

3/4 B.Tech. SIXTH SEMESTER

EM6L3

WEB TECHNOLOGY LAB

Credits: 2

Lab/Practice: 3 periods/week

Internal assessment : 25 marks

Semester end examination: 50 marks

Course Objectives:

To provide an idea on

- Basic concepts of HTML, DHTML, XML to develop a web page.
- Server-Side Programming using Servlets, Java Server Pages and AJAX.
- Creation of pure Dynamic Web Application using JDBC.

Learning Outcomes:

After completion of the course Students will be able to

- Understand the creation of a web page.
- Develop advanced HTML pages with the help of tags and scripting language.
- Develop user defined tags to exchange the data.
- Understand the object to object communication using JAVA Beans
- Build robust web applications using JSP with JDBC

LIST OF PROGRAMS:

ANY FOUR FROM PART- I & ANY ONE FROM PART-II

PART -I:

- 1) Write a html program that must cover atleast 15 html tags.
- 2) Write a html program that includes inline css, internal css, externa css.
- 3) Write a javascript program to perform form validations.
- 4) Write a javascript program to design a dynamic html page.
- 5) Write an xml document using XSLT.
- 6) Write a program that parses an xml document into an xml DOM object and then extracts some info from it with a JavaScript code.
- 7) Write a servlet program to calculate , the user choice of arithmetic operations(i.e addition,subtraction,multiplication,division. On client side user give input and select one of the arithmetic operation).
- 8) Write a simple cookie program using servlets.
- 9) write an application that will share data at Application level using ServletContext interface.

- 10) write a program that will dispatch the request to other servlets using include & forward methods (make use of interface RequestDispatcher).
- 11) Write a jsp program that retrieves data from form elements and store/save the data in database(make use of java.sql package).
- 12) Write a jsp program that display the contents of a database table based on choice made by user(write a html file that lists database tables which resides in database ,upon user selection the content of particular table displayed.).
- 13) write a factorial program in JSP using include directory.
- 14) write a simple JSP program using java beans.
- 15)Write a jsp program to create a simple custom tag.

Learning resources

Text Books:

1. Web Technologies, Black Book, Kogent Learning Solutions Inc, Dreamtech Press.(UNIT – I , II, III & VIII)
2. JDBC, Servlets, and JSP, New Edition, Santhosh Kumar K , Kogent Learning Solutions Inc, Dreamtech Press (UNIT - IV, V,VI,VII & VIII)

Reference Books:

1. Web Technologies , Uttam K. Roy, Volume 2 , Oxford University
2. Core Servlets and Java Server Pages Volume 1: CORE TECHNOLOGIES
Marty Hall and Larry Brown Pearson
3. Internet and World Wide Web – How to program , Dietel and Nieto