

FINAL EXAMINATION – MAY 2005
CSC 105 – INTERACTIVE WEB DOCUMENTS
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This is an open-book, open-notes exam.

All answers should be written in your exam booklet(s). Start with the questions that you know how to do, and try not to spend too long on any one question. Partial credit will be granted where appropriate if you show your work. You will have two hours and twenty minutes. Good luck!

Cascading Style Sheets (20 points)

Consider the following fragment of HTML:

```
<p class="fruit" id="first">Apple</p>
<div id="one">
  <p class="fruit">Banana</p>
  <p>Crayon</p>
</div>
<div id="two">Diamond</div>
```

- a.) Write a single CSS rule that would make all the text three centimeters tall.
- b.) Write a single CSS rule that would center the word **Apple** in the page.
- c.) Write a single CSS rule that would place a green background behind the words **Banana** and **Crayon**.
- d.) Write a single CSS rule that would make the word **Banana** yellow.
- e.) Write a single CSS rule with three parts that would make the word **Diamond** appear in the top right corner of the page.

Dynamic HTML (12 points)

Assume that the variables shown below have already been set up by a script. (Perhaps they are from analyzing the results of a submitted form.) Write a short piece of Javascript that would create the text shown beneath when executed while the page is loaded. In your answer, include tags to recreate the italicization and bold type as shown. The underlined portions show where the variables should be used, and do not need to be recreated.

Name
"Emma"

Order
"Scrambled Eggs"

*Good day, Emma. I see that you have ordered **Scrambled Eggs**.*

Cookies (18 points)

a). Assuming that no cookies have previously been set, what text would appear in the alert box as the result of executing the following script?

```
document.cookie = "FirstName=Jane"  
document.cookie = "LastName=Doe"  
alert(document.cookie)
```

b). Explain how a previously set cookie can be deleted on most browsers. (You do not need to provide an actual script; just describe the concept.)

c.) Give at least two circumstances in which a previously set cookie with no expiration date might not be available to the web site that had set it.

Forms (14 points)

Given the form created by the piece of HTML below, what would be the full url (including the assembled result string) that the browser would generate when the form was submitted? Assume that none of the default values are changed before submission.

```
<form action="http://www.smith.edu/exam.html" method="get">  
<input type="text" name="name" id="name"  
  value="Harry Potter"></input></td>  
<input type="checkbox" name="wizard" id="wizard" value="yes"  
  checked="checked"></input>  
<input type="checkbox" name="graduate" id="graduate"  
  value="yes"></input>  
<input type="radio" name="house" id="S"  
  value="Slytherin"></input>  
<input type="radio" name="house" id="G"  
  value="Gryffindor" checked="checked"></input>  
<input type="radio" name="house" id="H"  
  value="Hufflepuff"></input>  
<input type="radio" name="house" id="R"  
  value="Ravenclaw"></input>  
<input type="button" name="rush" id="rush" value="Hurry"></input>  
<select name="course" id="course">  
<option name="216" id="216" value="Potions">Potions</option>  
<option name="210" id="210" value="Defense"  
  selected="selected">Defense Against the Dark Arts</option>  
<option name="204" id="204" value="Charms">Charms</option>  
</select>  
<button type="submit" name="submit" id="submit"  
  value="Done">Done</button>  
</form>
```

Document Object Model (24 points)

After considering the following HTML tags, demonstrate how to use the Document Object Model to achieve the stated goal by writing one line of a script.

```
<p id="para1">Paragraph</p>

<a id="nextlink" href="next.html">Next</a>
```

Example: Make the word Paragraph appear in navy.

```
document.getElementById("para1").style.color = "navy"
```

- Change the image tag so that it displays `photo2.jpg` instead of `photo1.jpg`.
- Make the image two inches tall.
- Give the image a 0.25 inch solid red border all the way around.
- Change the link so that when clicked it will take the viewer to `step2.html` instead of `next.html`.
- Change the text of the link so that it says **“Tell Me More!”**
- Give the link text a red background.

Frames (12 points)

Write a piece of HTML that will create the set of frames pictured below. The top frame should be 30% of the window height, with the other frames filling the remainder of the window. The right- and left-hand frame should reach be 150 pixels wide, with the center frame using the remaining space. (You don't need to write an entire HTML document; the portion from the first `<frameset>` to the last `</frameset>` will do.) Each frame should link to the content page shown in the diagram. If viewed in a browser that doesn't understand frames, the user should see a link to `navbar.html`.

