**CS8651 INTERNET PROGRAMMING L T P C 3 0 0 3**

**OBJECTIVES:**

* To understand different Internet Technologies
* To learn java-specific web services architecture

UNIT I WEBSITE BASICS, HTML 5, CSS 3, WEB 2.0 9

Web Essentials: Clients, Servers and Communication – The Internet – Basic Internet protocols – World wide web – HTTP Request Message – HTTP Response Message – Web Clients – Web Servers – HTML5 – Tables – Lists – Image – HTML5 control elements – Semantic elements – Drag and Drop – Audio – Video controls - CSS3 – Inline, embedded and external style sheets – Rule cascading – Inheritance – Backgrounds – Border Images – Colors – Shadows – Text – Transformations – Transitions – Animations.

UNIT II CLIENT SIDE PROGRAMMING 9 Java Script: An introduction to JavaScript–JavaScript DOM Model-Date and Objects,- Regular Expressions- Exception Handling-Validation-Built-in objects-Event Handling - DHTML with JavaScript- JSON introduction – Syntax – Function Files – Http Request – SQL.

UNIT III SERVER SIDE PROGRAMMING 9 Servlets: Java Servlet Architecture- Servlet Life Cycle- Form GET and POST actions Session Handling- Understanding Cookies- Installing and Configuring Apache Tomcat Web Server- DATABASE CONNECTIVITY: JDBC perspectives, JDBC program example - JSP: Understanding Java Server Pages-JSP Standard Tag Library (JSTL)-Creating HTML forms by embedding JSP code.

UNIT IV PHP and XML 9 An introduction to PHP: PHP- Using PHP- Variables- Program control- Built-in functions Form Validation- Regular Expressions - File handling – Cookies - Connecting to Database. XML: Basic XML- Document Type Definition- XML Schema DOM and Presenting XML, XML Parsers and Validation, XSL and XSLT Transformation, News Feed (RSS and ATOM).

UNIT V INTRODUCTION TO AJAX and WEB SERVICES 9 AJAX: Ajax Client Server Architecture-XML Http Request Object-Call Back Methods; Web Services: Introduction- Java web services Basics – Creating, Publishing, Testing and Describing a Web services (WSDL)-Consuming a web service, Database Driven web service from an application –SOAP.

TOTAL 45 PERIODS

**OUTCOMES:**

At the end of the course, the students should be able to:

* Construct a basic website using HTML and Cascading Style Sheets. (K3)
* Build dynamic web page with validation using Java Script objects and by applying different event handling mechanisms. (K3)
* Develop server side programs using Servlets and JSP. (K3)
* Construct simple web pages in PHP and to represent data in XML format. (K3)
* Use AJAX and web services to develop interactive web applications (K3)

**TEXT BOOK:**

1. Deitel and Deitel and Nieto, ―Internet and World Wide Web - How to Program‖, Prentice Hall, 5th Edition, 2011.

**REFERENCES:**

1. Stephen Wynkoop and John Burke ―Running a Perfect Website‖, QUE, 2nd Edition,1999.

2. Chris Bates, Web Programming – Building Intranet Applications, 3rd Edition, Wiley Publications, 2009.

3. Jeffrey C and Jackson, ―Web Technologies A Computer Science Perspective‖, Pearson Education, 2011.

4. Gopalan N.P. and Akilandeswari J., ―Web Technology‖, Prentice Hall of India, 2011.

5. UttamK.Roy, ―Web Technologies‖, Oxford University Press, 2011.