

**BCA 6<sup>th</sup> SEMESTER**  
**DISCIPLINE SPECIFIC COURSE (CORE)**

**BCA621C1: INTERNET TECHNOLOGIES**

**CREDITS: THEORY: 4; PRACTICAL: 2**  
**MAX. MARKS: THEORY: 60; PRACTICAL: 30**  
**MIN. MARKS: THEORY: 24; PRACTICAL: 12**

**THEORY: 60 LECTURES**

**UNIT-I**

Introduction to HTML Programming (5 lectures)

**Java**

Use of Objects, Array and ArrayList class

**JavaScript (10 lectures)**

Datatypes, operators, functions, control structures, events and event handling.

**TJNIT-II**

**JDBC (15 lectures)**

JDBC Fundamentals, Establishing Connectivity and working with connection interface, Working with statements, Creating and Executing SQL Statements, Working with Result Set Objects.

**UNIT-III**

**JSP (15 lectures)**

Introduction to JavaServer Pages, HTTP and Servlet Basics, The Problem with Servlets, The Anatomy of a JSP Page, JSP Processing, JSP Application Design with MVC, Setting Up the JSP Environment, Implicit JSP Objects, Conditional Processing, Displaying Values, Using an expression to Set an Attribute, Declaring Variables and Methods, Error Handling and Debugging, Sharing Data Between JSP Pages, Requests, and Users, Database Access.

**UNIT-IV**

**Java Beans (15 lectures)**

Java Beans Fundamentals, JAR files, Introspection, Developing a simple Bean, Connecting to DB

**Recommended Books:**

1. Ivan Bayross, Web Enabled Commercial Application Development Using Html, Dhtml, javascript, Perl Cgi, BPB Publications, 2009.
2. Cay Horstmann, BIG Java, Wiley Publication , 3rd Edition., 2009
3. Herbert Schildt, Java 7, The Complete Reference, 8th Edition, 2009.
4. Jim Keogh, The Complete Reference J2EE, TMH, 2002.
5. O'Reilly, Java Server Pages, Hans Bergsten, Third Edition, 2003.

**LAB INTERNET TECHNOLOGIES (CREDITS: 2; LECTURES: 60)**

Create event driven program for following:

1. Print a table of numbers from 5 to 15 and their squares and cubes using alert.
2. Print the largest of three numbers.
3. Find the factorial of a number n.
4. Enter a list of positive numbers terminated by Zero. Find the sum and average of these numbers.
5. A person deposits Rs 1000 in a fixed account yielding 5% interest. Compute the amount in the account at the end of each year for n years.

Read n numbers. Count the number of negative numbers,

Positive numbers and zeros in the list.