1. **Write a PHP program using expressions and operator (ternary operator, arithmetic operatorsand comparison operators)**

**Ans:**

<?php

$num1 = 10;

$num2 = 5;

$num3 = $num1 > $num2 ? "$num1 is greater"."<br>" : "$num2 is smaller"."<br>";

$num4 = $num1 + $num2;

$num5 = $num1 - $num2;

$num6 = $num1 / $num2;

$num7 = $num1 \* $num2;

$num8 = $num1 % $num2;

$num9 = $num1 \*\* $num2;

$num10 = ($num1==$num2) ? "True" : "false";

$num11 = ($num1===$num2 ) ? "True" : "false";

$num12 = ($num1!=$num2) ? "True" : "false";

$num13 = ($num1!==$num2) ? "True" : "false";

$num14 = ($num1<$num2) ? "True" : "false";

$num15 = ($num1>$num2) ? "True" : "false";

$num16 = ($num1<=$num2) ? "True" : "false";

$num17 = ($num1>=$num2) ? "True" : "false";

$vars=array("$num3","$num4","$num5","$num6","$num7","$num8","$num9","$num10","$num11","$num12","$ num13","$num14","$num15","$num16","$num17",);

foreach($vars as $arr){ echo $arr."<br>";

}

?>

OR

<?php

$a = 10;

$b = 5;

$max = ($a > $b) ? $a : $b;

echo "The maximum of $a and $b is $max\n";

$x = 7;

$y = 3;

$sum = $x + $y;

$difference = $x - $y;

$product = $x \* $y;

$quotient = $x / $y;

$remainder = $x % $y;

echo "The sum of $x and $y is $sum\n";

echo "The difference between $x and $y is $difference\n";

echo "The product of $x and $y is $product\n";

echo "The quotient of $x and $y is $quotient\n";

echo "The remainder when $x is divided by $y is $remainder\n";

$p = 5;

$q = 7;

$is\_greater = ($p > $q);

$is\_equal = ($p == $q);

$is\_not\_equal = ($p != $q);

echo "Is $p greater than $q? " . ($is\_greater ? "Yes" : "No") . "\n";

echo "Is $p equal to $q? " . ($is\_equal ? "Yes" : "No") . "\n";

echo "Is $p not equal to $q? " . ($is\_not\_equal ? "Yes" : "No") . "\n";

?>

1. **Write a PHP program to the use of decision making and control structures using if statement, ifelse statement and switch case statement.**

**Ans:**

<?php

$number = 2;

if ($number % 2 == 0) {

echo "The number is even.";

}

if ($number >= 1 && $number <= 10) { echo "The number is between 1 and 10.";

} else {

echo "The number is not between 1 and 10.";

}

switch ($number) { case 1:

echo "You entered 1."; break;

case 2:

echo "You entered 2.";

break; case 3:

echo "You entered 3."; break;

default:

echo "You did not enter a valid number."; break;

}

?>

1. **Write a PHP program to the use of looping structure using while statement, do while statement.**

**Ans:**

<?php

$counter = 1;

while ($counter <= 10) { echo $counter . " ";

$counter++;

}

echo "\n";

$counter = 1; do {

echo $counter . " ";

$counter++;

} while ($counter <= 10); echo "\n";

?>

1. **Write a PHP program to the use of looping structure using for statement, for each statement.**

**Ans:**

<?php

for ($i = 1; $i <= 10; $i++) { echo $i . " ";

}

echo "\n";

$array = ["A","B","C","D","E","F","G","H"];

foreach ($array as $alpha) { echo $alpha . " ";

}

echo "\n";

?>

1. **Write a PHP program for creating and manipulating indexed array, associative array and multi-dimensional array**

**Ans:**

<?php

$array = [1, 2, 3, 4, 5];

$associative\_array = ['name' => 'John Doe', 'age' => 25];

$multidimensional\_array = [[1, 2, 3], [4, 5, 6]];

echo 'Indexed array'.'<br>'; foreach ($array as $number) { echo $number . ' ';

}

echo '<br>';

echo 'Associative array'.'<br>';

foreach ($associative\_array as $key => $value) { echo $key . ': ' . $value . '<br>';

