**MODULE – 3(Core PHP)**

**1. Write a PHP program to enter marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer, calculate percentage and grade by if else write a PHP program for find „Thursday‟ in week using switch Function.**

**<?php**

**$sub\_1 = 95;**

**$sub\_2 = 85;**

**$sub\_3 = 74;**

**$sub\_4 = 64;**

**$sub\_5 = 53;**

**$total = $sub\_1 + $sub\_2 + $sub\_3 + $sub\_4 + $sub\_5;**

**$average = $total / 5.0;**

**$percentage = ($total / 500.0) \* 100;**

**if ($average >= 90) {**

**$grade = "A";**

**} elseif ($average >= 80 && $average < 90) {**

**$grade = "B";**

**} elseif ($average >= 70 && $average < 80) {**

**$grade = "C";**

**} elseif ($average >= 60 && $average < 70) {**

**$grade = "D";**

**} else {**

**$grade = "E";**

**}**

**// Print the results**

**echo "Total marks: $total/500\n"."<br>";**

**echo "Average marks: $average\n"."<br>";**

**echo "Percentage: $percentage%\n"."<br>";**

**echo "Grade: '$grade'\n"."<br>";**

**?>**

**Output**

**Total marks: 371/500**

**Average marks: 74.2**

**Percentage: 74.2%**

**Grade: 'C'**

**2 Write a PHP program to check Leap years between 1901 to 2016 Using nested if.**

**<?php**

**$a = 2006;**

**if ($a % 4 == 0) {**

**echo $a . " is a leap year.";**

**} else {**

**echo $a . " is not a leap year.";**

**}**

**?>**

**Output:**

**2006 is not a leap year.**

**3• Write a PHP program to find the largest of three numbers using ternary Operator.**

**<?php**

**$num1 = 100;**

**$num2 = 20;**

**$num3 = 5;**

**//compare**

**$largest = ($num1 > $num2) ? ($num1 > $num3 ? $num1 : $num3) : ($num2 > $num3 ? $num2 : $num3);**

**echo "Largest Number: $largest";**

**?>**

**Output:**

**Largest Number: 100**

**4.Write a program in PHP to print Fibonacci series. 0, 1, 1, 2, 3, 5, 8, 13, 21, o 34**

**<?php**

**$first\_num = 0;**

**$second\_num = 1;**

**$n = 10; // Number of elements you want in the series**

**echo "Fibonacci Series: $first\_num, $second\_num";**

**for($i = 2; $i < $n; $i++) {**

**$next\_num = $first\_num + $second\_num;**

**echo ", $next\_num";**

**$first\_num = $second\_num;**

**$second\_num = $next\_num;**

**}**

**?>**

**Output:**

**Fibonacci Series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34**

**5.Write a program to find whether a number is Armstrong or not Write a program to print the below format :**

**5 9**

**2 6 1 0**

**3 7 1 1**

**4 8 1 2**

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

**<title>Document</title>**

**</head>**

**<body>**

**<?php**

**function armstrongCheck($number){**

**$sum = 0;**

**$x = $number;**

**while($x != 0)**

**{**

**$rem = $x % 10;**

**$sum = $sum + $rem\*$rem\*$rem;**

**$x = $x / 10;**

**}**

**// if true armstrong number**

**if ($number == $sum)**

**return 1;**

**// no armstrong number**

**return 0;**

**}**

**$number = 59;**

**$check = armstrongCheck($number);**

**if ($check == 1)**

**echo $number.**

**" Yes it is armstrong number";**

**else**

**echo $number." No it is not armstrong number" ;**

**?>**

**</body>**

**</html>**

**Output**

**59 No it is not armstrong number**

**2610 No it is not armstrong number**

**3711 No it is not armstrong number**

**4812 No it is not armstrong number**

**6.Write a program for this Pattern:**

**\*\*\*\*\***

**\***

**\***

**\***

**\*\*\*\*\***

**<?php**

**for($i=0; $i<1; $i++)**

**{**

**for($j=0; $j<5; $j++)**

**{**

**echo '\*';**

**}**

**echo '<br>';**

**}**

**for($i=0; $i<3; $i++)**

**{**

**for($j=0; $j<1; $j++)**

**{**

**echo'\*';**

**}**

**echo '<br>';**

**}**

**for($i=0; $i<1; $i++)**

**{**

**for($j=0; $j<5; $j++)**

**{**

**echo '\*';**

**}**

**echo '<br>';**

**}**

**?>**

**7.What will be the values of $a and $b after the code below is executed? Explain your answer.**

**$a = '1';**

**$b = &$a;**

**$b = "2$b";**

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**<title>Document</title>**

