

CODE	TITLE	L	T	P	C
21IT302	WEB SCRIPTING	3	0	0	3

COURSE OBJECTIVES:

- To make the students understand how server works and learn to use PHP as the scripting language
- To help the students understand the MySQL database management and integrate with the web application
- To inculcate the various design patterns available in designing the web application
- To make the students use Advanced Javascript and jQuery for client-side scripting
- To help the students to understand XML and Web Services, create and use them in web applications.

UNIT I: THE JAVASCRIPT LANGUAGE

9

Introduction to Javascript – Developer Console – Javascript Fundamentals – Code Quality – Javascript Objects – Data Types - Advanced Working with functions – Object Properties Configuration.

UNIT II: OOPS IN JAVASCRIPT

9

Prototypes, Inheritance – Classes – Error Handling – Promises – Async/ await – Generators, advanced Iteration – Modules

UNIT III: BROWSER: DOCUMENT, EVENTS, INTERFACES

9

Document – Introduction to Events – UI Events – Forms, Controls – Document and Resource Loading –Mutation Observer – Event Loop: microtasks and macrotasks

UNIT IV: ADVANCED JAVASCRIPT

9

Frames and Windows - Binary Data, Files – Network Requests – Storing Data in the Browser – CSS and JS Animation – Web Components: Shadow DOM and Events

UNIT V: NODE JS

9

Node Js Introduction- Modules-HTTP Module- File System- URL Module-NPM- EventsUpload Files- Email- Node Js MYSQL-Database connectivity

Theory: 45 | Tutorial: 0 | Practical: 0 | Total: 45 Periods

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.