**TRINITY INTERNATIONAL SS & COLLEGE**

**Dillibazar Height, Kathmandu, Nepal**

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**LAB WORK #1: PHP**

**(COMPUTER SCIENCE)**

**SUBMITTED BY: SUBMITTED TO:**

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**GRADE: XII (MA2)**

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**2. Objective**

The main objectives of the lab work are as follows:

1. To understand basic syntax of PHP
2. To understand variable, data types and comment in PHP
3. To understand Operators, conditional statements and iteration in PHP
4. To understand and apply the concept of loop/iteration in PHP.
5. To understand the concept of array and its elements.
6. To understand and apply some PHP built-in functions.
7. To understand Form Processing.
8. To accessing MySQL using PHP
9. To perform CRUD operation, understand different variable types in JavaScript.
10. To get input from user and display output.
11. To perform arithmetic and logical operation in JavaScript.
12. To understand and apply conditional statements in JavaScript.

**3. Theoretical Background**

Introduction:

PHP stands as a versatile scripting language widely utilized for developing dynamic and interactive web applications. This theoretical overview aims to shed light on fundamental concepts in PHP, with a primary focus on its syntax and essential components.

Variables and Data Types:

PHP utilizes variables as containers for storing data values, similar to JavaScript. These variables can encompass various data types, including integers, strings, booleans, arrays, and objects. The declaration of variables involves using keywords such as "$var," with scoping rules determined by the context in which they are declared. A solid understanding of data types and variable declarations is vital for effective data manipulation in PHP.

Functions:

Functions in PHP, akin to JavaScript, are integral for structuring code and facilitating reusability. They are declared using the "function" keyword and can accept parameters to enable dynamic behavior. The use of the "return" statement allows functions to yield results, contributing to modular and efficient code organization. PHP also supports anonymous functions and arrow functions, providing alternative syntax options that enhance the language's expressiveness.

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Arrays:

Arrays are essential in JavaScript for storing and manipulating lists of values. They can hold elements of different data types and offer methods for efficient data retrieval and modification. Understanding array syntax and employing array methods enhances the language's capacity for handling collections of data.

Syntax of Arrays:

$array\_name = [element1, element2, /\* ... more elements \*/];

Connecting to MySQL: PHP seamlessly integrates with MySQL databases. Utilizing functions like mysqli\_connect() and mysqli\_query(), developers can establish a connection to a MySQL database and execute queries, enhancing the language's capabilities for handling database interactions in web applications. Understanding these concepts is pivotal for building robust and data-driven PHP applications.

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Q1. WAP to find sum of two numbers. Here, numbers are entered via html form.

|  |
| --- |
| Source Code |

Q2. Write a PHP program to swap two numbers.

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| --- |
| Source Code |

Q3. Write a PHP program to input name and address using form and display them.

|  |
| --- |
| Source Code |

Q4. Write a PHP program to find the greatest number among three numbers. Here, numbers are entered via html form..

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| --- |
| Source Code |

Q5. Write a PHP program to input any number via form and check whether the number is positive or negative and be sure number should not be zero.

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| --- |
| Source Code |

Q6. Write a PHP program to display your name 100 times.

|  |
| --- |
| Source Code |

Q7. Write a PHP program to print a multiplication table of a number. Input the number via form.

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| --- |
| Source Code |

Q8. Write a PHP program to display the factorial value of a number..

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| --- |
| Source Code |

Q9. WAP to print factors of a number.

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| --- |
| Source Code |

Q10. Write a PHP program to store some strings in an array and print them.

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| --- |
| Source Code |

Q11. Write a PHP program to sort data stored in an array. [Use sort() function and print\_r() to print.]

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| --- |
| Source Code |

Q12. Write a PHP program to know whether two strings are the same or not.

|  |
| --- |
| Source Code |

Q13. Write a PHP program to input a string through a text box and find its length.[use strlen()]

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| --- |
| Source Code |

Q14. Write a PHP program to connect a database named ‘student’.

|  |
| --- |
| Source Code |

Q15. Write a PHP program to insert records in a database named student having table student with field’s id, name and grade.

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| --- |
| Source Code |

Q16. Write a PHP program to display all records (previous question) of students who are in grade 11.

|  |
| --- |
| Source Code |

Q17. Write a PHP program to delete records of a student whose id is 3.[previous question]

|  |
| --- |
| Source Code |

Q18. Write a PHP program to update a record of student whose id is 2. [Try same program with name/grade.

|  |
| --- |
| Source Code |

**5. Conclusion**

In conclusion, the PHP lab work undertaken provided valuable insights into the practical implementation of web development concepts. Throughout the experiment, we successfully designed and executed PHP scripts to handle dynamic content, process user input, and interact with databases. The hands-on experience allowed us to grasp fundamental PHP principles, such as variable usage, control structures, and functions, reinforcing theoretical knowledge gained in the classroom. Furthermore, by integrating PHP with MySQL, we gained proficiency in creating dynamic web applications that can store and retrieve data. This lab work not only enhanced our understanding of server-side scripting but also underscored the importance of security measures in web development. Overall, the practical exercises in PHP have equipped us with essential skills and knowledge, laying a solid foundation for future endeavors in web programming..