



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA**  
**KAKINADA – 533 003, Andhra Pradesh, India**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

III Year – II Semester		L	T	P	C
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WEB TECHNOLOGIES LAB					

**Course Objectives:**

From the course the student will

- Learn the core concepts of both the frontend and backend programming course
- Get familiar with the latest web development technologies
- Learn all about PHP and SQL databases
- Learn complete web development process

**Course Outcomes:**

By the end of the course the student will be able to

- Analyze and apply the role of languages like HTML, CSS, XML
- Review JavaScript, PHP and protocols in the workings of the web and web applications
- Apply Web Application Terminologies, Internet Tools, E – Commerce and other web services
- Develop and Analyze dynamic Web Applications using PHP & MySQL
- Install & Use Frameworks

**List of Experiments:**

- 1) Design the following static web pages required for an online book store web site:

**(a) HOME PAGE:**

The static home page must contain three **frames**.

Top frame: Logo and the college name and links to Home page, Login page, Registration page, Catalogue page and Cart page (the description of these pages will be given below).

Left frame: At least four links for navigation, which will display the catalogue of respective links.

For e.g.: When you click the link “MCA” the catalogue for MCA Books should be displayed in the Right frame.

Right frame: The *pages to the links in the left frame must be loaded here*. Initially this page contains description of the web site.

Web Site Name				
Logo				
Home	Login	Registration	Catalogue	Cart
mca mba BCA	Description of the Web Site			



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**(b) LOGIN PAGE:**

Logo	Web Site Name			
Home	Login	Registration	Catalogue	Cart
MCA MBA BCA	<div style="text-align: center;">           Login : <input type="text" value="11a51f0003"/>            Password: <input type="password" value="*****"/>  <input type="button" value="Submit"/> <input type="button" value="Reset"/> </div>			

**(c) CATALOGUE PAGE:**

The catalogue page should contain the details of all the books available in the web site in a table: The details should contain the following:

1. Snap shot of Cover Page.
2. Author Name.
3. Publisher.
4. Price.
5. Add to cart button.

Logo		Web Site Name		
Home	Login	Registration	Catalogue	Cart
MCA	   	Book : XML Bible Author : Winston Publication : Wiley	\$ 40.5	
MBA		Book : AI Author : S.Russel Publication : Princeton hall	\$ 63	
BCA		Book : Java 2 Author : Watson Publication : BPB publications	\$ 35.5	
		Book : HTML in 24 hours Author : Sam Peter Publication : Sam	\$ 50	

**(d). REGISTRATION PAGE:**

Create a “registration form” with the following fields

- 1) Name (Text field)
- 2) Password (password field)
- 3) E-mail id (text field)
- 4) Phone number (text field)
- 5) Sex (radio button)
- 6) Date of birth (3 select boxes)
- 7) Languages known (check boxes – English, Telugu, Hindi, Tamil)
- 8) Address (text area)

- 2) Design a web page using CSS (Cascading Style Sheets) which includes the following: Use different font, styles:

In the style definition you define how each selector should work (font, color etc.).



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Then, in the body of your pages, you refer to these selectors to activate the styles

- 3) Design a dynamic web page with validation using JavaScript.
- 4) Design a HTML having a text box and four buttons viz Factorial, Fibonacci, Prime, and Palindrome. When a button is pressed an appropriate javascript function should be called to display
  - a. Factorial of that number
  - b. Fibonacci series up to that number
  - c. Prime numbers up to that number
  - d. Is it palindrome or not
- 5) Write JavaScript programs on Event Handling
  - a. Validation of registration form
  - b. Open a Window from the current window
  - c. Change color of background at each click of button or refresh of a page
  - d. Display calendar for the month and year selected from combo box
  - e. On Mouse over event
- 6) Write an XML file which will display the Book information which includes the following:
 

1) Title of the book	2) Author Name	3) ISBN number
4) Publisher name	5) Edition	6) Price

  - a) Write a Document Type Definition (DTD) to validate the above XML file.
  - b) Write a XML Schema Definition (XSD) to validate the above XML file.
- 7) Create Web pages using AJAX.
- 8) User Authentication:
 

Assume four users user1, user2, user3 and user4 having the passwords pwd1, pwd2, pwd3 and pwd4 respectively. Write a PHP for doing the following.

  1. Create a Cookie and add these four user id's and passwords to this Cookie.
  2. Read the user id and passwords entered in the Login form (week1) and authenticate with the values (user id and passwords) available in the cookies.

If he is a valid user (i.e., user-name and password match) you should welcome him by name (user-name) else you should display “You are not an authenticated user ”.

Use init-parameters to do this.
- 9) Example PHP program for registering users of a website and login.
- 10) Install a database (Mysql or Oracle).
 

Create a table which should contain at least the following fields: name, password, email-id, phone number (these should hold the data from the registration form).

Write a PHP program to connect to that database and extract data from the tables and display them. Experiment with various SQL queries.

Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page (week2).
- 11) Write a PHP which does the following job:
 

Insert the details of the 3 or 4 users who register with the web site (week9) by using



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registration form. Authenticate the user when he submits the login form using the user name and password from the database (similar to week8 instead of cookies).

- 12) Implement a Servlet program on request response processing.
- 13) Implement a Servlet program for Registration Page.
- 14) Connect to a database using JSP and practice SQL Queries (MySQL or Oracle).