

# SYLLABUS

## WEB APPLICATION DEVELOPMENT USING PHP

BCA-16-504

External Marks: 65

Internal Marks: 10

Number of Lectures: 60

Time Duration: 3 Hrs.

**Objective:** This course enables students to do web programming using PHP and MySQL. It would enable them to develop websites and other web based applications.

- Note :**
- The Question Paper will consist of Four Sections.
  - Examiner will set total of NINE questions comprising TWO questions from each Section and ONE compulsory question of short answer type covering whole syllabi.
  - The students are required to attempt ONE question from each Section and the Compulsory question.
  - All questions carry equal marks unless specified.

### SECTION-A

**Introduction to web applications:** Client Side Scripting Vs Server Side Scripting, Understanding Web Servers: Local Servers and Remote Servers, Installing WAMP and configuring PHP environment, Static website Vs Dynamic website development, Embedding PHP code in Web Pages

**PHP Basics:** Tokens, Variables, Variable Scope, Constants, Data Types, number handling in PHP, operands, operators, expressions, operator precedence, comments, echo and Print statement

**Control structures:** Branching statements: if-else, ternary operator, switch; looping statements: while, do-while, for; file inclusion Statements

### SECTION-B

**Functions** Function definition, Creating and invoking user-defined functions, Formal parameters versus actual parameters, Function and variable scope, Recursion, Library functions

**String Handling:** interpolation with curly braces, characters and string indexes, string operators, heredoc, string functions, Formatting Strings, Comparing and searching Strings and substrings

**Arrays:** PHP Arrays, Creating Arrays, Accessing Array elements, Multidimensional Arrays, Inspecting Arrays, Deleting from Arrays, Iterating with each() and foreach(), Iterative functions: current(), next(), prev(), reset(), end()

## SECTION-C

**Forms:** Working with HTML Form controls and PHP, Super global variables, super global array, importing user input, Accessing user input

**Integrating PHP and Database:** Connecting to database, Making SQL queries, Executing queries, Fetching data sets, Integrating Forms and Databases: Basic form submission to a database, editing data with an HTML form

## SECTION-D

**Maintaining User State:** Introduction to Cookies, Setting time in a cookie with PHP, Deleting a cookie, creating session cookie, Introduction to sessions, Starting a session, Registering Session variables, working with session variables, Destroying session, passing session Ids , encoding and decoding session variables, increase session expire time, working of session without cookie.

**Working with File System:** Understanding PHP file permissions, Opening and closing a file, File reading and writing functions, File system and directory functions