

CODE	TITLE	L	T	P	C
21IT302	WEB SCRIPTING	3	0	0	3
<b>COURSE OBJECTIVES:</b> <ul style="list-style-type: none"> <li>• To make the students understand how server works and learn to use PHP as the scripting language</li> <li>• To help the students understand the MySQL database management and integrate with the web application</li> <li>• To inculcate the various design patterns available in designing the web application</li> <li>• To make the students use Advanced Javascript and jQuery for client-side scripting</li> <li>• To help the students to understand XML and Web Services, create and use them in web applications.</li> </ul>					
<b>UNIT I: THE JAVASCRIPT LANGUAGE</b>					<b>9</b>
Introduction to Javascript – Developer Console – Javascript Fundamentals – Code Quality – Javascript Objects – Data Types - Advanced Working with functions – Object Properties Configuration.					
<b>UNIT II: OOPS IN JAVASCRIPT</b>					<b>9</b>
Prototypes, Inheritance – Classes – Error Handling – Promises – Async/ await – Generators, advanced Iteration – Modules					
<b>UNIT III: BROWSER: DOCUMENT, EVENTS, INTERFACES</b>					<b>9</b>
Document – Introduction to Events – UI Events – Forms, Controls – Document and Resource Loading –Mutation Observer – Event Loop: microtasks and macrotasks					
<b>UNIT IV: ADVANCED JAVASCRIPT</b>					<b>9</b>
Frames and Windows - Binary Data, Files – Network Requests – Storing Data in the Browser – CSS and JS Animation – Web Components: Shadow DOM and Events					
<b>UNIT V: NODE JS</b>					<b>9</b>
Node Js Introduction- Modules-HTTP Module- File System- URL Module-NPM- EventsUpload Files- Email- Node Js MYSQL-Database connectivity					
<b>Theory: 45   Tutorial: 0   Practical: 0   Total: 45 Periods</b>					

## **TEXT BOOKS**

1. Eric Freeman, Elisabeth Robson, “Head First Javascript Programming”, O'Reilly Media, Inc. March 2014
2. Ivelindemirov, “Learn Javascript with Interactive Exercises Visually”, The beautiful Way to learn a programming language, Nai Inc, 1st Edition

## **REFERENCE BOOKS**

1. Jeremy McPeak and Paul Wilton, "Beginning Javascript", Wrox, Fifth Edition.
2. Kyle Simpson, “You Don’t Know JS”, O’Reilly Media, 1st Edition

## **COURSE OUTCOMES:**

At the end of the course students should be able to

**CO1:** Explain separation of concerns and identify three layers of web and use operators, variables, arrays and control structures, functions and objects in JavaScript.

**CO2:** Use constructors and classes concepts in real time application.

**CO3:** Demonstrate handling web page events.

**CO4:** Design web pages with JS animations.

**CO5:** Apply regular expressions in Javascript Code.

**CO6:** Understand about NODE JS.