}

echo 'Multidimensional array'.'<br>';

foreach ($multidimensional\_array as $row) { foreach ($row as $number) {

echo $number . ' ';

}

echo '<br>';

}

?>

1. **Write a PHP program to calculate length of string , to count the no of words in string and tocompare two string using string function.**

**Ans:**

<?php

$string = "Hello world!";

echo "The length of the string is ".strlen($string);

$string = "This is a sentence with three words.";

echo " The number of words in the string is ".str\_word\_count($string);

$string1 = "Hello";

$string2 = "World";

$result = strcmp($string1, $string2); if ($result == 0) {

echo "The strings are equal.";

} else if ($result < 0) {

echo " The first string is less than the second string.";

} else {

echo " The first string is greater than the second string.";

}

?>

1. **Write a PHP program using following string function: strrev(),strpos(),strrpos(),str\_replace(),ucwords(),strtoupper(),strtolower()**

**Ans:**

<?php

$string = "Hello world!";

echo "The reversed string is ".strrev($string)."<br>";

$string = "Hello world!";

$substring = "o";

echo "The position of the first occurrence of the substring 'o' is ".strpos($string,

$substring)."<br>";

$string = "Hello world!";

$substring = "o";

echo "The position of the last occurrence of the substring 'o' is ".strrpos($string,

$substring)."<br>";

$string = "Hello world!";

$substring = "Hello";

$replacement = "hi";

$new\_string = str\_replace($substring, $replacement, $string);

echo "The new string is ".str\_replace($substring, $replacement, $string)."<br>";

$string = "hello world!";

echo "The new string is ".ucwords($string)."<br>";

$string = "hello world!";

echo "The new string is ".strtoupper($string)."<br>";

$string = "HELLO WORLD!";

echo "The new string is ".strtolower($string);

?>

1. **Write a PHP program to use user define function, variable function and anonymous function.**

**Ans:**

<?php

function multiply($x, $y) {

return $x \* $y;

}

$operation = 'multiply';

$result = $operation(4, 5); // Equivalent to calling multiply(4, 5)

echo "Result of variable function: $result\n";

$sum = function($x, $y) {

return $x + $y;

};

$result = $sum(2, 3);

echo "Result of anonymous function: $result\n";

?>

1. **Write a PHP program to create PDF document by using graphics concept.**

**Ans:**

<?php

require\_once('fpdf.php');

$pdf = new FPDF();

$pdf->AddPage();

$pdf->SetFont('Arial', 'B', 12);

$pdf->Cell(80,10,'Prof.Sonal Naik');

$pdf->Output('my\_first\_pdf.pdf', 'I');

?>

1. **Write a PHP program a) to inherit member of superclass in subclass b)create constructor toinitialize object of class by using object oriented concept**

**Ans:**

<?php

class Animal {

public $name;

public $age;

public function \_\_construct($name, $age) {

$this->name = $name;

$this->age = $age;

}

public function speak() {

echo "I am an animal.";

}

}

class Dog extends Animal {

public $color;

public function \_\_construct($name, $age, $color) {

$this->color = $color;

echo "Dog Name: $name and age $age and color is $color"."<br>";

}

public function bark() {

echo "Woof!";

}

}

$dog = new Dog('Fido', 5, 'White');

$dog->speak();

$dog->bark();

?>

1. **Write a PHP program on introspection and serialization**

**Ans:**

<?php

class Person { public $name; public $age;

public function construct($name, $age) {

$this->name = $name;

$this->age = $age;

}

}

$person = new Person('John Doe', 25);

if (class\_exists('Person')) {

echo "The Person class exists.<br>";

} else {

echo "The Person class does not exist.<br>";

}

$class\_name = get\_class($person);

echo "The class name of the object is $class\_name.<br>";

$parent\_class = get\_parent\_class($person);

echo "The parent class of the object is $parent\_class.<br>";

if (is\_subclass\_of($person, 'Person')) {

echo "The object is a subclass of the Person class.<br>";

} else {

echo "The object is not a subclass of the Person class.<br>";

}

$array=array("Red","green","blue");

$serialized\_array = serialize($array); echo $serialized\_array."<br>";

