

PHP Programming		Semester	3			
Course Code	BAI358D	CIE Marks	50			
Teaching Hours/Week (L:T:P: S)	0:0:2:0	SEE Marks	50			
Credits	01	Exam Hours	02			
Examination type (SEE)	Practical					
<b>Course objectives:</b>						
<ul style="list-style-type: none"> <li>● To introduce the PHP syntax, elements, and control structures</li> <li>● To make use of PHP Functions and File handling</li> <li>● To illustrate the concept of PHP arrays and OOPs</li> </ul>						
Sl.NO	<b>Experiments</b>					
<b>AIM:</b> Introduction to HTML/PHP environment, PHP Data Types, Variables, Literals, and operators						
1	a. Develop a PHP program to calculate areas of Triangle and Rectangle. b. Develop a PHP program to calculate Compound Interest.					
2	Demonstrating the various forms to concatenate multiple strings Develop program(s) to demonstrate concatenation of strings: (i) Strings represented with literals (single quote or double quote) (ii) Strings as variables (iii) Multiple strings represented with literals (single quote or double quote) and variables (iv) Strings and string variables containing single quotes as part string contents (v) Strings containing HTML segments having elements with attributes					
3	a. Develop a PHP Program(s) to check given number is: (i) Odd or even (ii) Divisible by a given number (N) (iii) Square of a another number b. Develop a PHP Program to compute the roots of a quadratic equation by accepting the coefficients. Print the appropriate messages.					
4	a. Develop a PHP program to find the square root of a number by using the newton's algorithm. b. Develop a PHP program to generate Floyd's triangle.					
5	a. Develop a PHP application that reads a list of numbers and calculates mean and standard deviation. b. Develop a PHP application that reads scores between 0 and 100 (possibly including both 0 and 100) and creates a histogram array whose elements contain the number of scores between 0 and 9, 10 and 19, etc. The last "box" in the histogram should include scores between 90 and 100. Use a function to generate the histogram.					
6	a. Develop PHP program to demonstrate the date() with different parameter options. b. Develop a PHP program to generate the Fibonacci series using a recursive function.					
7	Develop a PHP program to accept the file and perform the following (i) Print the first N lines of a file (ii) Update/Add the content of a file					
8	Develop a PHP program to read the content of the file and print the frequency of occurrence of the word accepted by the user in the file					
9	Develop a PHP program to filter the elements of an array with key names.  Sample Input Data: 1st array: ('c1' => 'Red', 'c2' => 'Green', 'c3' => 'White', 'c4' => 'Black') 2nd array: ('c2', 'c4')					

	<p>Output:</p> <pre>Array (     [c1] =&gt; Red     [c3] =&gt; White )</pre>
10	Develop a PHP program that illustrates the concept of classes and objects by reading and printing employee data, including Emp_Name, Emp_ID, Emp_Dept, Emp_Salary, and Emp DOJ.
11	a. Develop a PHP program to count the occurrences of Aadhaar numbers present in a text. b. Develop a PHP program to find the occurrences of a given pattern and replace them with a text.
12	Develop a PHP program to read the contents of a HTML form and display the contents on a browser.
<b>NOTE: Necessary HTML elements (and CSS) can be used for designing the experiments.</b>	
<b>Course outcomes (Course Skill Set):</b> At the end of the course, the student will be able to: <ul style="list-style-type: none"> <li>• Apply basic concepts of PHP to develop web program</li> <li>• Develop programs in PHP involving control structures</li> <li>• Develop programs to handle structured data (object) and data items (array)</li> <li>• Develop programs to access and manipulate contents of files</li> <li>• Use super-global arrays and regular expressions to solve real world problems.</li> </ul>	

**Assessment Details (both CIE and SEE)**

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks (20 marks out of 50) and for the SEE minimum passing mark is 35% of the maximum marks (18 out of 50 marks). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/course if the student secures a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together

**Continuous Internal Evaluation (CIE):**

CIE marks for the practical course are **50 Marks**.

The split-up of CIE marks for record/ journal and test are in the ratio **60:40**.

- Each experiment is to be evaluated for conduction with an observation sheet and record write-up. Rubrics for the evaluation of the journal/write-up for hardware/software experiments are designed by the faculty who is handling the laboratory session and are made known to students at the beginning of the practical session.
- Record should contain all the specified experiments in the syllabus and each experiment write-up will be evaluated for 10 marks.
- Total marks scored by the students are scaled down to **30 marks** (60% of maximum marks).
- Weightage to be given for neatness and submission of record/write-up on time.
- Department shall conduct a test of 100 marks after the completion of all the experiments listed in the syllabus.
- In a test, test write-up, conduction of experiment, acceptable result, and procedural knowledge will carry a weightage of 60% and the rest 40% for viva-voce.
- The suitable rubrics can be designed to evaluate each student's performance and learning ability.
- The marks scored shall be scaled down to **20 marks** (40% of the maximum marks).

The Sum of scaled-down marks scored in the report write-up/journal and marks of a test is the total CIE marks scored by the student.

**Semester End Evaluation (SEE):**

- SEE marks for the practical course are 50 Marks.
- SEE shall be conducted jointly by the two examiners of the same institute, examiners are appointed by the Head of the Institute.
- The examination schedule and names of examiners are informed to the university before the conduction of the examination. These practical examinations are to be conducted between the schedule mentioned in the academic calendar of the University.
- All laboratory experiments are to be included for practical examination.
- (Rubrics) Breakup of marks and the instructions printed on the cover page of the answer script to be strictly adhered to by the examiners. **OR** based on the course requirement evaluation rubrics shall be decided jointly by examiners.

- Students can pick one question (experiment) from the questions lot prepared by the examiners jointly.

- Evaluation of test write-up/ conduction procedure and result/viva will be conducted jointly by examiners.

General rubrics suggested for SEE are mentioned here, writeup-20%, Conduction procedure and result in -60%, Viva-voce 20% of maximum marks. SEE for practical shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks (however, based on course type, rubrics shall be decided by the examiners)

Change of experiment is allowed only once and 15% of Marks allotted to the procedure part are to be made zero.

The minimum duration of SEE is 02 hours

**Suggested Learning Resources:**

- BOOK: Programming in HTML and PHP (Coding for Scientists and Engineers, BY DEVID R BROOKS, Springer International Publishing AG 2017)
- PHP TUTORIALS: [<https://www.w3schools.com/php/>]
- PHP TUTORIALS: [<https://www.tutorialspoint.com/php/index.htm>]
- HTML TUTORIALS: [<https://www.w3schools.com/html/>]