### FULL STACK APPLICATION DEVELOPMENT

## III Year – I Semester

Lecture : 3 Internal Marks : 30

Credits : 3 External Marks : 70

## **Course Objectives**

To develop web applications using Full stack technologies.

### **Course Outcomes**

Upon successful completion of the course, the students will be able to

- design web pages using HTML5 and CSS3.
- develop dynamic web pages and perform form validations using Javascript.
- develop server side script to handle the given form data using JSP.
- perform CRUD operations on MySql database using PHP.
- perform various operations on constructing React elements with data.

### **Course Content**

### **UNIT - I: HTML5 and CSS3**

**HTML5:** HTML5 Document Structure, Basic HTML tags, Section elements, text, links, tables, images, forms.

**CSS3:** Evolution of CSS3, Syntax of CSS3, Types, Selectors, Background, Font, Text, Borders.

# **UNIT - II: Bootstrap and JavaScript**

**Bootstrap:** Introduction to Bootstrap, Structure of the page, Typography, Forms. **Java Script:** Introduction to Javascript, variables, primitive data types, control flow statements, Built-in objects, arrays, functions, event handling, DHTML - Object model.

JQuery: Working with JQuery

### **UNIT - III: JSP**

JSP architecture, Life Cycle, Creating Simple JSP Pages, JSP Basic tags, Implicit Objects.

**JDBC**: Introduction to JDBC, JDBC architecture, JDBC Drivers, Database Connectivity, CRUD operations.

# **UNIT - IV: PHP**

Introduction, Creating and running a PHP script, variables, constants, data types, arrays and functions, Reading and processing data from web form controls.

**MySql:** Connecting to MySql server using PHP, creating new database and tables, reading and displaying table data, Inserting, deleting and updating records in database table using PHP.

### **UNIT - V: ReactJS**

Components in React, Styling in React, Creating Complex Components, Transferring Properties, Dealing with States, Going from Data to UI, Working with events.

## **Text Books**

- 1. HTML5 Black Book, Dream Tech Publisher.
- 2. Web Technologies, Black Book, DreamTech Publisher, 2017

# **Reference Books**

- 1. Kirupa Chinnathambi, Learning React, Addison Wesley, 2017.
- 2. Jorge Krause, Introducing Bootstrap 4, Apress Publisher, 2016
- 3. Riaz Ahmed, "Full Stack Web Development For Beginners", Atlantic Publishers and Distributors.

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