

S.Y. M.Sc. Semester III**Theory Departmental Elective Paper - 9(CSA5307): Full Stack****[Credits-4]****Course Outcomes**

At the end of this course, students will be able to

- CO1** Develop the skills to build accessible, usable and attractive User Interfaces for your web applications.
- CO2** To make the user interaction as very simple and most efficient

Unit	Details	Lectures
I	HTML 5 1.1 Understanding Basic Tags / Elements and Attributes 1.2 Working with Basic Tags and Font Formatting Tags 1.3 Understanding Block Level Tags, Inline Tags & Empty Tags 1.4 Heading Tags, Paragraph Tags & Multiple Columns 1.5 Adding Basic Styles using HTML Attributes and CSS Styles 1.6 Inserting Images & Image Attributes 1.7 Working with Links & Link Attributes / Link States	[8]
II	CSS 3 2.1 History of CSS 2.2 Browser Support 2.3 HTML5Selectors and Pseudo Classes 2.4 Fonts and Text Effects, Colours, Gradients, Background 2.5 Images, and Masks, Borders and Box Effects, Transitions, Transforms, and Animations 2.6 Layout: Columns and Flexible Box, Vendor Prefixes 2.7 Embedding Media	[7]
III	JavaScript 3.1 Introduction 3.2 Role as Client Scripting Language 3.3 Variables, Loops & Control Statements 3.4 Arrays / Array Sorting Methods 3.5 Creating Functions / Working with JavaScript Inbuilt Functions 3.6 Scope	[5]
IV	Databases and Web Storage 4.1 NoSQL 4.2 Database Connectivity 4.3 In-memory data stores 4.4 Web storage	[8]
V	HTTP & REST 5.1 What is REST? 5.2 RESTful API	[5]

VI	Bootstrap 6.1 Introduction 6.2 Grid 6.3 Components 6.4 Plugins	[8]
VII	jQuery 7.1 Introduction 7.2 jQuery Syntax 7.3 jQuery Selectors 7.4 jQuery Events 7.5 jQuery Effects 7.6 jQuery HTML 7.7 jQuery Traversing 7.8 jQuery AJAX	[7]

Books-

1. Beginning JQuery By Jack Franklin (APress), 2017.
2. Bootstrap by Jake Spurlock (O'Reilly), 2013.
3. Head First HTML5 Programming, Building Web Apps with JavaScript By Eric Freeman, Elisabeth Robson (O'Reilly), 2011.
4. Beginning JavaScript By Jeremy McPeak and Paul Wilton(Wrox), 2009.
5. Head First Ajax By Rebecca M. Riordan (O'Reilly), 2008

Web references

1. https://www.w3schools.com/whatis/whatis_fullstack_js.asp
2. https://www.tutorialspoint.com/the_full_stack_web.../index.asp
3. https://www.w3schools.com/html/html5_intro.asp
4. <https://jquery.com/>
5. <https://getbootstrap.com/>