DIPLOMA WING
RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL
DIPLOMA IN COMPUTER SCIENCE & ENGINEERING (C04)

SEMESTER IV

COURSE TITLE	:	WEB TECHNOLOGIES
PAPER CODE	:	7490
SUBJECT CODE	:	405
TREORY CREDITS	:	03
PRACTICAL CREDITS	:	02

Course Learning Objectives:

To provide basic skills on tools, languages and technologies related to website development. Learnings from this course may be used in the Mini Project and summer internship.

Course Content:

UNIT 1: Introduction to www

Protocols and programs, secure connections, application and development tools, the web browser,

What is server, setting up UNIX and LINUX web servers, Logging users, dynamic IP Web Design: Web site design principles, planning the site and navigation

UNIT 2: Web Systems Architecture

Architecture of Web based systems- client/server (2-tier) architecture, 3-Tier architecture, Building blocks of fast and scalable data access Concepts - Caches-Proxies- Indexes-Load Balancers- Queues, Web Application architecture (WAA)

UNIT 3: Javascript

Client side scripting, What is Javascript, simple Javascript, variables, functions,conditions, loops and repetition

UNIT 4: Advance scripting

Javascript and objects, Javascript own objects, DOM and web browser environments, forms and validations

DHTML: Combining HTML, CSS and Javascript, eventsand buttons, controlling your browser,

Ajax: Introduction advantages & disadvantages,ajax based web application, alternatives of ajax

XML, XSL and XSLT: Introduction to XML, uses of XML, simple XML,XML keycomponents, DTD and Schemas, XML with application, XSL and XSLT.

Introduction to Web Services

UNIT 5: PHP

server side scripting, Arrays, function andforms,advance PHP Databases :Basic command with PHP examples, Connection to server,creating database, selecting a database, listing database, listing tablenames creating a table, inserting data,altering tables, queries, deletingdatabase, deleting data and tables, PHP myadmin and database bugs.

Reference Books:

2. "Web Technologies--A Computer Science Perspective", Jeffrey C.Jackson,
3. "Internet & World Wide Web How To Program", Deitel, Deitel, Goldberg, Pearson Education
4. "Web programming- Building Internet Application", Chris Bales
5. Web Applications: Concepts and Real World Design, Knuckles.

Course Outcomes:

Student will be able to develop/build a functional website with full features.

WEB TECHNOLOGIES LAB

Course Learning Objectives:

This Lab course is intended to practice whatever is taught in theory class of 'Web Technologies'. Some of the things that should necessary be covered in lab are listed below:

Course Content:

S.No.	Topics for Practice
1	Coding Server Client Programs
2	Developing Web Application using HTML, JavaScript
3	Developing Advanced Web Application Programs using CSS
4	Practicing PHP : Basics
5	Practicing PHP : Web Application Development
6	Practicing PHP: MySql - tiered Applications
7	Developing a fully functional Web Service Application using all the technologies learned in this course.

This is a skill course. More student practice and try to find solution on their own, better it will be.

Reference Books:

1. "Web Technologies--A Computer Science Perspective", Jeffrey C.Jackson,
2. "Internet & World Wide Web How To Program", Deitel, Deitel, Goldberg, Pearson Education
3. "Web programming- Building Internet Application", Chris Bales
4. Web Applications: Concepts and Real World Design, Knuckles

Course outcomes:

Student will be able to program web applications using and will be able to do the following:

- Use LAMP Stack for web applications
- Use Tomcat Server for Servlets and JSPs
- Write simple applications with Technologies like HTML, Javascript, AJAX, PHP, Servlets and JSPs
- Connect to Database and get results
- Parse XML files using Java (DOM and SAX parsers)

Student will be able to develop/build a functional website with full features.