**Name: Mukarugwiza BETTY**

**REG NO: 21RP00088**

**Q1. Explain php programming beyond definition?**

PHP stands for **Hypertext Preprocessor**.

**PHP** is an open-source, interpreted and object-oriented scripting language that can be executed at the server-side. And in php there is no need for compilation and is faster than other scripting languages (ASP and JSP).

ASP stand for Active Server Page and JSP stand for Java Server Page

**PHP** is used to manage the dynamic content of the website and can be embedded into HTML.

**Q2. Why do we need to use php programming?**

* PHP can actually do anything related to server-side scripting or more popularly known as the backend of a website.
* There are also many hash functions available in PHP to encrypt user’s data that makes PHP secure and reliable to be used as a server-side scripting language.
* PHP can run on all major operating systems like Windows, Linux, Unix, Mac OS X etc.
* PHP allows using wide range of databases.
* It is free to use and download and anyone can download PHP from its official source.

**Q3. What is the latest php version we have today and list the updated features for the latest 3 release?**

* The latest php version is 8.2.0 and it is released on December 2,2022.
* The latest 3 php versions and their features are:
* PHP version 8.1 is released in 2021

And it brings these major new features such as Enums, Fibers, never return type, Intersection Types, read-only properties, while ironing out some of its undesired legacy features by deprecating them.

* PHP version 8.0 brings several important features such as Union Types, JIT, Constructor Property Promotion, Match Syntax, Named Parameters, and several more performance, syntax, and quality-of-life improvements.
* PHP version 7.4 brings typed properties, underscore numeric separator, and other minor improvements to PHP.

**Q4. What is different between new released vs stable release of software product? https://www.javatpoint.com/php-tutorial**

* **A stable release** is a version that has been tested as thoroughly as possible and is as reliable as we can make it.
* **A new release** is the distribution of the final version or the newest version of a software application and there is no need of being tested to be published.

**Q5. What are the main features of php programming?**

The features of php include:

\* Performance \* Error reporting

\* Open-source \* Web server support

\* Familiarity with syntax \* Security and control

\* Platform independent \* Embedded

\* Database support \* Loosely typed language

**Q6. With a help of examples explain why php is case sensitive?**

**<?php**

**$number =78; // this variable hold the different values**

**$Number=90; //90**

**Echo $number+$Number; // the output will be 168**

**?>**

**Q7. What and why do we use comments while writing php codes, example explain?**

PHP supports two types of comments:

**One-line comments:** The one-line comment is placed at the end of the line or at the current block and use // or # to comment

**Multi-line comments:** It start with /\* and end with \*/ and use the multi-line comment when you need to span comments multiple lines.

Example:

**<?php**

**$number =78; // this is a single line comment**

**$Number=90; //90**

**Echo $number+$Number; /\* this the**

**multiline comment\*/**

**?>**

**Q8. Differentiate with real example the following php by output functions:**

1. **Echo () vs print()**

**<?php**

**print "<h2>Did you know this!</h2>";**

**print "My birthday is loading!<br>";**

**print "I can ‘t wait to receive your gift!";**

**?>**

<?php

$num=50;

$num1=60;

echo $num."+".$num1."=";

echo $num + $num1."<br>";

?>

1. **Print() vs printf()**



**<?php**

**print "<h2>Did you know this!</h2>";**

**print "My birthday is loading!<br>";**

**print "I can ‘t wait to receive your gift!";**

**?>**

**<?php**

**$number = 123;**

**printf("%f",$number);**

**?>**

1. **printf() vs print\_r()**

**<?php**

**$number = 123;**

**printf("%f",$number);**

**?>**

**->**

**<?php**

**$arr = array( "John");**

**print\_r($arr);**

**?>**

1. **print\_r() vs var\_dump()**

**<?php**

**$arr = array( "John");**

**print\_r($arr);**

**?>**

**<?php**

**//dump strings**

**$nam1 = "Alex";**

**var\_dump ($nam1);**

**echo "</br>";**

**$nam2 = "Betty";**

**var\_dump ($num2);**

**?>**

**Q9. List and describe different datatype we have in php by categorizing them in scalar, compound and special datatypes?**

There are 4 scalar data types in PHP.

* Boolean is data type only has two values, it can be either true or false.
* Integer is data type used in php to return integer values
* Float is data type used for decimal number
* String is data type used for set of characters(string).

There are 2 compound data types in PHP.

* Array is data type used for holding more than one values at time (variable) with the same type.
* Object : is a compound data type (along with array) , is data type that hold data of difference data type.

There are 2 special data type in PHP:

* Resources : a special data type that refer to any external resource of data such as stream, file, database. When you want to include external resource in php script
* Null : is a special data type which can have only one value , there is no value assigned to it.

**Q10. What is php variable naming rules you have to obey while defining a variable in php?**

* Php variable is container for storing information.
* List the variable naming rules in php
* Variable star with the $ sign , followed by the name of the variable.
* Variable name must start with letter or the underscore character
* Variable name can not start with number.
* Variable name can only contain alphanumeric character and underscore.
* Variable names are case sensitive($age and $AGE).

**Q11. List and explain at least 10 super global variables?**

**$GLOBALS** is php super global variable which is used to access global variables from anywhere in php script also with in function or methods.

**$server :** php super global variable which hold information about headers, path and script locations.

**$\_Request**: is a php super global variable which is used to collect form data after submitting an HTML form.

**$\_post :** is php global variable which is used to collect form data after submitting an html form with method =”POST”.

**$\_get** : is php global variable which is used to collect form data after submitting an html form with method =”GET”.

**$\_FILES** : is an associative array containing items uploaded via HTTP POST method.

**$\_ENV** : is an associative array in php, it stores environment available to current script.

**$\_COOKIE**: it stores variables passed to current script along with HTTP request in the form of cookies.

**$\_SESSION**: is an associative array that contains all session variable.

References

<https://www.javatpoint.com/php-tutorial>.

<https://www.javatpoint.com/php-tutorial> and <https://www.geeksforgeeks.org/what-is-php-and-why-we-use-it/?ref=gcse>.

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