## RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

### **New Scheme Based On AICTE Flexible Curricula**

# Artificial Intelligence and Data Science, V-Semester AD 503 (A) Internet and Web Technology

#### **COURSE CONTENTS:**

#### UNIT-I

Introduction: Concept of WWW, Internet and WWW, HTTP Protocol: Request, Response, header and methods. Web browser and Web servers, Features of Web 2.0 Web Design: Concepts of effective web design, Web design issues including Browser, Bandwidth and Cache, Display resolution, Look and Feel of the Web site, Page Layout and linking, User centric design, Sitemap, Planning and publishing website, Designing effective navigation.

#### **UNIT-II**

HTML: Basics of HTML, formatting and fonts, commenting code, color, hyperlink, lists, tables, images, forms, XHTML, Meta tags, Character entities, frames and frame sets, Browser architecture and Web site structure. Web Sockets: Overview and features of HTML5. MIME type and content encoding, Session tracking and Cookies. Browser: Working of a Browser, Plugins; Search Engines. Client Side Programming: Java Script, JavaScript Regular expressions, web servers.

#### UNIT-III

Style sheets: Need for CSS, introduction to CSS, basic syntax and structure, using CSS, background images, colors and properties, manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning using CSS, CSS2, Overview and features of CSS3 JavaScript: Client side scripting with JavaScript, variables, functions, conditions, loops and repetition, Pop up boxes, Advance JavaScript: JavaScript and objects, JavaScript own objects, the DOM and web browser environments, Manipulation using DOM, forms and validations, DHTML: Combining HTML, CSS and JavaScript, Events and buttons.

#### **UNIT-IV**

XML: Introduction to XML, uses of XML, simple XML, XML key components, DTD and Schemas, Using XML with application. Transforming XML using XSL and XSLT

PHP: Introduction and basic syntax of PHP, decision and looping with examples, PHP and HTML, Arrays, Functions, Browser control and detection, string, Form processing, Files, Advance Features: Cookies and Sessions, Object Oriented Programming with PHP.

#### **UNIT-V**

PHP and MySQL: Basic commands with PHP examples, Connection to server, creating database, selecting a database, listing database, listing table names, creating a table, inserting data, altering tables, queries, deleting database, deleting data and tables, PHP myadmin and database error handling. Case study: Web based application development.

#### **Books Recommended:**

- 1. Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India
- 2. Moller, "An Introduction to XML and Web Technologies", Pearson Education, 2012
- 3. Web Technologies, Black Book, dreamtech Press
- 4. HTML 5, Black Book, dreamtech Press
- 5. Web Design, Joel Sklar, Cengage Learning
- 6. Harwani, Developing Web Applications in PHP and AJAX, McGrawHill
- 7. Internet and World Wide Web How to program, P.J. Deitel& H.M. Deitel, Pearson