**</head>**

**<body>**

**<?php**

**$a = '1';**

**$b = &$a;**

**$b = "2$b";**

**echo "Value of \$a: $a";**

**echo "Value of \$b: $b";**

**?>**

**</body>**

**</html>**

**Output:**

**Value of $a: 21 Value of $b: 21**

**8.How can you tell if a number is even or odd without using any Condition or loop?**

**<?php**

**$number = 5;**

**$evenodd = $number % 2 == 0;**

**if ($evenodd) {**

**echo "The number $number is even.";**

**} else {**

**echo "The number $number is odd.";**

**}**

**?>**

**Output**

**The number 5 is odd.**

**9.How can you declare the array (all type) in PHP? Explain with example Covert a JSON string to array.**

**<!DOCTYPE html>**

**<html>**

**<body>**

**<?php**

**// function example:**

**function myFunction() {**

**echo "This text comes from a function";**

**}**

**// create array:**

**$myArr = array("Volvo", 15, ["apples", "bananas"], myFunction);**

**// calling the function from the array item:**

**$myArr[3]();**

**?>**

**</body>**

**</html>**

**Json string convert**

**<?php**

**// api work**

**header("Access-Control-Allow-Origin: \*");**

**header("Access-Control-Allow-Headers: \*");**

**header("Access-Control-Allow-Methods: \*");**

**$json=file\_get\_contents('https://jsonplaceholder.typicode.com/posts');**

**$phparr=json\_decode($json); // json econvert to arr**

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

**?>**

**10.Write program to remove duplicate values from array**

**<?php**

**$numbers = array(1, 2, 2, 3, 4, 4, 5);**

**$unique\_numbers = array\_unique($numbers);**

**print\_r($unique\_numbers);**

**?>**

**out put:**

**Array ( [0] => 1 [1] => 2 [3] => 3 [4] => 4 [6] => 5 )**

**11.Get random values from array**

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**<title>Document</title>**

**</head>**

**<body>**

**<?php**

**$fruits = ["apple", "banana", "orange", "mango"];**

**$randomarry= array\_rand($fruits);**

**$randomFruit = $fruits[$randomarry];**

**echo "Random fruit: $randomFruit\n";**

**?>**

**</body>**

**</html>**

**Output:**

**Random fruit: banana**

**12.Write a PHP script which decodes the following JSON string.**

**<?php**

**// api work**

**header("Access-Control-Allow-Origin: \*");**

**header("Access-Control-Allow-Headers: \*");**

**header("Access-Control-Allow-Methods: \*");**

**$json=file\_get\_contents('https://jsonplaceholder.typicode.com/posts');**

**$phparr=json\_decode($json); // json econvert to arr**

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

**?>**

**13. Use a for loop to total the contents of an integer array called numbers which has five elements. Store the result in an integer called total.**

**<?php**

**$numbers = [144, 256, 65, 98, 23];**

**$total = 0;**

**for ($i = 0; $i < count($numbers); $i++)**

**{**

**$total += $numbers[$i];**

**}**

**echo "Sum of the elements: " . $total;**

**?>**

**Output:**

**Sum of the elements: 586**

**14.Declare a Multi Dimensioned array of floats called balances having Three rows and five columns**

**<!DOCTYPE html>**

**<html>**

**<body>**

**<?php**

**$balances = array(**

**array(4.2, 6.4, 1.6, 6.8, 1.0),**

**array(0.5, 2.3, 4.1, 6.7, 8.9),**

**array(2.4, 4.5, 6.7, 8.1, 9.2)**

**);**

**echo "Element at row 0, column 2 is: " . $balances[0][2] ."<br>";**

**echo "Element at row 1, column 4 is: " . $balances[1][4]."<br>";**

**echo "Element at row 2, column 2 is: " . $balances[2][2]."<br>";**

**?>**

**</body>**

**</html>**

**Output:**

**Element at row 0, column 2 is: 1.6**

**Element at row 1, column 4 is: 8.9**

**Element at row 2, column 2 is: 6.7**