$unserialized\_array = unserialize($serialized\_array); print\_r($unserialized\_array);

?>

1. **Design a web page using following form controls: a)textbox b)radio button c)check box d)button**

**Ans:**

<html>

<head>

<title>Form Controls</title>

</head>

<body>

<form action="<?php $\_PHP\_SELF?>" method="post">

<input type="text" name="textbox" placeholder="Enter your name">

<input type="radio" name="gender" value="male"> Male

<input type="radio" name="gender" value="female"> Female

<input type="checkbox" name="fruits[]" value="apple"> Apple

<input type="checkbox" name="fruits[]" value="banana"> Banana

<input type="checkbox" name="fruits[]" value="orange"> Orange

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

</form>

</body>

</html>

<?php

$name = $\_POST['textbox'];

$gender = $\_POST['gender'];

$fruits = $\_POST['fruits'];

echo "Your name is $name.\n";

echo "Your gender is $gender.\n";

echo "Your favorite fruit is: "; foreach ($fruits as $fruit) {

echo "$fruit ";

}

?>

1. **Design a web page using following form controls: a)List box b)hidden field box**

**Ans:**

<!DOCTYPE html>

<html>

<head>

<title>Simple Form</title>

</head>

<body>

<form action="<?php $\_PHP\_SELF?>" method="post">

<select name="listbox">

<option value="1">Option 1</option>

<option value="2">Option 2</option>

<option value="3">Option 3</option>

</select>

<input type="hidden" name="hidden\_field" value="This is a hidden field">

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

</form>

</body>

</html>

<?php

$listbox\_value = $\_POST['listbox'];

$hidden\_field\_value = $\_POST['hidden\_field'];

echo "The selected option in the list box is $listbox\_value.\n";

echo "The value of the hidden field is $hidden\_field\_value.\n";

?>

1. **Develop a web page with data validation.**

**Ans:**

<!DOCTYPE html>

<body>

<?php

$nerror = $merror = $perror ="";

$name = $email = $phone= "";

$pattern = "^[\_a-z0-9-]+(\.[\_a-z0-9-]+)\* @[a-z0-9-]+(\.[a-z0-9-]+)\*(\.[a-z]{2,3})$^"; if($\_SERVER["REQUEST\_METHOD"]=="POST") {

if(empty($\_POST["name"])) {

$nerror = "Name cannot be empty!";

}

else {

$name = test\_input($\_POST["name"]); if(!preg\_match("/^[a-zA-Z-']\*$/",$name))

{

$nerror = "Only characters and white spaces allowed";

}

}

if(empty($\_POST["email"])) {

$merror = "Email cannot be empty!";

}

else

{

$email = test\_input($\_POST["email"]); if(!preg\_match($pattern, $email)) {

$merror = "Email is not valid";

}

}

if(empty($\_POST["phone"])) {

$perror = "Phone no cannot be empty!";

}

else {

$phone = test\_input($\_POST["phone"]);

if (!preg\_match ('/^[0-9]{10}$/', $phone)) {

$perror = "Phone no is not valid";

}

}}

function test\_input($data)

{

$data = trim($data);

$data = stripslashes($data);

$data = htmlspecialchars($data); return $data;

}

?>

<p><span class="error">\* required field </span></p>

<form method="post" action="<?php echo htmlspecialchars($\_SERVER["PHP\_SELF"]);?>"> Name: <input type="text" name="name">

<span class="error">\* <?php echo $nerror;?></span><br/><br/> E-mail: <input type="text" name="email">

<span class="error">\* <?php echo $merror;?></span><br/><br/> Phone no: <input type="text" name="phone">

<span class="error">\* <?php echo $perror;?></span><br/><br/>

<input type="submit" name="submit" value="Submit"></form>

<?php

echo "<h2>Your Input:</h2>"; echo $name; echo "<br>"; echo $email; echo "<br>"; echo $phone; echo "<br>";

?>

</body>

</html>

1. **Write a PHP program to create cookies, modify cookies value and delete cookies.**

**Ans:**

<html>

<?php

$name = "name";

