Course Name: 
Diploma in LAMP
Course Code: D6

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Diploma in LAMP

1. **Introduction:**
   PHP: Hypertext Preprocessor is a widely used, general-purpose scripting language that was originally designed for web development to produce dynamic web pages. PHP is available as a processor for most modern web servers and as standalone interpreter on most operating systems and computing platforms.

2. **Eligibility:**
   Graduate in any discipline or equivalent or diploma

3. **Duration:**
   260 Hours. Two Hours each day
   - Theory 60 hours
   - Practical 200 hours

4. **Course Details:**

<table>
<thead>
<tr>
<th>Type of course</th>
<th>Syllabus</th>
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<tbody>
<tr>
<td></td>
<td><strong>Programming Concepts</strong></td>
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<td>Flowcharts</td>
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<td>Algorithms</td>
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<td>Data Flow Diagrams</td>
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<td>Software Life Cycle</td>
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<td><strong>HTML</strong></td>
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<td><strong>INTRODUCTION</strong></td>
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<td>The World Wide Web (WWW)</td>
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<td>HTML History</td>
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<td>Hypertext and Hypertext Markup Language</td>
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<td>Microsoft Front Page</td>
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<td><strong>HTML DOCUMENTS</strong></td>
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<td>Dividing the document into 2 parts.</td>
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<td>Headers</td>
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<td>Body</td>
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<td><strong>Tags</strong></td>
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<td>Representing 2 types of tag (odd and even)</td>
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<td><strong>Elements of an HTML Document</strong></td>
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<td>Text Elements</td>
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<td>Tag Elements</td>
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<td>Special Character elements</td>
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</table>
# Structural Elements of HTML Documents

- Header tags
- Body tags
  - Paragraphs
  - Titles
  - Lists
    - Numbered list
    - Non-Numbered lists
    - Definition lists

# Formatting HTML Documents

- Logical styles (source code, text enhancements, variables)
- Physical Styles (Bold, Italic, underlined, crossed)

# Managing Images in HTML

- Image format (quality, size, type, …)
- Importing images (scanners)
- Tags used to insert images
- Frames

# Creating Tables in HTML Documents

- Tags used in table definition
- Tags used for border thickness
- Tags used for cell spacing
- Tags used for table size
- Dividing table with lines
- Dividing lines with cells
- Cell types
  - Titles cells
  - Data cells

# Hypertext and Link in HTML Documents

- URL/FTP/HTTP
- Types of links.
  - Internal Links
  - External Links
- Link Tags
- Links with images and buttons
- Links that send email messages

# Special Effects in HTML Documents

- Text fonts
- Sensitive Images
Tip tables  
Page background  
  Variable  
  Fixed  
Rotating messages (Marquee)  
Counters  

**MULTIMEDIA**

Audio files and acceptable formats (AIFF, AU, MIDI, WAVE)  
  Inserting audio files  
Video files and acceptable formats (MPEG, Quick Time, Video for Windows).  
  Inserting video files  
  Screen control attributes (WIDTH, HEIGHT, ALIGN).  
  Start control attributes (START, FILEOPEN, LOOP, LOOPDELAY, MOUSEOVER).

**MANAGING FORMS**

Interactive forms  
Creating data entry forms

**LINUX**

Linux History and Operation  
  The Evolution of Linux  
  The GNU Movement and the GPL  
  Linux Operations as a Server  
  The Architecture and Structure of Linux

Installing and Configuring Linux  
  Introduction to Installation and Media Types  
  Performing a Custom Linux Server Installation  
  Run Levels and the Startup/Shutdown Sequence  
  Logging In and Out of a Linux System

Shells, Commands, and Navigation  
  Introduction to Linux Shells, Commands, and Navigation  
  Navigating the Linux Filesystem  
  Using Shell Variables in Bash  
  The Bash Shell  
  Commands for Obtaining System Information  
  Examining File Contents  
  Customizing your Shell Environment  
  Manipulating Commands and Their Input/Output
Getting Help

Common Text Editors
   Using the Emacs Editor
   Using the vi Editor
   Using the Pico Editor
   Manipulating Text Files From the Command Line
   Using Awk
   Using Sed

Linux Printing
   The Line Printer Daemon (lpd)
   Printing
   Administering a Linux Printer Queue

Users and Groups
   Introduction to Users and Groups
   Essentials of Effective User, Group, and Password Management

The Ext2 Filesystem
   Introduction to the Second Extended (Ext2) Filesystem
   Partitioning and Formatting
   Mounting and Configuring Filesystems
   Administering Ext2 Filesystems
   Understanding Permissions

The Linux Kernel
   Introduction to the Linux Kernel
   Using Kernel Modules
   Compiling the Linux Kernel
   Installing the Linux Kernel

Shell Scripting
   Introduction to Shell Scripting
   Variables
   Basic Control Structures
   Loops
   Command-line Arguments

