

**JYOTI NIVAS COLLEGE AUTONOMOUS
SYLLABUS FOR 2018 BATCH AND THEREAFTER**

Programme: B.C.A

Semester: V

WEB PROGRAMMING

Course Code: 18BCAVT3

No. of Hours: 60

COURSE OBJECTIVES:

- To learn about XML and XSL Transformations
- To enable students to design web applications using ReactJS.
- To learn about .NET technology, this provides Multilanguage environment.
- To acquire the nature of the development and deployment cycles of enterprise applications.

LEARNING OUTCOMES:

- To understand the XML and XSL Transformations
- To understand ReactJS scripts to handle web applications.
- To understand about windows forms, Web Forms, ADO.NET Data Access and Crystal Reports.

UNIT - I

12 HRS

XML: Introduction, XML Structure, Xml Elements, Adding Attributes, comments.

Document Type Definition (DTD): DTDs and Validation, Adding DTDs to your document, Defining DTD Entities: Understanding Entities.

XSL Basics: Introduction, XSL Transformations.

UNIT - II

10 HRS

ReactJS Introduction: Introduction on ReactJS, Features, Advantages, Limitations, Environment Setup, Stateless and Stateful Components, State Object, Props Overview & Validation.

UNIT - III

10 HRS

ReactJS Component API : Components of API, Component lifecycle methods, Forms, events, using refs, keys, Router.

UNIT - IV

16 HRS

.NET framework: The origins of .NET technology, CLR, CTS, CLS, MSIL, Managed code.

ASP.NET: Setting up ASP.NET and IIS, developing ASP.NET application, Differences between web-based and windows based application, ASP.NET Page Life Cycle, Tasks and Events.

ASP.NET Controls: Standard web controls, validation controls, state management, handling exceptions.

UNIT - V

12 HRS

ADO.NET:ADO.NET- Creating a database, creating web sites for database use, entering data from a web site, **Data Binding** – Repeater, DataList, DataGrid.

Crystal Report – Connection to database, Table, Queries, Building Report, Modifying Report, Formatting fields.

REFERENCES:

1. Heather Williamson, The Complete Reference XML, Tata McGRaW-HILL Edition, 2001
2. https://www.tutorialspoint.com/reactjs/reactjs_overview.htm
3. <https://goalkicker.com/ReactJSBook/ReactJSNotesForProfessionals.pdf>
4. E.Balaguruswamy. Programming in C# .Tata McGraw Hill Publications.Third Edition.
5. William B. Sanderse. ASP.NET A Beginner's Guide. Tata McGraw Hill Education private limited Edition.