## CIS 228 (Fall, 2012)

Final Exam, 12/18/12
Name (sign)
Name (print) email

| Question | Score |
| :---: | :---: |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| TOTAL |  |

## Question 1

## True or false:

$\qquad$ A $\mathbf{p}$ element cannot have an ol element embedded within it.
$\qquad$ An a element cannot have another a element embedded within it.
$\qquad$ Images cannot be uses as labels for hyperlinks.
$\qquad$ The td elements cannot contain table elements.
$\qquad$ The caption element cannot be the first child of a table element.
$\qquad$ The columns of a table cannot be specified by the te element.

URL's in CSS cannot be specified using the "href" attribute.
$\qquad$ Event attribute values cannot contain calls to JavaScript functions.

A web page cannot access JavaScript functions defined in a separate file.

JavaScript cannot automatically convert Strings to numbers.

## Question 2

Indicate which of the following tasks could be best accomplished using HTML (H), CSS (C), or JavaScript (JS).
$\qquad$ Specify that the elements of a list should be numbered using capital letters.
$\qquad$ Specify an action to be taken when a button is pushed.
$\qquad$ Make row or column headings in a table.
$\qquad$ Add an element to an ordered list in responses to user input.
$\qquad$ Specify that the borders around consecutive cells in a table be fused together.
$\qquad$ Specify a title for a button on a form.
$\qquad$ Calculate the total field of a form.
$\qquad$ Create a hyperlink to another file.
$\qquad$ Solicit the users name when a web page is first loaded.
$\qquad$ Specify the font to be used for the text inside a $\mathbf{q}$ element.

## Question 3

Indicate which of the following identifiers is the name of $\boldsymbol{C}$ - an HTML character entity, $\boldsymbol{E}$ - an HTML element, $\boldsymbol{A}$ - an HTML attribute, $\boldsymbol{P}$ - a CSS property, $\boldsymbol{J}$ - a JavaScript keyword or function video
_ class
__ option
createElement
border
function
display
\ 
alert
section

## Question 4

Fill in the blanks with the name of an HTML element that could be an immediate child of the element named on its right and could be the immediate parent of the element on its left. Put an X in any blank that no element could fit.


## Question 5

The following is the file and directory structure of the www.mylibrary.com website.
/

```
index.html
index.css
BOOKS
        BIOGRAPHY
            napoleon.html
            wellington.html
        HISTORY
            FRANCE
                revolution.html
    PICTURES
        napoleon.jpg
```

A) In index.html, create a hyperlink to napoleon.html labeled "Napoleon".
B) In wellington.html, create a hyperlink to napoleon.html labeled "defeated".
C) In napoleon.html, embed the napoleon.jpg image.
D) In revolution.html, create a hyperlink to napoleon.html labeled with napoleon.jpg.
E) In index.css, create a rule making napoleon.jpg the background image on a page.

## Question 6

For each of the CSS selectors below, show its "specificity tuple" and describe the HTML elements that would be displayed in red if it were used in the following rule:
$\ldots$ \{ color : red ; \}
Order the selectors from most to least specific:
a) section\#sports
b) li.editorial $\mathbf{p}$ em.oped
c) table\#deaths th.contry li
d) nav
e) article ol q
f) a\#weather:visited
g) form.news
h) section\#classified > div.ad
i) header + blockquote
j) ul p

## Question 7

Write a complete HTML 5 (standards compliant) document that corresponds to the following DOM tree:

```
html
    head
        meta charset="utf-8"
        title
            TODO Today
    body
        h2
            shopping
        ol
            li
            soap
            li
                supplies
            ul
                li
                pencils
            li
                                    pens
li
                    radio
```


## Question 8

Write the HTML 5 elements to create approximately the following table (don't worry about styling it).

| Score |  |  |  |
| :--- | ---: | :--- | ---: |
|  | red | black |  |
| odd | 2 |  | -2 |
| even | -2 | new | 4 |
| old | -4 |  |  |

## Question 9

Create an order form for a candy store. The form will be processed by the "/order.php" script at the "www.candy.com" domain. Be sure to include a button that will cause the form to be submitted. Remember that the browser will transform a completed form into a sequence of name-value pairs and submit them to the application. The names for this form are listed in italic and described below. You don't need to specify a complete webpage, just the form. Don't worry about styling the form. But, do make sure that the user has enough information to fill it out.
item: use a menu to allow selection of "chocolate", "caramel", or "taffy".
address: space for up to 4 lines of text 80 columns wide.
card: either "MasterCard" or "Visa".
number: space for a credit card number (disguise the characters as they are typed).

## Question 10

Briefly describe what the following JavaScript code fragments do

$$
7 \text { + " shoes"; }
$$

alert("Date not specified!");
var date $=$ prompt("Enter date", "12/18/12");
window.onload = init;
var name $=$ document.getElementById("name");
var fido = new Dog("Fido", "mixed", 20);
var li = document.createElement("li");
var $c=$ list.getAttribute("class");
function random(n) \{ return Math.floor(n*Math.random()); \}
var list = document.getElementById("list");
var li = document.createElement("li");
li.innerHTML = "Lehman College";
list.appendChild(li);