APACHE

   Introduction to Apache Web Server
   Apache Web Server Evolution
   Apache Architecture and Features
   Apache's Role in the Internet
Installation and Configuration
  - Build and Install Apache Web Server
  - Verify Initial Configuration
  - Start, Stop, and Status the Apache Server Process
  - Configure Apache Core Modules

Security
  - Basic Security with Apache
  - Host-based Authentication
  - User-based Authentication
  - Secure Sockets Layer (SSL)

Delivering Dynamic Web Content
  - Apache's Role in the Dynamic Web
  - Server Side Includes (SSIs)
  - Configure Apache Web Server to Support CGI
  - Write CGI Programs
  - CGI Alternative Technologies

Virtual Hosts, Redirection, and Indexing
  - Virtual Hosting with Apache
  - Virtual Host Configuration
  - Redirection
  - Directory Indexing

Proxy Servers and Firewalls
  - Apache Proxy
  - Configuring Proxy Services
  - Firewalls and Apache
  - Firewall Architecture Models

Monitoring Apache Web Server
  - Error Logs
  - Logging HTTP Access
  - Web Server Status and Server Information
  - User Tracking

Improving Performance
  - Improve System Performance
  - Apache Performance Strategies
  - Process Improvements and Directives

Proxy Caching

MYSQL
Introduction
MySQL Database Products
MySQL GUI Tools
MySQL Drivers
MySQL Services
MySQL Training
MySQL Certification
MySQL Consulting
MySQL Support
Community vs Enterprise
MySQL Partners
Supported Operating Systems
MySQL Certification Program

Applications servers
Apache Server
MySQL Server

PHP Foundations
Delimiting PHP Code
Comments
Construct Feedback
PHP Data Types
Scalar Data Types
Compound Data Types
Special Data Types
Flow Control Statements
If….else….. elseif
Switch
While
Do…While
For
Foreach
Break and Continue
Other control statements
User Defined Functions
Cookies, Sessions and forms
Adding , appending and deleting a file
Manipulation of strings, loops and string statements
Arrays & Functions

PHP database ODBC
Creating an ODBC connection
Creating an ODBC
Retrieving records, fields
Closing an ODBC connection

MYSQL FOUNDATIONS
MySQL General Architecture
  MySQL Server
  Client Programs
SQL Parser and Storage Engine Tiers
  Storage Engine Breakdown
The mysql Client
  Using mysql Interactively
  Statement Terminators
MySQL Query Browser
  Using the Connection Dialog
  The MySQL Query Browser Window

MANAGING DATABASES
Database Properties
Database Design Practices
MySQL Identifiers
Creating Databases
Drop a Database

MANAGING DATABASE TABLES
Table Properties
MySQL Data Types
  Numeric Data Type
  String Data Types
  Temporal Data Types
Creating Database Tables
  Displaying Table Creation Information
  Table Properties
  Column Options
  Temporary Tables
Altering Tables
  Add Columns
  Remove Columns
  Modifying Columns
  Changing Columns
  Renaming Tables
  Emptying Tables
Drop Tables
Table Indexing
Foreign Keys

SQL SELECT COMMANDS
SELECT Statements
  SELECT with DISTINCT
  SELECT with WHERE
  SELECT with ORDER BY
  SELECT with LIMIT
  SELECT with MySQL Query Browser
Aggregating Query Results
<table>
<thead>
<tr>
<th>SQL EXPRESSIONS</th>
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<td>Numeric Expressions</td>
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<td>Functions in SQL Expressions</td>
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<td>INSERT with NULL Values</td>
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<td>The REPLACE Statement</td>
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<td>INSERT with ON DUPLICATE KEY UPDATE Instead of REPLACE</td>
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<td>The DELETE Statement</td>
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<td>What is a Join?</td>
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<td>Using Qualifiers and Aliases</td>
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<td>Qualifying and Aliasing Table Names</td>
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<td>A SelfJoins</td>
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<td>Multi—Table UPDATE and DELETE Statements</td>
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<th>MYSQL DATA DRIVEN WEB BASED FORMS</th>
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<td>The Web Interface</td>
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<td>What is Session Handling?</td>
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**Encoding/Decoding Session Data**
- PHP Session Handling with MySQL

**OBJECT ORIENTED PROGRAMMING**
- Benefits of OOP
- Working with Objects
- Exception Handling

**ESTABLISHING USER AUTHENTICATION**
- HTTP Authentication
- PHP Authentication
  - Hard—Coded Authentication
  - File-Based Authentication
  - Database Authentication

**SECURING PHP AND MYSQL**
- Building a Wall of Security
  - PHP Configurations
- Data Encryption
- Securing the MySQL Server (mysqld)
- MySQL Access Privilege System
  - MySQL versus Operating System Accounts
  - Creating and Dropping User Accounts
  - Setting Account Password
- Privileges
  - Types of Privileges that MySQL Supports
  - The Grant Tables
  - Granting Privileges
  - The GRANT Statement
  - The SHOW GRANT Statement
  - Revoking Privileges
  - Changing Account Passwords

**Web Application project**

5. **Fee:**
   - Rs. 15000/- (exclusive of all the taxes)