<u>Guidelines for BSc Phy Science VIth Semester SEC</u> <u>BSCS10B: PHP Programming</u>

Unit 1 - Introduction: Introduction to three tier web application development, front end, business layer and back end connectivity, role of PHP in web application development, software requirements.Chapter 1, 2 (Only LAMP, XAMP and MAMP)[1]Init 2 - Starting PHP Programming: Rasics of PHP programming, variables, scope of a variable, expressions, operators, operator precedence, simple procedural scripts, decision making based on conditions, case structure, loops.Chapter 3 (pg 35-53, 55-59 (till global variables))[1]Unit 3 - Modular Programming: Functions and objects, Passing parameters.Chapter 5 (pg 95-109)[1]Unit 4 - Strings and Arrays: coreating and accessing strings, built-in functions for string and string formatting, creating index based and associative array, accessing array elements.Chapter 6 (pg 123-128, 132-136) from [1][1]Unit 5 - Forms and form processing: Capturing form data, GET and POST form methods, processing of form data, and use of regular expressions.Chapter 11 (till page 283) [1][1]DBMS: Connecting PHP & DBMS: connecting PHP and DBMS, creating database, defining database structure and accessing dataChapter 10 (pg 234, 235, 248-252)[1]	Tonic	Contants of Pools	Deference
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References:

[1] Nixon, R. (2014). Learning PHP, MySQL, JavaScript, CSS & HTML5. 4th Edition, O'reilly.

[2] Welling, L., Thompson, L. (2008). PHP and MySQL Web Development. 4th Edition, Addison-Wesley Professional.

Additional Resources:

1. Boronczyk, T., & Psinas, M. E. (2008). PHP and MYSQL (Create-Modify-Reuse).

Wiley India Private Limited.

2. Holzner, S. (2007). PHP: The Complete Reference. McGraw Hill Education (India).

3. Sklar, D., & Trachtenberg, A. (2014). PHP Cookbook: Solutions & Examples for PHP Programmers. O'Reilly Media.

List of Practicals:

(Use HTML forms for accepting input from user)

- 1) Write a PHP script to input three numbers and print the largest number.
- 2) Write a PHP code which accepts a number(from 1-12) as month value, and displays the number of days in that month. (use Switch case).
- 3) Using switch case and dropdown list display a "Hello" message depending on the language selected in the drop down list.
- 4) Write a PHP script to find the sum of first n odd numbers.
- 5) Write a PHP script to check whether the given number is prime or not.
- 6) Write a PHP script to construct the following pattern, using nested for loop:
 - * * * * * * * *
- 7) Write a function to calculate the factorial of a number (non-negative integer), which accepts the number as an argument. Use this function to compute C(n,r).
- 8) Write a PHP script to accept a string from the user, and print its reverse as output.
- 9) Write a PHP script to compare two variables using equality operator and identity operator.



- 10) Write a script to check if the input string consists of lowercase characters only.
- 11) Write a PHP script that checks if a string contains another string.
- 12) Write a PHP script to remove whitespaces from a string. Sample string : The quick brown fox Expected Output : Thequickbrownfox
- 13) Write a PHP script to replace the first 'the' of the following string with 'That'. Sample : 'the quick brown fox jumps over the lazy dog'. Expected Output : 'That quick brown fox jumps over the lazy dog'.
- 14) Write a PHP script to check whether a string is palindrome or not? (A palindrome is word, phrase, or sequence that reads the same backward as forward, e.g., madam or nursesrun)
- 15) WAP to sort an array of numbers.
- 16) Create an array using a PHP script. Display the elements of this array in the form of a bulleted list.

Sample: \$color = array('white', 'green', 'red').

Expected Output : • white • green • red

- 17) Write a PHP code which creates an array of 5 names. Display the names which start with character "A".
- 18) Create an associative array to store marks in five subjects of a student, where key is subject name and value is marks in the subject. Display all keys and values. Also sort the array on the basis of the key.
- 19) Write a PHP script to explode a string delimited with ## into an array. Print each element of this array in the form of Array[index]= element.

Sample String: hello ## this ## is ## php ## programming

Expected Output: Array[0]=hello

Array[1]= this Array[2]= is Array[3]= php Array[4]= programming

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20) Create an HTML form with input elements: Name, Age, Address, Email and a submit button.

Write PHP scripts to perform following validations:

- a. Name, Age, Address should not be left blank
- b. Age should be greater than 18
- c. Address should contain "Delhi"
- d. Check whether the email entered is valid or not.
- 21) Write PHP scripts to
 - a. Create a database "CollegeWebsite"
 - b. create a table "User(username varchar(120), password varchar(10))" within database "CollegeWebsite".
 - c. Create a login page, which asks the user for a username and password. On clicking submit, a welcome message should be displayed if the user is already registered (i.e. name is present in the database) otherwise an error message should be displayed.



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