**CIT-223-044/2022**

**CONWAY RONO**

**COMPUTER SCIENCE**

CHAPTER 1 ASSIGNMENT

**Practical Questions**

1. **Write steps of xampp installation or setup process.**

i)Download the XAMPP package from the official website.

(ii)Run the installer and select the components you wish to install (e.g., Apache, MySQL, PHP, etc.).

(iii)Choose the installation directory (e.g., C:\xampp).

(iv)Click 'Next' and wait for the installation to complete.

(v)Launch the XAMPP Control Panel and start the Apache and MySQL services.

(vi)Open a browser and type localhost or 127.0.0.1 to check if the installation is successful.

1. **Write PHP code to display your Roll Number, Course Name and Technology Name on the browser.**

<?php

$rollNumber = "CIT-223-044/2022";

$courseName = "Bachelor of Science in Computer Science";

$technologyName = "Web Programming 2 using PHP";

echo "<p>Roll Number: $rollNumber</p>";

echo "< p>Course Name: $courseName</ p>";

echo "<h2>Technology Name: $technologyName</ p>";

?>

CHAPTER 2 ASSIGNMENT

**1. Write a simple PHP program to print your BIODATA on the browser screen.**

<?php

$name = "Conway Rono";

$age = 21;

$height = "175 cm";

$gender = "Male";

$university = "MMU";

$course = "Bachelor of Computer Science";

$dob = "Apr 1, 2003";

$nationality = "Kenyan";

echo "<h1>BIODATA</h1>";

echo "<br/><b>Name:</b>" .$name;

echo "<br/><b>Age:</b>" .$age;

echo "<br/><b>Height:</b>" .$height;

echo "<br/><b>Gender:</b>" .$gender;

echo "<br/><b>Nationality:</b>" .$nationality;

echo "<br/><b>University:</b>" .$university;

echo "<br/><b>Course:</b>" .$course,"</b>";

echo "<br/><b>Date of birth: </b>".$dob;

?>

**2. Elaborate the Error(s) in the code below (if any).**

**<?php**

**/ This is a comment for PHPprogram**

**echo "Display first line </br>";**

**echo "Display second line </br> "**

**Print "Display third line with print statement ";**

**?>**

Errors:

* Comment Syntax Error: PHP comments start with // for single-line comments.
* Missing Semicolon: After the second echo statement.
* Use of print instead of echo in the fifth line

**3. Write down the correct code of above program.**

<?php

// This is a comment for PHP program

echo "Display first line </br>";

echo "Display second line </br>";

print "Display third line with print statement";

?>

**4. Mention the output of the above code.**

Display first line

Display second line

Display third line with print statement

**5. Write PHP code to display any text on the browser uses HTML formatting tags within the**

**echo statements.**

<?php

echo "<h1>Welcome to My Webpage</h1>";

echo "<del>This sentence is struck through</del>

echo "<p><b>This is a bold statement.</b></p>";

echo "<p><i>This text is italicized.</i></p>";

?>

CHAPTER 3 ASSIGNMENT

**1. Write a simple program of the following output using Constants.**

**Employee code is 001**

**Employee Name is ABC**

**Employee Salary is 25000**

**Working Hours are 7.5**

<?php

define("EMPLOYEE\_CODE", "001");

define("EMPLOYEE\_NAME", "ABC");

define("EMPLOYEE\_SALARY", 25000);

define("WORKING\_HOURS", 7.5);

echo "Employee code is " . EMPLOYEE\_CODE . "<br>";

echo "Employee Name is " . EMPLOYEE\_NAME . "<br>";

echo "Employee Salary is " . EMPLOYEE\_SALARY . "<br>";

echo "Working Hours are " . WORKING\_HOURS . "<br>";

?>

**2. Repeat the above program using Variables. Hint: Save the given data at 4 memory locations respectively and print on the screen.**

<?php

$employee\_code = "001";

$employee\_name = "ABC";

$employee\_salary = 25000;

$working\_hours = 7.5;

echo "Employee code is " . $employee\_code . "<br>";

echo "Employee Name is " . $employee\_name . "<br>";

echo "Employee Salary is " . $employee\_salary . "<br>";

echo "Working Hours are " . $working\_hours . "<br>";

?>

**3. How do you make a constant name case insensitive?**

By setting a third parameter to the define() function as true. e.g define("EMPLOYEE\_NAME", "ABC", true);

**4. How do you declare a constant in PHP with example?**

using the define() function.

e.g: define("COMPANY\_NAME", "Rono Tech");

**5. Write make a simple program to set your G.R No. and Name in the variables and display G.R**

**No. and name by echo and print functions.**

<?php

$gr\_no = "GR12345";

$name = "Conway Rono";

echo "G.R No: " . $gr\_no . "<br>";

echo "Name: " . $name . "<br>";

print "G.R No: " . $gr\_no . "<br>";

print "Name: " . $name . "<br>";

