ST. ALOYSIUS COLLEGE (AUTONOMOUS), JABALPUR

Reaccredited 'A+ 'Grade by NAAC(CGPA:3.68/4.00)
College with Potential for Excellence by UGC
DST-FIST Supported & STAR College Scheme by DBT

Faculty of Science

Bachelor of Science (B.Sc.), VI Semester
SUBJECT: COMPUTER SCIENCE
Paper: DSE-IA
Subject: PHP and MySQL

Course Outcomes

CO. No.	Course Outcomes	Cognitive Level
CO 1	Develop a strong foundation in HTML, CSS, and JavaScript, enabling students to create and style dynamic web pages with text, links, tables, images, forms, and interactive elements.	U, R
CO 2	Gain proficiency in PHP, including its history, characteristics, installation, configuration, and language basics. Students can handle data types, variables, expressions, operators, control flow, and string manipulation effectively.	U, R, Ap
CO 3	Acquire skills in working with complex data structures such as arrays and multidimensional arrays. Understand and apply functions, object-oriented programming concepts (classes, objects, inheritance, polymorphism), and develop the ability to handle file operations and database access using PHP.	U, Ap, C
CO 4	Learn to set up web pages with PHP to handle various form elements and master file operations, including creating, reading, writing, renaming, deleting files, and managing file information.	An, Ap, C
CO 5	Master PHP for database access, including connecting to MySQL, creating databases and tables, and performing essential operations like inserting, updating, deleting, and selecting data.	U, Ap, C

Credit and Marking Scheme

	Credits	Marks		Total Marks
		Internal	External	
Theory	4	40	60	**100**
Practical	2	40	60	**100**
Total	**6**	**200**		

Evaluation Scheme

	Marks	
	Internal	External
Theory	3 Internal Exams of 20 Marks (During the Semester) (Best 2 will be taken)	1 External Exams (At the End of the Semester)
Practical	3 Internal Exams (During the Semester) (Best 2 will be taken)	1 External Exams (At the End of the Semester)

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Bachelor of Science (B.Sc.)   **Subject: Computer Science**
VI Semester   **Paper: DSE-IA, PHP and MySQL**

Content of the Course

No. of Lectures (in hours per week): 2 Hrs. per week

Total No. of Lectures: 60 Hrs.   **Maximum Marks:** 60

Units	Topics	No. of Lectures
I	Overview of HTML, Working with Text, Link, Table, Image, Forms, Input. Introduction of cascading style sheet, selector, inline, internal, external CSS, CSS in text, image. Overview of JavaScript, Variables, Operators, Control flow statements, Popup Boxes, Functions, Events, Windows and Document Objects, Array.	10
II	A Brief History of PHP, PHP Characteristics, Installing and Configuring PHP on Windows, PHP Language Basics: Lexical Structure, Data Types, Variables, Expressions and Operators, Decision Statements, Flow Control Statements, Embedding PHP in Web Pages. Strings: String Constants, Printing Strings, Accessing Individual Characters, String Handling Functions: length, Word count, string position, reverse, replace.	10
III	Arrays: Indexed Arrays, Associative Arrays, Identifying Elements of an Array, Storing Data in Arrays, Multidimensional Arrays, extracting multiple values, converting between arrays and variables, Traversing Arrays, Sorting. Functions: Calling a Function, defining a Function, Variable Scope, Function Parameters, Return Values, Variable Functions, Anonymous Functions. Object Oriented Programming Concepts: Classes, Objects, Member Functions, Encapsulations, Inheritance, and Polymorphism.	10
IV	Form Handling in PHP: Setting Up Web Pages to Communicate with PHP, Handling Text Fields, Text Areas, Check Boxes, Radio Buttons, List Boxes, Password Controls, Hidden Controls, Image Maps. File Handling: Working with files and directories, File Open and Read, File Create and Write, Reading and writing Character in file, reading entire file, Rename and Delete File, getting Information of files, ownership and permissions.	15
V	Database Access: Using PHP to access a database. Introduction to MySql, Connect and create database, create tables, insert, update, delete, select.	15

References

Text Books:
- Programming PHP by Rasmus Lerdorf and Kevin Tatroe, O'Reilly Publications
- Beginning PHP5 by Wrox Publication
- HTML 5, Black Book by DreamTech Press

Reference Books:
- Mastering PHP: BPB Publication
- PHP 5.1 for beginners by Evan Bayross and Sharman Shah, SPD Publications
- PHP 5.2 The Complete Reference by Steven Holzner, McGraw Hill Edition 2008.

Suggestive digital platforms/ web links:
- https://www.w3schools.com/php/
- https://www.learn-php.org/
- https://www.javatpoint.com/php-tutorial Part D-Assessment

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List of Practical

1. Write HTML codes for displaying images and demonstrate hyperlinking.
2. Create a Feedback Form Using Form Handling.
3. Write a code for design menu system using list tag.
4. Apply CSS formatting to create page.
5. Write a PHP script to display a Welcome message.
6. Write a PHP script to demonstrate use of arithmetic operators, comparison operators, and logical operators.
7. Write a PHP script to set the type of variable using type casting.
8. Write PHP Script to print the Fibonacci series.
9. Write PHP Script to generate results and display grades.
10. Write PHP Script to find the maximum number out of three given numbers.
11. Write PHP Script using two-dimensional arrays such as the addition of two 2×2 matrices.
12. Write PHP Script for FOR EACH loop execution.
13. Write PHP script Using the user-defined function.
14. Write PHP script to demonstrate use of string function.
15. Write PHP script to demonstrate use of date/time function and Math functions.
16. Write a program to read input data, from table and display all this information in tabular form on output screen.
17. Write a program to manipulate data and display all this information in table format.
18. Create form to search data.
19. Develop small PHP application(s) using forms and database with updated and delete options.
20. Open and Read a file.