

Instructions: For multiple choice questions, **circle the letter of the one best choice** unless the question explicitly states that it might have multiple correct answers.
There is no penalty for guessing.
Fill-ins count the same as multiple choice. Longer questions count more.
No cell phones or other electronic devices allowed.

1. What is the name of the Internet service that translates computer names into numeric addresses?
 - A. Domain Name Service
 - B. World Wide Web Consortium
 - C. Tim Berners-Lee
 - D. babbage.cs.qc.cuny.edu
 - E. Address Book
2. Which statement best describes the relationship between a *web browser* and a *web server*?
 - A. The browser waits for servers to send requests to it, and sends files back to the servers.
 - B. The server waits for browsers to send requests to it, and sends files back to the browsers.
 - C. Browsers are a special type of server that handle requests from clients.
 - D. Web servers use case-preserving file systems, but browsers use case-sensitive file systems.
 - E. Web browsers and web servers are two names for the same thing.
3. Circle the letters of **all** of the following that are names of *web servers*:
 - A. Internet Explorer
 - B. Opera
 - C. Safari
 - D. Firefox
 - E. Apache
4. Circle the letters of **all** of the following that are the names of *web browsers*:
 - A. Internet Explorer
 - B. Opera
 - C. Safari
 - D. Firefox
 - E. Apache
5. What is the name of the set of rules that govern how web servers and web clients structure the messages they send to each other?
 - A. File Transfer Protocol
 - B. Geneva Conventions
 - C. Web Interchange Rules
 - D. HyperText Transfer Protocol
 - E. Transmission Control Protocol
6. What is the *host name* in this URL: `http://babbage.cs.qc.cuny.edu/courses/cs081/2009_02/`?
 - A. `http://`
 - B. `babbage.cs.qc.cuny.edu`
 - C. `courses/cs081/2009_02/`
 - D. `//babbage.cs`
 - E. `cuny.edu/courses`

7. What is the name of the file that would be returned for the URL in Question 6?
 - A. http
 - B. babbage.cs.qc.cuny.edu
 - C. courses
 - D. 2009_02
 - E. index.shtml
8. What is the relative path from My Website/Blog/index.shtml to My Website/css/main.css ?
 - A. /main.css
 - B. ../main.css
 - C. ../css/main.css
 - D. ../../Blog/css/main.css
 - E. main.css
9. Is the directory name CSS the same as the directory name css ?
 - A. Yes: case never matters in directory names.
 - B. No: upper and lower case names are always different.
 - C. It depends on the operating system.
10. What is this: `<?php echo "hello"; ?>`
 - A. It is code that sets the text for the title bar of the browser window.
 - B. It is a PHP script; it will be executed and removed by the server before the browser gets the page.
 - C. It is a PHP script; the browser will execute it.
 - D. It is a PHP script; the browser will ignore it.
 - E. It is a CSS rule for setting the background color.

Questions 11-14 deal with this code:

```
<h1 class="important">This is important.</h1>
```

11. What is this code?
 - A. A CSS *rule*
 - B. A CSS *selector*
 - C. An XHTML *tag*
 - D. An XHTML *element*
 - E. An XHTML *attribute*
 12. What is *class* ?
 - A. The *content*
 - B. An *attribute name*
 - C. An *attribute value*
 - D. A tag
 - E. A *selector*
 13. What is the *content*? (fill in)
-

14. What is the *name* of the tag?
- A. class
 - B. class="important"
 - C. "important"
 - D. This is important.
 - E. h1
15. What is the difference between a *class* and an *id*?
- A. The same class name can be used multiple times in a web page, but each id has to be unique.
 - B. The same id can be used multiple times in a web page, but each class must be unique.
 - C. Classes have to be enclosed in quotes, but ids do not.
 - D. The value of an id may not have any capital letters in it, but they are OK in the value of a class.
 - E. Classes appear in the start tag, but ids appear in the end tag.
16. What is the purpose of classes and ids?
- A. Their values can be used in CSS selectors.
 - B. They tell the browser where to place elements on a web page.
 - C. They tell the browser how large to make the text.
 - D. They tell the server what scripting language to use.
 - E. They tell the user where to click.
17. What is the purpose of *h2* tags?
- A. To control the font weight.
 - B. To control the font size
 - C. To control the font color
 - D. To center the text
 - E. To indicate that something is a subheading.
18. Which rule will make the backgrounds of paragraphs blue?
- A. paragraphs:blue;
 - B. p { background-color:blue; }
 - C. blue: paragraph-backgrounds;
 - D. { paragraph-backgrounds = blue; }
 - E. #background { color:blue;}

20. What is the difference between the selectors `p a` and `p, a`? That is, what is the difference between separating parts of a selector using spaces and commas?
- A. There is no difference; the comma is optional.
 - B. The version without the comma is correct, but the one with the comma is an error.
 - C. The version with the comma is an correct, but the one without the comma is an error.
 - D. The one without the comma means “all a elements that are *inside* p elements” but the one with the comma means “all a elements *and* all p elements.”
 - E. The one without the comma means “all a elements *and* all p elements” but the one with the comma means all a elements that are *inside* p elements.”
21. How would you insert this character into a web page: “
- A. Type " (straight quotes) on the keyboard and Windows will convert it to curly quotes for you.
 - B. `“`;
 - C. `('`
 - D. `{ ' }`
 - E. It depends on the browser being used to view the page.
22. *On the back of any exam sheet*, write a complete web page, starting with the `html` tag.
- A. The title bar of the browser is to display “Midterm Exam” (without the quotes)
 - B. The content area of the web page is to consist of a level-1 heading that says “Vickery’s Web Page.”
 - i) No quotes around the text
 - ii) Substitute your own name for mine
 - iii) Be sure the apostrophe will display as a “curly” apostrophe, not as a prime symbol.
 - C. Link the page to an external stylesheet named `exam.css` in a directory named `css`
 - i) Do not write that stylesheet.
 - D. After the level-1 heading, put in two paragraphs with a little bit of arbitrary text in each.
 - i) Make the second paragraph have the class “important.”
 - ii) Make the first paragraph have the id “first.”
 - E. Add one more paragraph at the bottom that contains a link to the index page in a directory named `Answers`.
- Notes:
- 1. Do not include anything before the `html` tag.
 - 2. Do not include any attributes inside the `html` tag.
 - 3. Do not include links to the W3C validators.
 - 4. Everything must be valid XHTML
 - 5. Use pencil if you have one.
 - 6. This question counts as much as at least 5 multiple choice questions.
23. *On the back of another exam sheet*, draw the complete DOM tree for the web page in Question 22.
24. *On the back of another exam sheet*, write a complete CSS rule that will cause the first (but not the second) paragraph:
- A. To have a 1 pixel solid blue border around it.
 - B. To have a background that is a mixture of full intensity red, no green, and full intensity blue.
 - i. Use hexadecimal notation to specify the color.
 - C. To have 20 pixels between the text and the border.
 - D. To have at least 35 pixels of space between the border and the other elements on the page.