PHP FUNCTION AND ARRAY

CHOOSE THE CORRECT ANSWERS

1. Which one of the following is the right way of defining a function in PHP?
a) function { function body }
b) data type functionName(parameters) { function body }
c) functionName(parameters) { function body }
d) function functionName(parameters) { function body }

2. A function in PHP which starts with __ (double underscore) is known as_____
a) Magic Function b) Inbuilt Function
c) Default Function d) User Defined Function

3. PHP's numerically indexed array begin with position _____
a) 1 b) 2 **c) 0** d) -1

4. Which of the following are correct ways of creating an array?
i) state[0] = "Tamilnadu";
ii) $state[] = array("Tamilnadu");
iii) $state[0] = "Tamilnadu";
iv) $state = array("Tamilnadu");

a) iii) and iv) b) ii) and iii) c) Only i) **d) ii), iii) and iv)**

5. What will be the output of the following PHP code?
```php
<?php
$a=array("A","Cat","Dog","A","Dog");
$b=array("A","A","Cat","A","Tiger");
$c=array_combine($a,$b);
print_r(array_count_values($c));

?>
```

a) Array ([A] => 5 [Cat] => 2 [Dog] => 2 [Tiger] => 1)

b) Array ([A] => 2 [Cat] => 2 [Dog] => 1 [Tiger] => 1)
c) Array ([A] => 6 [Cat] => 1 [Dog] => 2 [Tiger] => 1)
d) Array ([A] => 2 [Cat] => 1 [Dog] => 4 [Tiger] => 1)
e) None of these

6. For finding nonempty elements in array we use
a) is_array ( ) function
b) sizeof ( ) function
c) array_count ( ) function
d) count ( ) function

7. Indices of arrays can be either strings or numbers and they are denoted as
a) $my_array {4}
b) $my_array [4]
c) $my_array| 4 |
d) None of them

8. PHP arrays are also called as

a) Vector arrays b) Perl arrays c) Hashes d) All of them

9. As compared to associative arrays vector arrays are much

a) Faster **b) Slower** c) Stable d) None of them

10. What functions count elements in an array?

a) count b) Sizeof c) Array_Count d) Count_array

SHORT ANSWERS

1. Define Function in PHP.

➢ A Function is a type of sub routine or procedure in a program.

➢ A Function will be executed by a call to the Function and the Function returns any data type values or NULL value to called Function in the part of respective program.

2. Define User define Function.

➢   User Defined Function (UDF) in PHP gives a privilege to user to write own specific operation inside of existing program module.
➢   A user-defined Function declaration begins with the keyword "function".

3. What is parameterized Function.

➢   PHP Parameterized functions are the functions with parameters or arguments.
➢   The arguments are mentioned after the function name and inside of the parenthesis.

4. List out System defined Functions.

➢   is_bool() function -By using this function, we can check whether the variable is boolean variable or not.
➢   is_int() function-By using this function, we can check the input variable is integer or not.
➢   is_float() function-By using this function, we can check the float variable is integer or not.
➢   is_null() function-By using the is_null function, we can check whether the variable is NULL or not.

5. Write Syntax of the Function in PHP.
SYNTAX:
Function functionName()

```
{
Custom Logic code to be executed;
}
```

6. Define Array in PHP.

Array is a data type which has multiple values in single variable. In other words, Array is a concept that stores more than one value   of same data type (homogeneous) in single array variable.

7. Usage of Array in PHP.

The array() function is used to create an array.

8. List out the types of array in PHP.

They are 3 types of array concepts in PHP.
➢   Indexed Arrays,
➢   Associative Array and
➢   Multi-Dimensional Array.

9. Define associative array.

Associative arrays are a key-value pair data structure. Instead of having storing data in al inear array, with associative arrays you can store your data in a collection and assign it a unique key which you may use for referencing your data.

10. Write array Syntax in PHP.
array(key=>value,key=>value,key=>value,etc.);

Where
         key = Specifies the key (numeric or string)
         value = Specifies the value

EXPLAIN IN BRIEF ANSWER

1. Write the features System define Functions.

➢   A function is a block of statements that can be used repeatedly in a program.
➢   A function will not execute immediately when a page loads.
➢   A function will be executed by a call to the function.

2. Write the purpose of parameterized Function.

Information can be passed to functions through arguments. An argument is just like a variable. Arguments are specified after the function name, inside the parentheses. We can add as many arguments as you want, just separate them with a comma.

3. Differentiate user define and system define Functions.

User defined Functions.	System define Functions
User Defined Functions are the functions which are created by user as per his own requirements.	System define Functions are Predefined functions.
In User Defined Functions, name of function can be changed any time	In System Defined Functions, Name of function can't be changed
In User Defined Functions, the name of function id decided by user	In System Defined Functions, it is given by developers.

