DEPARTMENT OF M.Sc. COMPUTER SCIENCE

MASTER OF COMPUTER APPLICATIONS (MCA) PROGRAMME

MCAS 105 : WEB PROGRAMMING		
Hours/Week: 4 Credits : 4		I.A. Marks: 30 Exams. Marks: 70

Course Outcomes:

CO1: Implement interactive web page(s) using HTML, CSS and JavaScript.

CO2: Design a responsive web site using HTML5 and CSS3.

CO3: Build Dynamic web site using server side PHP Programming and Database connectivity.

CO4: Describe and differentiate different Web Extensions and Web Services.

CO5: Describe different Web Services Standards.

UNIT-I 12 Hours

Introduction: Web Publishing, Web Browsers, Web Servers, URL; Essential Web Developer Tools; Web hosting. HTML5 and CSS3: Introduction, Basics – Structure, Essential Tags, Lists, Links; Formatting Text with HTML and CSS, Including Style Sheets in a Page, Varieties of Selectors, Units of Measure, Box Model, Using Images on Web Pages, Image Formats, Using Images – Basics, Text Alignments, Links, Scale, Backgrounds, Bullets; Image-map, Image Etiquettes. Tables, Creating Table, Parts of Table; Formatting Tables – Size, Borders, Cells; Alignment and Spacing; Spanning; Advanced Enhancements.

UNIT-II 12 Hours

Using CSS to Position Elements: Positioning Schemes, Absolute Positioning, Fixed Positioning, Controlling Stacking, Creating Drop-Down Menus. Designing HTML5 Forms: Basics; Creating Controls, Buttons and Fields; Grouping Controls; Displaying Updates; Applying Styles. Structuring a Page with HTML5: History, Laying Out a Page, Structural Tags, Page Outline, Structural Elements. Advanced CSS Page Layouts: Laying Out Page, The Role of CSS in Web Design.

UNIT-III 12 Hours

JavaScript and jQuery: JavaScript – Significance, Basics, Environment, Events, Validating Forms, Hiding and Showing Content, Adding New Content to a Page. **Using jQuery:** Introduction, JavaScript Libraries, Selecting Elements from the Document, Binding Events, Modifying Styles on the Page, Modifying Content on the Page, Special Effects, AJAX and jQuery.

PHP: Introduction, Basics, Loops, Built-In Functions, User-Defined Functions, Processing Forms, Using PHP Includes, Database Connectivity, Regular Expressions, Sending Mail, Object-Oriented PHP, Cookies and Sessions, File Uploads.

REFERENCE BOOKS:

- 1. Laura Lemay et.al., **Sams Teach Yourself HTML, CSS & JavaScript Web Publishing in One Hour a Day**, Pearson Education, 2016, 7th Edition.
- 2. Jon Duckett, **Web Design with HTML, CSS, JavaScript and jQuery** (set), Wiley, 2014
- 3. Robert W. Sebesta, **Programming the World Wide Web**, Pearson Education

