

INT220: SERVER SIDE SCRIPTING

L:2 T:0 P:2 Credits:3

Course Outcomes: Through this course students should be able to

- CO1 :: employ web development concepts including server setup and basic programming syntax
- CO2 :: use PHP arrays and functions to enhance web development efficiency.
- CO3 :: develop PHP form handling, validation, and sanitization techniques for secure data processing.
- CO4 :: employ PHP techniques for enhanced web functionality, encompassing cookies, sessions
- CO5 :: apply object-oriented programming principles in PHP for enhanced code organization and functionality.
- CO6 :: demonstrate proficiency in MySQL fundamentals including database basics, SQL queries and functions

Unit I

PHP Fundamentals : PHP, MySQL and XAMPP Installation, PHP Basic Syntax, PHP Data Types, PHP Variables, PHP Constants, PHP Expressions, PHP Operators, PHP Control Structures, PHP Loops

Unit II

PHP Arrays and Functions : PHP Enumerated Arrays, PHP Associative Arrays, PHP Multi-Dimensional Arrays, PHP Functions, Syntax, Arguments and Variables, References, Pass by Value & Pass by references, Return Values, Variable Scope, PHP include() and PHP require()

Unit III

PHP Forms : PHP Form handling, PHP GET and POST, PHP Form Validation, PHP Form Sanitization

Unit IV

PHP Cookies, Sessions and Strings Handling : PHP Cookie Handling, PHP Session Handling, PHP Login Session, Strings and Patterns, Matching, PHP Sending Emails, PHP File Uploading, PHP Filters, PHP Error Handling

Unit V

Object Oriented Programming in PHP : Defining PHP Classes, Creating Objects in PHP, Calling Member Functions, Constructor Functions, Inheritance, Function Overriding, Interfaces, Abstract Classes

Unit VI

Basic MySQL and SQL Queries : Database Basics, Indexes, PHP MyAdmin, Connect & Pconnect, MySQL Create, MySQL Insert, MySQL Select, MySQL Update, MySQL Delete, MySQL Truncate, MySQL Drop, WHERE condition, Order By and Group By, Having, LIKE, AND OR operators, SQL functions AVG, COUNT, SUM, MIN, MAX, LCASE, UCASE

List of Practicals / Experiments:

List of practicals

- Installation and configuration of XAMPP Web Server, PHP and MySQL.
- Use data types of PHP including String, Integer, Float, Boolean, Array, Object and Resource.
- Use Constants in PHP and make them global.
- Use Various types of operators including Arithmetic, Assignment, Comparison, Increment/Decrement, Logical, String and array operators.
- Use PHP control structures - if, if...else, if...elseif..else, switch statement and Loops.
- Create PHP arrays, their indexing and get the length using count(), associative Arrays and how to loop through an associative array.
- Implement the concept of two-dimensional arrays.
- Create a user-defined function in PHP, PHP function arguments, and various types for passing arguments in functions- call by value, call by reference.
- Use of PHP include and require statements.

- Design HTML forms with PHP including validations using GET and POST.
- Use the concept of PHP cookies, sessions and strings handling including filter functions.
- Use object oriented concepts in PHP
- Use the file handling functions.
- Design a Web Page with database connectivity using MySQL and PHP.

Text Books: 1. UNLOCK PHP 8: FROM BASIC TO ADVANCED by RONI SOMMERFELD, BPB PUBLICATIONS

References: 1. PHP BEGINNERS PRACTICAL GUIDE by PRATIYUSH GULERIA, BPB PUBLICATIONS