**IT 352 - WEB TECHNOLOGIES LAB (R18)**

**Semester V [Third Year]**

**Lab Cycle – 1**

1. Develop your **Bio-data** form using forms and basic XHTML tags.
2. Write the CSS rules for a simple static website.
3. Rule for a background image is **left top** of the page, **tiling horizontally**. The image should **remain in place** when the user scrolls up or down.
4. All paragraphs text **1.5 times** larger than the base font of the system and colors it **red** (inline, embedded and external style sheet).
5. Rule for all H1 & H2 elements a **padding of 0.5em**, a grooved border style and a **margin of 0.5em**. (Box Model).
6. Write the following scripts using JavaScript
7. Search a number from a given list of numbers using **Binary Search**technique.
8. Sort given set of numbers using **Bubble Sorting** technique.
9. Write scripts for the following using recursive functions
10. Write a function to power which takes two arguments **m** and **n**, and returns **mn** (consider m and n are integers**).**
11. Write a function to find out **Factorial** & finding nth **Fibonacci** in a single program.
12. Write a script which reads two matrices from the prompt dialog, and do the **matrix multiplication**.
13. Write Scripts for the following events
14. Display **digital clock** using ONLOAD event.
15. To **move text** along with mouse pointer. The text will be inputted by a text field.
16. Write java script which uses random number generation to create sentences. Use four arrays of strings called **article**, **noun**, **verb**, and **preposition**. Create a sentence by selecting a word at random from each array in the following order.

**Article, noun, verb, preposition, article, and noun.**

As each word is picked, concatenate it to the previous words in the sentence. The words should be separated by spaces. When the final sentence is output, it should start with capital letter and end with period. The program should generate 20 sentences and output them to an HTML TEXTAREA.

The arrays should be filled as follows.

**Article** array contains “**the**”, “**a**”, “**one**”, “**some**”, and “**any**”.

**Noun** array contains “**boy**”, “**girl**”, “**dog**”, “**town**”, and “**car**”.

**Verb** array contains “**drove**”, “**jumped**”, “**ran**”, “**walked**”, and “**skipped**”.

**Preposition** array contains “**to**”, “**from**”, “**over**”, “**under**”, and “**on**”.

1. Design a simple web page containing user’s login information. Validate that form by using following conditions.
   1. Name should be entered.
   2. Password must be greater than or equal to 6 characters.
   3. Ignore the submit event.
   4. Prompt the user whether he wants to clear the data or not. If yes then only clear the login information from the text fields.
2. Display all **anchor elements** in a given using DOM collections.
3. Write a program on **event bubbling** and mouse event model. (event bubbling and cancel Bubble)
4. Write and validate XML documents using DTD.
5. Write and validate XML documents using XML Schema (XSD).
6. To display XML data in the XHTML table using XSL.

**Lab Cycle – 2**

1. Implement a JAVA Servlet Program to implement a dynamic HTML using **Generic Servlet** (user name and password should be accepted using HTML and displayed using a Servlet).
2. Implement a JAVA Servlet Program using **cookies**.
3. Implement a JAVA Servlet Program to implement sessions using **HTTP Session Interface.**
4. Write a JSP program
5. Write a JSP program