

Course Title: Web Development using JSP	Course Code: 24MJCS3S
Total Contact Hours: 26	No. of Credits: : 02
L:T:P: 1-0-2	Duration of SEE: 01
Internal Assessment Marks: 10	Semester End Exam Marks: 40

<b>Course Outcomes (COs):</b>
<ul style="list-style-type: none"> <li>Develop dynamic, data-driven web applications using JSP, incorporating its syntax, directives, and actions effectively.</li> </ul>
<ul style="list-style-type: none"> <li>Able to process user input through forms, manage sessions, and handle cookies and client-server interactions proficiently.</li> </ul>
<ul style="list-style-type: none"> <li>Implement file uploads, data handling, page redirects, and dynamic features such as auto-refresh and hits counters in JSP applications.</li> </ul>
<ul style="list-style-type: none"> <li>Ensuring security in JSP applications, using JSTL for efficient tag handling, and applying best practices in email handling and session tracking.</li> </ul>

Unit	Description	Hours
<b>1</b>	<b>Introduction to JSP:</b> Overview, Environment set up of JSP, Architecture of JSP, Life cycle of JSP, Syntax of JSP, Directives of JSP, Actions of JSP	<b>6</b>
<b>2</b>	<b>Overview of JSP Form:</b> Implicit objects of JSP, Client response, Server response, HTTP Status Code, Form Processing, Writing Filters, Cookies Handling, Session Tracking. <b>File Handling with JSP:</b> File uploading, Handling Data, Page re-direct, Hits counter, Auto refresh, Sending E-mail, Standard Tags library, Security.	<b>7</b>
<b>3</b>	<b>JSP Environment Setup:</b> Ensure <b>JDK, Tomcat, and Eclipse/NetBeans</b> are installed. Place .jsp files in Tomcat's webapps/ROOT folder. <ol style="list-style-type: none"> <li>Write a simple JSP program to create Syntax.</li> <li>Write a simple JSP program to create JSP Actions.</li> <li>Write a simple JSP program to create a Form Handling (GET/POST).</li> <li>Write a JSP program to create Client &amp; ServerResponse</li> <li>Write a simple JSP program to create Client &amp; Server Response.</li> <li>Write a simple JSP program for cookies Handling .</li> <li>Write a simple JSP program for file Handling File Upload .</li> <li>Write a simple JSP program for file Handling Hit Counter</li> <li>Write a simple JSP program for file Handling Auto Refresh.</li> <li>Write a simple JSP program for Session Tracking.</li> <li>Write a simple JSP program for Writing Filters.</li> </ol>	

<b>References:</b>
1. JSP: The Complete Reference, Phil Hanna, McGraw-Hill.
2. Head First Servlets and JSP, Bryan Basham, Kathy Sierra, Bert Bates, O'Reilly Media, 2008