?>

CHAPTER 4 ASSIGNMENT

**1. Write a simple program of following using post method:**

**Enter Student Name:**

**Enter Student G.R #:**

**Enter Class:**

**Enter Section:**

**// Output should be display on new tab of browser. \*\***

<html>

<head>

<title>Student Information Form</title>

</head>

<body>

<form action="student.php" method="post" target="\_blank">

<label for="name">Enter Student Name:</label>

<input type="text" id="name" name="name" ><br><br>

<label for="gr">Enter Student G.R #:</label>

<input type="text" id="gr" name="gr" ><br><br>

<label for="class">Enter Class:</label>

<input type="text" id="class" name="class"><br><br>

<label for="section">Enter Section:</label>

<input type="text" id="section" name="section"><br><br>

<input type="submit" value="Submit">

</form>

</body>

</html>

<?php

if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

$name = $\_POST["name"];

$gr = $\_POST["gr"];

$class = $\_POST["class"];

$section = $\_POST["section"];

echo "<h2>Student Information:</h2>";

echo "Name: $name<br>";

echo "G.R #: $gr<br>";

echo "Class: $class<br>";

echo "Section: $section<br>";

}

?>

**5. Write syntax of the action and method attributes in the opening <form> tag.**

<form action="student.php" method="post"></form>

CHAPTER 5 ASSIGNMENT

**1. Write a simple program to calculate total numbers of days you lived up to until now**

<?php

$age\_in\_years = 25;

$number\_of\_days = $age\_in\_years \* 365;

echo "You have lived approximately ”.$number\_of\_days.” days";

?>

**2. Write a code to calculate and print percentage of a student where,**

**Total\_Marks=400, Obtained\_Marks=Sum of obtained marks of all 4 subjects**

**Percentage= (Obtained\_Marks\*100)/Total\_Marks.**

<?php

$total\_marks = 400;

$subject1 =55;

$subject2 =66;

$subject3 =78;

$subject4 =45;

$obtained\_marks =$subject1 + $subject2 + $subject3 + $subject4;

echo "percentage= ".$obtained\_marks \* 100 /$total\_marks, "%";

?>

**3. Write a code to input Temperature in Centigrade and convert to Fahrenheit.**

<?php

$centigrade = 34;

$far = ($centigrade \* 1.8)+32;

echo $centigrade."C = ".$far."F";

?>

**4. If $A= 34 and $B=55 then solve the following Exercise; Also Justify your answer**

* $A= = 34 && $B = = 55

**True:** both are true

* $A>=30 || $B<=50

**True:** one has to be true; the first is true

* $B= = 55 || $A= =35

**True:** the first is true

* $A!=34

**False:** condition is false

* $A>=30 && $A<35

**True:** both are true

* $B>50 || $B<56

**True**: both are true

**5. Mention the output of the following code at each step**

**<?php Output**

**$a = 33;**

**$b = 55;**

**$a += $b;** $a = 33 + 55 = 88

**$c = $a;** $c = 88

**$c -= $b;** $c = 88 - 55 = 33

**$c \*= $a;** $c = 33 \* 88 = 2904

**$a++;** $a = 88 + 1 = 89

**echo "a=$a ,b=$b , c=$c";** $a=89 ,$b=55, $c=2904

**6. What is the result after the execution of the following program segment?**

**<?php**

**$a = 8;**

**$b = ++$a + 5;**

**$c = $b-- + 10;**

**echo "a= $a , b= $b , c = $c ";**

**?>**

answer: $a= 9 , $b= 13 , $c = 24

**7. Write down the output of following code and also justify your answer**

**a) echo 4 + 2 - 12 \* 3; //what will be output**

-30.

According to the order of operations (PEMDAS), multiplication is done before addition and subtraction.

· First, calculate 12\*3: 12∗3=3612 \* 3 = 3612∗3=36

· Now substitute that back into the expression:

4+2−364 + 2 - 364+2−36

· Calculate from left to right:

4+2=64 + 2 = 64+2=6

6−36=−306 - 36 = -306−36= −30

**b) echo 4 + (2 – 12) \* 3; //what will be output**

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* The expression inside the parentheses is calculated first.
* Calculate 2-12: 2−12=−102 - 12 = -102−12=−10
* Substitute that back into the expression: 4+(−10)∗34 + (-10) \* 34+(−10)∗3
* Now perform the multiplication:−10∗3=−30-10 \* 3 = -30−10∗3=−30
* Finally, calculate: 4−30 = −264 - 30 = -264−30= −26

