

Contents

<i>Preface</i>	(vii)
<i>Acknowledgement.....</i>	(ix)

UNIT - 1

Hyper Text Markup Language

1.1 Introduction	1
1.2.1 Structure of HTML Program.....	5
1.3 HTML Common Tags	7
1.3.1 Creating a Web Page using HTML	8
1.3.2 Text Formatting Tags.....	9
1.3.2.1 Headline tag.....	9
1.3.2.2 Paragraphs, Line Breaks & Horizontal Rule	10
1.4 Hyper Links	11
1.5 Images.....	13
1.6 Lists	15
1.7 Applying Attributes to the Tags	17
1.8 Advanced Text Formatting.....	19
1.9 Tables	22
1.10 Frames	30
1.11 Forms.....	44
1.12 Cascading Style Sheets.....	48

UNIT - 2

Java Script

2.1 Introduction to Java Script.....	79
2.2 Java Script Operators.....	80
2.3 Conditional Statements.....	82
2.3.1 If Statement.....	82
2.3.2 If..else Statement.....	83
2.3.3 If..else if..else Statement	84
2.3.4 The Java Script Switch Statement.....	86

2.4	JAVA SCRIPT FUNCTIONS	87
2.5	JAVA SCRIPT POPUP BOXES	89
2.5.1	Alert Box.....	89
2.5.2	Confirm Box	91
2.5.3	Prompt Box	92
2.6	LOOPS	93
2.6.1	For Loop.....	93
2.6.2	While Loop	94
2.6.3	do while Loop	95
2.6.4	For In Statement.....	98
2.7	JAVA SCRIPT EVENTS	99
2.8	Exception Handling	100
2.9	Java Script Objects	103
2.9.1	String Object.....	104
2.9.2	Date Object	108
2.9.3	Array Object.....	112
2.9.4	Math Object.....	117
2.9.5	Boolean Object.....	121
2.9.6	Window Object	121
2.10	Dynamic HTML with Java Script	128

UNIT - 3

XML

3.1	Introduction to XML	151
3.2	Basic Building Blocks of XML Documents.....	157
3.3	Validation of XML	163
3.3.1	Document Type Definition (DTD).....	163
3.3.2	XML Schema	165
3.4	XML Processors/Parsers.....	169
3.4.1	DOM Parser	169
3.4.2	SAX.....	173

UNIT - 4**Java Beans**

4.1	Introduction to Java Beans	210
4.2	Advantages of Java Beans	211
4.3	Beans Development Kit (BDK) Introspection.....	212
4.4	BDK Components	214
4.5	Java Bean Properties (Design Patterns for.....	215
4.5.1	Simple Properties	216
4.5.2	Boolean Properties	216
4.5.3	Indexed Properties.....	217
4.5.4	Bound Properties.....	218
4.5.5	Constrained Properties	218
4.5.6	Event Handling in Java Beans.....	219
4.6	Java Beans API.....	220
4.7	The BeanInfo Interface.....	223
4.8	Developing Simple Java Bean using BDK.....	223
4.10	Customization.....	229
4.11	Introduction to EJB's.....	232
4.11.1	Session Beans.....	232
4.11.2	Entity Beans	234
4.11.3	Message-Driven Beans.....	235

UNIT - 5**Servlets**

5.1	Introduction to Servlets	246
5.2	Java Servlet Development Kit (JSDK).....	251
5.2.1	javax.servlet Package	251
5.2.2	javax.servlet.http	259
5.3	Tomcat Web Server.....	265
5.4	First Servlet Program.....	269
5.4.1	Reading Servlet Initialization Parameters	274
5.5	Session Tracking	277

UNIT - 6**Java Server Pages**

6.1	Introduction to JSP	301
6.2	The Problem with Servlets	301
6.3	The Anatomy of a JSP Page	304
6.3.1	JSP Elements.....	305
6.3.1.1	JSP Directives.....	305
6.3.1.2	JSP Standard Action Elements	305
6.3.1.3	JSP Scripting Elements.....	306
6.4	JSP Processing.....	306
6.5	JSP Application Design with MVC	313
6.6	Setting Up the JSP Environment	314
6.7	Installing the Java Software Development Kit (JSDK or JDK)	314
6.8	APACHE TOMCAT INSTALLATION	321

UNIT - 7**JSP Application Development**

7.1	Generating Dynamic Content	336
7.1.1	Using JSP Directives.....	338
7.1.2	Using Template Text.....	339
7.1.3	Using JavaBeans	340
7.1.4	Accessing JavaBean Properties.....	342
7.1.5	Input and Output	343
7.1.6	Validating user Input.....	347
7.2	Using Scripting Elements	348
7.3	Implicit JSP Objects	348
7.4	Conditional Processing	350
7.5	Displaying Values using Expressions.....	351
7.5.1	Using More Request Methods.....	355
7.6	Using an Expression to Set an Attribute.....	356
7.7	Declaring Variables and Methods	356

Contents (xv)

7.8	Error Handling and Debugging	360
7.8.1	Dealing with Syntax Errors.....	361
7.8.2	Element Syntax Errors	361
7.8.3	Scripting Syntax Errors	364
7.8.4	Debugging a JSP-Based Application	365
7.8.5	Dealing with Runtime Errors	368
7.9	Sharing Data between JSP Pages, Requests, and Users	370
7.9.1	Passing Control and Data between Pages	371
7.9.2	Passing Control from One Page to Another.....	372
7.9.3	Passing Data from One Page to Another.....	374
7.10	Sharing Session and Application Data	375

UNIT - 8

Data Base Access

8.1	Database Programming using JDBC	390
8.1.1	JDBC Architecture.....	390
8.1.2	JDBC Components.....	391
8.2	JDBC Drivers	392
8.2.1	JDBC Drivers Types	392
8.2.2	Steps to Connect Database	395
8.3	JDBC API.....	398
8.4	Accessing a MySQL Database using JAVA Program.....	418
8.5	Accessing a MySQL Database using JSP Program - JSPMySQL.jsp	422
8.6	Steps to Create Data Source Name (DSN)	424
8.7	Application – Specific Database Actions	427
8.8	Deploying JAVA Beans in a JSP Page.....	435
8.9	Introduction to Struts Framework.....	437

<i>Index</i>	439
---------------------------	------------

