CERTIFICATE COURSE IN WEB DESIGNING AND DEVELOPMENT

Paper No.	Course Code	Title of the Course	Credits
8031	CCWD-01	Basics of HTML and CSS	4
8032	CCWD-02	Introduction to JSP	4
8033	CCWD-03	Introduction to PHP	4
8034	CCWD-04	Introduction to DBMS and MySQL	4
8035	CCWD-05	Lab based on CCWD-01, CCWD-02, CCWD-03 and CCWD-04	8
		Total	24

SYLLABUS

Course Code: CCWD-01
BASICS OF HTML AND CSS
Unit I:Web Design Principles
Basic principles involved in developing a web site, Planning process, Five Golden rules of web designing, Designing navigation bar, Page design, Home Page Layout, Design Concept.

Unit II:Basics in Web Design
Brief History of Internet, What is World Wide Web, Why create a web site, Web Standards, Audience requirement.

Unit III:Introduction to HTML
What is HTML, HTML Documents, Basic structure of an HTML document, creating an HTML document, Mark up Tags, Heading-Paragraphs, Line Breaks,HTML Tags.

Unit IV:Elements of HTML
Introduction to elements of HTML, Working with Text, Working with Lists, Tables and Frames, Working with Hyperlinks, Images and Multimedia, Working with Forms and controls

Unit V: Introduction to Cascading Style Sheets
Concept of CSS, Creating Style Sheet, CSS Properties, CSS Styling(Background, Text Format, Controlling Fonts), Working with block elements and objects, Working with Lists and Tables, CSS Id and Class, Box Model(Introduction, Border properties, Padding Properties, Margin properties), CSS Advanced(Grouping, Dimension, Display, Positioning, Floating, Align,Pseudo class, Navigation Bar, Image Sprites, Attribute sector), Color, Creating page Layout and Site Designs.

Unit VI:Introduction to Web Publishing or Hosting

Creating the Web Site, Saving the site, Working on the web site, Creating web site structure, Creating Titles for web pages, Themes-Publishing web sites.

Recommended Book:
1. HTML, XHTML, and CSS Bible 5ed, Steven M. Schafer, Wiley India

Reference Books:

1. HTML 5 in simple steps, Kogent Learning Solutions Inc., Dreamtech Press.
2. A beginner's guide to HTML, NCSA

Course Code: CCWD-02
INTRODUCTION TO JSP
Unit I:
Introduction to Java Server Pages, Features of JSP 2.1, Access Models, Advantages of JSP over competing technologies, developing a simple Java Server Page, JSP Processing model, comments and character coding conventions

Unit II:
Forms of scripting elements, predefined variables, examples using scripting elements, JSP Directives, JSP Page Directive, JSP Include Directive

Unit III:
JSP Actions, JSP: include action, JSP: forward action, jsprplugin action, java beans, bean related actions, custom tags, type of tags, creating custom tags

Unit IV:
Introduction to advance custom tags, using simple tags, using tag files, JSP standard tag library, why use JSTL, using expression language, using JSTL

Unit V:
Introduction to JavaScript, understanding events, JavaScript example, external JavaScript, comments, variable, global variable, data types, operators, if statement, switch, for, while, functions, JavaScript objects, JavaScript array

Unit VI:
Browser objects, window objects, document object, getElementsbyId, getElementsbyName, getElementsbyTagName, innerHTML property, inner Text property, form validation, email validation, jQuery HOME, jQuery Intro, jQuery Install, jQuery Syntax, jQuery Selectors, jQuery Events, jQuery Hide/Show, jQuery Fade, jQuery Slide, jQuery Animate, jQuery stop(), jQuery Callback, jQuery Chaining, jQuery GetjQuery Set, jQuery Add, jQuery Remove, jQuery CSS Classes, jQuery css(), jQuery Dimensions, jquery slider

Recommended Books:
JSP 2.0: The Complete Reference, Second Edition by Philip Hanna, Osborne/McGraw-Hill

Eloquent JavaScript: A Modern Introduction to Programming, by Marijn Haverbeke

Reference Book:
Java Server Pages, 3rd Edition, by Hans Bergsten, O'Reilly Media

Course Code:CCWD-03

INTRODUCTION TO PHP
Unit I:
Introducing PHP, configuring the environment, embedding PHP in web pages, commenting the code, outputting data to the browser, PHP's supported data types, identifiers, variables, constants, expressions, string interpolations, control structures, invoking a function, creating a function, function libraries, creating an array, outputting an array, adding and removing array elements, locating array elements, traversing arrays, determining array size and uniqueness, sorting arrays, merging, slicing and dissecting arrays, other useful array functions

Unit II:
Configuration directives, error logging, exception handling, regular expressions, other string specific functions, alternatives for regular expressions, taking advantage of PEAR:Validate_US, learning about files and directories, working with files, executing shell commands, system-level program execution, the UNIX time stamp, PHP's date and time library, date Fu, date and time enhancement for PHP 5.1+ users

Unit III:
PHP and Web forms, validating form data, taking advantage of PEAR:HTML_QuickForm2, HTTP authentication concepts, authenticating your users with PHP, user login administration, uploading files via HTTP, uploading files with PHP, taking advantage of PEAR:HTTP_Upload, DNS services and servers, mail, common networking tasks

Unit IV:
What is session handling, configuration directives, working with sessions, practical session handling examples, creating custom session handlers, web services, really simple syndication, introducing SimplePie, SimpleXML, configuring PHP securely, hiding configuration details, hiding sensitive data, data encryption, translating websites with Gettext, localizing dates, numbers and times.

Recommended Book:
Beginning PHP and MySQL, From Novice to Professional, Fourth Edition by W. Jason Gilmore, Apress

Reference Book:
The Joy of PHP: A Beginner's Guide to Programming Interactive Web Applications with PHP and mySQL

Course Code: CCWD-04
INTRODUCTION TO DBMS AND MySQL
Unit I:
Introduction to DBMS, characteristics of the database approach, database administrators, database designers, end users, advantages of using DBMS approach, data models, schemas and instances, three schema architecture and data independence, databases languages and interfaces, database system environment, Centralized and Client/Server Architectures for DBMSs, classification of database management systems

Unit II:
The evolution of MySQL, prominent MySQL users, downloading and installing MySQL, setting administrator password, starting and stopping MySQL, configuring and optimizing MySQL, configuring PHP to work with MySQL, Introducing the command line clients, MySQL's GUI client programs, phpMyAdmin

Unit III:
Storage Engines, data types and attributes, working with databases and tables, securing the mysqld Daemon, the MySQL access privilege system, user and privilege management, limiting user resources, secure MySQL connections, using PHP with MySQL, installation prerequisites, using the MySQLi extension, interacting with the database, executing database transactions

Unit IV:
Introducing triggers, MySQL's Trigger support, integrating triggers into web applications, introducing Views, MySQL's View support, incorporating Views into web applications, practical database queries, creating tabular output with PEAR, sorting output, creating paged output, listing page numbers, querying multiple tables with subqueries, iterating result sets with cursors

Unit V
Database indexing, forms-based searches, transactions, MySQL's transaction capabilities, a sample project, building transactional applications with PHP, using data delimitation, importing data, exporting data

Recommended Book:
Beginning PHP and MySQL, From Novice to Professional, Fourth Edition by W. Jason Gilmore, Apress

Reference Book:
Fundamentals of Database Systems, Fifth Edition, by Elmasri and Navathe