**c) echo ( (4 + 2) - 12 ) \* 3 //what will be output**

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* Start with the operation inside the innermost parentheses:
* Calculate 4+2: 4+2=64 + 2 = 64+2=6
* Substitute that back into the expression: (6−12)∗3(6 - 12) \* 3(6−12)∗3
* Now calculate the expression in the parentheses:6−12=−66 - 12 = -66−12=−6
* Finally, multiply by 3: −6∗3= − 18-6 \* 3 = -18−6∗3= −18

**8. What value is assigned to $ReturnValue for each of the following expression.**

**a) $ReturnValue = 2 == 3;** bool(false)

**b) $returnValue = "2" + "3";** int(5)

**c ) $ReturnValue = 2 > 3**; bool(false)

**d) $ReturnValue = 2 < 3;** bool(true)

**e ) $ReturnValue = (2 > 3 ) && ( 2 < 3):**  bool(false)

**f) $ReturnValue = (2 > 3 ) || (2 < 3** ) bool(true)

CHAPTER 6 ASSIGNMENT

1. **Write a simple program to construct a Calculator that can perform Basic operation Mathematical operation as well.**

<?php

$num1 = 10;

$num2 = 20;

$operation = '+';

switch ($operation) {

case '+':

$result = $num1 + $num2;

break;

case '-':

$result = $num1 - $num2;

break;

case '\*':

$result = $num1 \* $num2;

break;

case '/':

$result = ($num2 != 0) ? $num1 / $num2 : "Division by zero error!";

break;

default:

$result = "Invalid operation!";

}

echo "Result: " . $result;

?>

1. **Write a simple program to check an alphabet entered by user is a Vowel or not using if statement, if else if else statement and switch case statements. If Statement If else if Statement Switch Case**

Using if statement:

<?php

$char = 'a';

if ($char == 'a' || $char == 'e' || $char == 'i' || $char == 'o' || $char == 'u') {

echo "$char is a vowel";

} else {

echo "$char is not a vowel";

}

?>

Using if-else if-else statement**:**

<?php

$char = 'a';

if ($char == 'a'){

echo "$char is a vowel";

} elseif ($char == 'e') {

echo "$char is a vowel";

} elseif ($char == 'i') {

echo "$char is a vowel";

} elseif ($char == 'o') {

echo "$char is a vowel";

} elseif ($char == 'u') {

echo "$char is a vowel";

} else {

echo "$char is not a vowel";

}

?>

Using switch statement:

<?php

$char = 'a';

switch ($char) {

case 'a':

case 'e':

case 'i':

case 'o':

case 'u':

echo "$char is a vowel";

break;

default:

echo "$char is not a vowel";

break;

}

?>

1. **Write a code to check an integer number entered by user is Even or Odd using Conditional operator statement.**

<?php

$num = 4;

echo ($num % 2 == 0) ? "$num is Even" : "$num is Odd";

?>

1. **Write a program to input subject marks Math, English and Physics then to prepare marks sheet of a student that will show the Obtain marks, percentage and grade.**

<?php

$math = 85;

$english = 90;

$physics = 80;

$total\_marks = 300; // Assuming each subject has max 100 marks

$obtained\_marks = $math + $english + $physics;

$percentage = ($obtained\_marks / $total\_marks) \* 100;

echo "Obtained Marks: $obtained\_marks\n";

echo "Percentage: $percentage%\n";

if ($percentage >= 80) {

echo "Grade: A";

} elseif ($percentage >= 60) {

echo "Grade: B";

} elseif ($percentage >= 40) {

echo "Grade: C";

} else {

echo "Grade: Fail";

}

?>

1. **Write a program that input a number, then report whether the number is in the range from 1 to 100. Otherwise the number above to 100.**

<?php

$num = 50;

if ($num >= 1 && $num <= 100) {

echo "$num is in the range 1 to 100";

} else {

echo "$num is above 100";

}

?>

**6. The following is supposed to cause an action or print message, whenever x is 5 and y is 9.**

**<?php**

**If ( $x >= $y )**

**echo “x is greater than y”**

**else**

**echo “y is greater than x “;**

1. **Write a switch statement that output messages indicating what day has been numerically input (for example 1-> Monday, 2-> Tuesday, 3-> Wednesday,...)**

<html>

<head>

<title>Day of the Week</title>

</head>

<body>

<form method="post" action="">

<label for="number">Number:</label>

<input type="text" name="number" id="number">

<button type="submit">Submit</button>

</form>

<?php

if (isset($\_POST['number'])) {

$dayNumber = intval($\_POST['number']);

switch ($dayNumber) {

case 1:

echo "Monday";

break;

case 2:

echo "Tuesday";

break;

case 3:

echo "Wednesday";

break;

case 4:

echo "Thursday";

break;

case 5:

echo "Friday";

break;

case 6:

echo "Saturday";

break;

case 7:

echo "Sunday";

break;

default:

echo "Invalid day number";

break;

}

}

?>

</body>

</html>