Course Title: Scripting Language (3 Cr.)
Course Code: CACS254
Year/Semester: II/IV
Class Load: 6 Hrs. / Week (Theory: 3 Hrs, Practical: 3 Hrs.)

Course Description
This course includes both theoretical as well as practical knowledge of scripting language (client side & server side) along with database connectivity. So that students can develop more effective and efficient web based application packages.

Course Objectives
The general objectives of this course are to provide fundamental concepts of server side script programming and client side script programming using JavaScript and PHP respectively along with database connectivity.

Course Contents

Unit 1 Client Side Scripting

15 Hrs.

Unit 2 Server Side Scripting with Database Connectivity
PHP(8 Hrs.): Introduction to Server Side Scripting Language, PHP introduction, Basic PHP Syntax, Comments in PHP, Variables, PHP Operators, Control Structures(if else, switch, all loops), Arrays, For Each Loop, Functions, Form Handling, PHP $_GET, PHP $_POST, PHP $_REQUEST, PHP date () Function, PHP include File, File Handling, File Uploading, PHP Sessions, Sending Emails, PHP Cookies.
MySQL(7 Hrs.): Introduction to MySQL, PHP MySQL Connect to a Database, Closing a Connection, MySQL Data Types, MySQL Insert, MySQL Select, MySQL Where Clause, MySQL Delete, MySQL Update, MySQL Aggregate Functions(sum, avg, count etc); MySQL Order by and Group by Clause, MySQL Subqueries, MySQL Joins.

15 Hrs.

Unit 3 Advanced Server Side Scripting
Object Oriented Programming in PHP: Classes and Objects, Defining and Using properties and methods, Constructors and Destructors, Method Overriding, Encapsulation, Inheritance, Polymorphism, Static Members, Exception Handling

15 Hrs.
AJAX (Asynchronous JavaScript and XML): Using PHP, Using PHP + MySQL
jQuery: Playing With Elements, Hiding and Unhiding Images, Jquery UI
Joomla: Introduction To CMS, Installation, Handling Joomla Back End, Customization In Joomla, Introduction To Extensions, Installation and Uses Of Extensions in Joomla, Template Development In Joomla, Artiseer (IDE), Module Development In Joomla, Component Development In Joomla, Introduction To MVC (Model, View and Controller)
WordPress Administrator Level: Theme Integration, Creating pages, Managing Posts, Managing Widgets

Laboratory Works
Laboratory works should be done covering all the topics listed above and a small project work should be carried out using the concept learnt in this course. Project should be assigned on Individual Basis.

Teaching Methods
The general teaching pedagogy includes class lectures, group discussions, case studies, guest lectures, research work, project work, assignments (theoretical and practical), and examinations (written and verbal), depending upon the nature of the topics. The teaching faculty will determine the choice of teaching pedagogy as per the need of the topics.

Evaluation

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Text Books
Reference Books