4. Write Short notes on Array.

➢   Array is a concept that stores more than one value of same data type (homogeneous) in single array variable.

➢   They are 3 types of array concepts in PHP.

            Indexed Array

            Associative Array and

            Multi-Dimensional Array.

Syntax:

array(key=>value,key=>value,key=>value,etc.);

where

key = Specifies the key (numeric or string)

value = Specifies the value

5. Differentiate Associate array and Multidimensional array.

Associate array	Multidimensional array
Associative arrays are arrays that use named keys that you assign to them.	Array containing one or more arrays.
It storing data in a linear	Multidimensional arrays that are two, three, four, five, or more levels deep.
We can associate name with each array elements in PHP using => symbol.	It can be represented in the form of matrix which is represented by row * column.

EXPLAIN IN DETAIL

1. Explain Function concepts in PHP.

➢   A block of segment in a program that performs a specific operation tasksis also known as Function.

➢　　A Function is a type of sub routine or procedure in a program.

➢A Function will be executed by a call to the Function and the Function returns any data type values or NULL value to called Function in the part of respective program.

Types of functions

　　The Function can be divided in to three types as follows:

- User defined Function
- Pre-defined or System or built-in Function
- Parameterized Function.

User defined Function :

　　　　User to write own specific operation inside of existing program module.

Pre-defined or System or built-in Function:

　　　　A function is already created by system it is a reusable piece or block of code that performs a specific action.

Parameterized Function:

　　　　PHP Parameterized functions are the functions with parameters or arguments.

2. Discuss in detail about User defined Functions.

　　　　User Defined Function (UDF) in PHP gives a privilege to user to write own specific operation inside of existing program module.

Two important steps the Programmer has to +create for users define Functions are:

Function Declaration :

A user-defined Function declaration begins with the keyword "function".

User can write any custom logic inside the function block.

Syntax:
function functionName()
{
Custom Logic code to be executed;
}

Function Calling:

A function declaration part will be executed by a call to the function. Programmer has tocreate Function Calling part inside the respective program.

Syntax:
Function Name();

Example:

```
<?php
function insert Msg() {
echo "Student Details Inserted Successfully!";
}
insertMsg(); // call the function
?>
```

3. Explain the Multidimensional Array.

Multidimensional Array:

A multidimensional array is an array containing one or more arrays. PHP understands multidimensional arrays that are two, three, four, five, or more levels deep.
However, arrays more than three levels deep are hard to manage for most people.

Example:

```php
<?php
// A two-dimensional array
$student=array(array("Iniyan",100,96),ar-
ray("Kavin",60,59),array("Nilani",1313,139));
echo $$student[0][0].": Tamil Mark: ".$student [0][1].". English
mark: ".$student [0] [2]."<br>";
```
echo $$student[1][0].": Tamil Mark: ".$student [1][1].". English mark:
".$student [1] [2]."
";
echo $$student[2][0].": Tamil Mark: ".$student [2][1].". English mark:
".$student [2] [2]."
";
?>

4. Explain Array concepts and their types.

Array is a concept that stores more than one value of same data type
(homogeneous) in single array variable.

Types of array:

They are 3 types of array concepts in PHP.
   Indexed Array
   Associative Array and
   Multi-Dimensional Array.

Indexed Array:
Arrays with numeric index for the available values in array variable
which contains key value pair as user / developer can take the values
using keys.

Associative Arrays
Associative arrays are a key-value pair data structure. Instead of having
storing data in a linear array, with associative arrays you can store your
data in a collection and assign it a unique key which you may use for
referencing your data.

Multidimensional Arrays

A multidimensional array is an array containing one or more arrays. PHP understands multidimensional arrays that are two, three, four, five, or more levels deep.

However,arrays more than three levels deep are hard to manage for most people.

5. Explain Indexed array and Associate array in PHP.

Indexed Array:

Arrays with numeric index for the available values in array variable which contains key value pairas user / developer can take the values using keys.

Example:
```
<?php
$ teacher_name=array("Iniyan", "Kavin", "Nilani");
echo "The students name are " . $teacher_ name[0] . ", " .
$$teacher_name[1] . " and " . $ teacher_name[2] . ".";
?>
```

Associative Arrays

Associative arrays are a key-value pair data structure. Instead of having storing data in alinear array, with associative arrays you can store your data in a collection and assign it a unique key which you may use for referencing your data.

Example:
```
<?php
$Marks=array("Student1"=>"35","Stu-
dent2"=>"17","Student3"=>"43");
echo "Student1 mark is" . $Marks['Student1'] . " is eligible for
qualification";
```

```
echo "Student2 mark is" . $Marks['Student2'] . " is not eligible for
qualification";
?>
```

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