



Kot Bhalwal, Jammu



Model Institute of Engineering  
& Technology (Autonomous)  
Lab Handout

## LABORATORY HANDOUT

Web Technologies (MCA-311)

MCA-3rd SEMESTER

ACADEMIC YEAR (2024-25)

**Mr. Vishal Gupta**

Associate Professor

Department of Computer Applications



Department of Computer Applications

Model Institute of Engineering & Technology (Autonomous)

Kot Bhalwal, Jammu - 181122

[www.mietjmu.in](http://www.mietjmu.in)



Dr. Arun K. Gupta Teaching-Learning Centre

Version 1.1



Please Do Not Print Unless Necessary



Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
							Sessional	Final Exam	Total
MCA-311	Web Technologies	PCC	3	0	0	6	-	75	75

### COURSE OUTCOMES

At the end of the course the student will be able to:	
CO1	Demonstrate an understanding of designing a web page using HTML.
CO2	Develop web pages using DHTML and Cascading Styles sheets.
CO3	Develop dynamic web pages using JavaScript (client-side programming).
CO4	Develop dynamic web pages using database connectivity.
CO5	Develop an interactive application using ASP.net.

### LIST OF EXPERIMENTS

S.No.	Title
1	Create an HTML document with the different formatting options i.e., Bold, Italics, Underline, Headings (Using H1 to H6 heading styles)
2	Create an HTML document with the different, Font (Type, Size and Color), Background (Colored background/Image in background), Paragraph, Line Break, Horizontal Rule, Pre tag
3	Create an HTML document which consists of: Ordered List, Unordered List, Nested ordered and/or unordered List and Image
4	Create an HTML document which implements Internal linking as well as External linking
5	Create a table using HTML demonstrating use of columns and rows, merging multiple rows and/or columns etc. With data and image values and contents with hyperlinking
6	Create HTML documents having multiple frames in different possible formats/organization
7	Design a bio data form using form and controls in HTML
8	Implementation of CSS selectors
9	<ul style="list-style-type: none"><li>Implementation of Inter CSS</li><li>Implementation of External CSS</li></ul>
10	Program in JavaScript to check given no is even or odd
11	<ul style="list-style-type: none"><li>Program to calculate factorial of a no</li><li>Program to generate series from 1 to 10</li></ul>
12	<ul style="list-style-type: none"><li>Implementation of inbuilt String functions in JavaScript</li><li>Implementation of inbuilt Mathematical functions in JavaScript</li></ul>
13	<ul style="list-style-type: none"><li>Implementation of Arrays in JavaScript</li><li>Implementation of Strings</li></ul>
14	Implementation of alert and input functions.
15	Implementation of events in JavaScript



16	<ul style="list-style-type: none"><li>• Create an XML document with the following sample real estate data ▪ Root element real-estate will contain a sequence of sub-elements agencies, owners, properties and flats, all with an empty content.</li><li>• Create an internal DTD for the XML document.</li><li>• Move the previous DTD to an external file and validate the XML document</li></ul>
17	Use of different controls
18	Write a program to insert data into the Database
19	Write a program to Update the existing data into the Database
20	Write a program to delete data from the Database
21	Write a program to view individual data from the Database
22	Write a program to view data in tabular from the Database
23	Create a web form with Label, Textbox, Button, Hyperlink, and Checkbox controls.
24	Handle button click event to display text from Textbox in the Label.
25	Implement checkbox functionality to enable/disable a Textbox.
27	Implement different state management techniques (Cookies, Session, Application, View State, Query String).
28	Use Required Field Validator, Compare Validator, Range Validator, and Custom Validator to validate user input.

#### ADDITIONAL WEB RESOURCES

1.	VLAB LINK: Web Technologies which gives hands-on experience to the students. <a href="https://html-iitd.vlabs.ac.in/">https://html-iitd.vlabs.ac.in/</a>
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### LAB REPORT INSTRUCTIONS

- Provide specific title of the lab experiment.
- Theory: Provide a concise abstract (typically 100-200 words) that summarizes the purpose, methods, key findings, and significance of the experiment.
- Materials/ Equipment: List all materials, components, and equipment used in the experiment. Include specifications when applicable.
- Software/Simulation Tools:
- Experimental Procedure: Describe the step-by-step procedure for conducting the experiment. Be detailed and clear in your instructions. Include diagrams or schematics to illustrate the setup, connections, and component placement. Explain any variations or adjustments made to the standard procedure.
- Observation & Calculations/Analysis: Detail the data you collected during the experiment. Include descriptions of measurements and any calculations made. Use tables, charts, or graphs to present data clearly. Discuss any trends, patterns, or significant observations. Interpret the data in the context of the experiment's objectives. Ensure that all figures, tables, and equations are correctly labeled.
- Results: Summarize the key findings of the experiment. Present results in a clear and organized manner using tables and graphs. Include units of measurement and labels for data points.
- Conclusion: Provide a concise summary of the experiment's key points and outcomes.

### GRADING AND ASSESSMENT

- **Continuous Evaluation:** 35 marks
- **Final Demo & Viva:** 30 marks
- **Attendance:** 10 marks
- **Lab Overall Marks:** 75 marks

### COURSE POLICIES

- **Attendance:** Minimum 75% attendance is mandatory to appear in the final examination of the course.
- **Late Submissions:** Manuals and projects must be submitted by the specified timelines.

### FACULTY INFORMATION

- **Office Hours**  
Monday (12:05 PM - 12:55 PM)  
Friday (12:05 PM - 12:55 PM)
- **Contact Information**  
[vishal.mca@mietjammu.in](mailto:vishal.mca@mietjammu.in)



### RUBRICS FOR LAB CONTINUOUS EVALUATION

Parameters	Performance			Marks
	Low	Medium	High	
<b>Execution of the Experiment</b>	Student was not able to setup and conduct the Experiment completely	Student was able to setup and conduct the experiment but measurement/results/observations were not correct	Students was able to set and conduct the experiment and the measurement/results/observations were not correct	10
	0-2 Marks	3-6 Marks	7-10 Marks	
<b>Record</b>	Student was not able to describe the detailed procedure and could not record the measurement.	Student was able to describe the detailed procedure partially or with some inaccuracy.	Student was able to describe the detailed procedure accurately and record all measurements correctly.	10
	0-2 Marks	3-6 Marks	7-10 Marks	
<b>Viva Voice</b>	Students could not demonstrate sufficient knowledge of foundation, functional or applied aspects related to the experiment during viva.	Students demonstrated sufficient knowledge of foundation, functional or applied aspects related to the experiment during viva.	Students demonstrate strong knowledge of foundation, functional or applied aspects related to the experiment during viva	10
	<b>0-2 Marks</b>	<b>3-6 Marks</b>	<b>7-10 Marks</b>	
<b>Total Marks</b>				<b>30</b>