$value = "John Doe";

setcookie($name,$value,time()+(8600\*30));//1 day

?>

<html>

<body>

<?php

if (!isset($\_COOKIE["name"])){

echo "cookie name'".$name."'is not set!";

} else {

echo "Cookie name ".$name."<br>";

echo "value ".$value;

}

?>

</body>

</html>

Modify cookie

<?php

$name = "name";

$value = "xyz";

setcookie($name,$value,time()+(8600\*30));//1 day

?>

<html>

<body>

<p>To modify a cookie, use the setcookie() function again. The setcookie() function will overwrite the existing cookie

with the new values.</p>

<?php

if (!isset($\_COOKIE["name"])){

echo "cookie name'".$name."'is not set!";

} else {

echo "Cookie name ".$name."<br>";

echo "value ".$value;

}

?>

</body>

</html>

<html>

<?php

$name = "name";

$value = "xyz";

setcookie($name,$value,time()-(8600\*30));//1 day

?>

<html>

<body>

<p>To delete a cookie, set the expiration date of the cookie to a date in the past.</p>

<?php

if (!isset($\_COOKIE["name"])){

echo "cookie name'".$name."'is not set!";

} else {

echo "Cookie name ".$name."<br>";

echo "value ".$value;

}

?>

</body>

</html>

1. **Write a PHP program to start session,get session variable and destroy session**

**Ans:**

<?php

session\_start();

$\_SESSION["name"] = "John Doe";

$value = $\_SESSION["name"];

echo $value;

session\_destroy();

?>

1. **Write a PHP program for sending and receiving plain text message (sending email).**

**Ans:**

<?php

$to = "recipient@example.com";

$subject = "This is a test email";

$message = "This is the message body.";

mail($to, $subject, $message);

if (mail($to, $subject, $message)) {

echo "The email was sent successfully.";

} else {

echo "The email was not sent successfully.";

}

?>

1. **Write a PHP program to create database and creation of table**

**Ans:**

<?php

$servername = "localhost";

$username = "root";

$password = " ";

$conn = mysqli\_connect($servername, $username, $password);

if (!$conn) {

die("Connection failed: " . mysqli\_connect\_error());

}

$sql = "CREATE DATABASE myDB";

if (mysqli\_query($conn, $sql)) {

echo "Database created successfully";

} else {

echo "Error creating database: " . mysqli\_error($conn);

}

mysqli\_select\_db($conn, "myDB");

$sql = "CREATE TABLE customers (

id INT(6) UNSIGNED AUTO\_INCREMENT PRIMARY KEY,

firstname VARCHAR(30) NOT NULL, lastname VARCHAR(30) NOT NULL, email VARCHAR(50),

reg\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP

)";

if (mysqli\_query($conn, $sql)) {

echo "Table customers created successfully";

} else {

echo "Error creating table: " . mysqli\_error($conn);

}

mysqli\_close($conn);

?>

1. **Write a PHP program to Inserting and retrieving the query result operations and Update ,Deleteoperations on table data.**

**Ans:**

<?php

$servername = "localhost";

$username = "username";

$password = "password";

$dbname = "myDB";

$conn = mysqli\_connect($servername, $username, $password, $dbname);

if (!$conn) {

die("Connection failed: " . mysqli\_connect\_error());

}

$sql = "INSERT INTO customers (firstname, lastname, email) VALUES ('John', 'Doe', 'john@example.com')"; if (mysqli\_query($conn, $sql)) {

echo "New record created successfully";

} else {

echo "Error: " . $sql . "<br>" . mysqli\_error($conn);

}

$sql = "SELECT \* FROM customers";

$result = mysqli\_query($conn, $sql); if (mysqli\_num\_rows($result) > 0) {

while($row = mysqli\_fetch\_assoc($result)) {

echo "id: " . $row["id"]. " - Name: " . $row["firstname"]. " " . $row["lastname"]. " - Email: " .

$row["email"]. "<br>";

}

} else {

echo "0 results";

}

$sql = "UPDATE customers SET email='johndoe@example.com' WHERE id=1"; if (mysqli\_query($conn, $sql)) {

echo "Record updated successfully";

} else {

echo "Error updating record: " . mysqli\_error($conn);

}