. Write down the output of the following code segments.

[06 Marks]

```
c.

for($i=0; $i<3; $i++){
    for($j=3; $j>0; $j--){
        echo $i;
    }
    echo "<br/>
    }
```

[Total 20 Marks]

?>

Question 3	
T. Briefly describe the term Array.	[02 Marks]
2. What is an Associative array in PHP?	[03 Marks]
3. Discuss the use of implode () function in terms of the array.	[04 Marks]
4. Write down PHP codes to perform the following tasks.	[05 Marks]
a. Create a numerically indexed array to store five numbers give and 6.	•
b. You are given another array with 3 numbers 4, 7, and 9. Creat merging the two arrays.	e a new array by
c. Display the array items in descending order.	
5. You are asked to store the details of two books. Each book consists of	f an ISBN, Title,
and published year. Write down a PHP code to create a multidimension above and display the book details given below.	
ISBN - 9780136083238  Title - Clean Code  Year - 2007  ISBN - 9332555400  Title - Design Patterns  Year - 2013	
	Total 20 Marks]
Question 4	
1. State two uses of cookies in WWW.	[02 Marks]
2. Write down a PHP code to set a cookie for the below-given details.  Cookie name -> userID  Cookie value -> Tom Tom	[03 Marks]
Expire date -> after 3 days of creation. (86400 -> 1 day)	
Explain the usage of S_GET and S_POST superglobals in PHP. Whe used?	n should each be [04 Marks]
4. You need to write down a PHP code segment to validate a Login form enters the correct username and password user will be navigated to the	
(dashboard.php). Otherwise, an error message should be given. Correct username=admin and password=123.	[05 Marks]
Login Form	
Username	

Password [

Login

5. Follow given a code segment for reading a text file using PHP. Describe the purpose of terms given in bold. [06 Marks]

```
<?php

$file=fopen("textfile.txt", "w");
    or die("Error in file");
    while(!feof($file)){
        $line=fgets($file);
        echo $line;
}

fclose($file);
?>
```

[Total 20 Marks]

### Question 5

The following details are given regarding the student management system in ATI.

1. You are asked to create a database connection for a MySQL database. Write down the PHP code segment to connect the database. [02 Marks]

Server name=localhost,

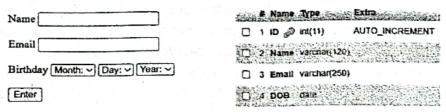
Port=80, username=root,

password=r123,

database=atiWeb

- 2. Add a suitable PHP code block to the above to check whether the connection is established or not. [03 Marks]
- Write down a suitable PHP code to collect the data from the form and insert it into the table named as student. The form and the table details are given below. [04 Marks]

#### **Register Here**



#### Registration Form

Student table

[Hint: - date type is stored in the format yyyy-mm-dd in the database]

4. Write down a PHP code segment to display all the records in student table.

[05 Marks]

5. Explain MVC architecture in the context of software development. Describe the responsibilities of each component (Model, View, and Controller). [06 Marks]

[Total 20 Marks]

# Question 6

Define the keyword extends in PHP.

, php.

[02 Marks]

State three access modifiers used in PHP.

[03 Marks] [04 Marks]

URL

client system

3. Differentiate Constructor and Destructor? 4. Create a class named Employee with the followings.

[11 Marks]

a. Add a field to store the basic salary of an employee, which can be accessed within the class and derived classes.

b. Add the constructor used to initialize the values in above mentioned field.

 Add a function named calNetSalary(). Which will take the OT hours and OT rate as parameters and return the Net salary.

[Hint:- Net Salary=basic salary+(OT hours\*OT rate)]

d. Add the destructor to display as "Calculation Completed".

e. Create an object of the Employee class named emp1. The basic salary of emp1

is 25000.

f. Invoke the calNetSalary() with given arguments. OT hours=12, OT rate=250

[Total 20 Marks]

constructor is a variable whose Value connot be changed at runtine

A constructor allow you to intialize an objection

function - confidence ()

A destructe is called when the objecti 15 dastucted or the storight is stoppe of ex.

function\_ obstructo. ()

1.