


NOTE: It is my policy to give a failing grade in the course to any student who either gives or receives aid on any exam or quiz.

INSTRUCTIONS: Answer all questions in your examination booklet, in sequence, please. Unless otherwise indicated, all questions count equally.

1. What is the purpose of the PHP code we put at the top of each web page?
2. What is one reason for putting CSS rules and XHTML code in separate files?
3. Why was a CSS rule put in the XHTML code file for the picture gallery project?
4. Why should JavaScript code and XHTML code be put in separate files?
5. What is the *aspect ratio* of an image?
6. When preparing images for the picture gallery you were told what size *canvas* to use. What is a canvas, and what was the consequence of using a fixed-size canvas for all the pictures, regardless of their aspect ratios?
7. What is a reasonable *resolution* for images on the web?
8. What is the consequence of using a larger resolution than necessary?
9. What is the reason for using a gradient that has transparent pixels on one end?
10. What is the value of the `background-repeat` property that will cause a background image to be drawn repeatedly horizontally but not vertically?
11. What is the *viewport* of a web page?
12. Which of the following features of the viewport can be controlled using XHTML and/or CSS:
(a) *width*, (b) *height*, (c) *position on the screen*.
13. How can you use CSS to make a web page with the following structure never scroll vertically?

```
<body>  
  <div id="header"> ... </div>  
  <div id="content"> ... </div>  
  <div id="footer"> ... </div>  
</body>
```
14. How can you use CSS to change the color of a link after the user has visited it?
15. Normally, images are shown as inline elements. How can you use CSS to make them start on a new line?
16. What is an *em*, and what would be a reason for using *ems* for a web page?
17. Write a snippet of XHTML that will produce a picture that a user can click on to go to another web page. Use any names you like for the picture file and the other web page.
18. What file format would be better for this picture, JPEG or PNG, and why? 
19. What is *lorem ipsum*?
20. How can you use CSS to make a `<div>` (or any element, really) move to the right side of the web page, with the text that follows flowing around the top, left, and bottom of the `<div>`?
21. What is *Verdana* and why is it useful?
22. What is *Sans-Serif* and why is it important?
23. (a) What is *whitespace*, (b) when would it not be white, and (c) how could you use CSS to add some to a web page?
24. What is the difference between *get* and *post*, and which is which?

25. What is the *action* attribute of a form used for?
26. What is the difference between checkboxes and radio buttons?
27. What attribute must radio buttons have in common in order to work as a *radio group*?
28. What is the difference between an `<input type="text">` tag and a `<textarea>` tag?
29. What is the `<fieldset>` tag used for?
30. Write a snippet of XHTML that will generate a checkbox and its associated label. Include the attributes needed to link the label to the checkbox and to enable the server-side script to find out whether the checkbox was checked or not when the form is submitted.
31. Write the XHTML tags to create a table with two rows and three columns, except the second row is to have its middle and right columns merged together.
32. (a) Tell what the following JavaScript code does. (b) Tell when the first and second equal signs are executed, and (c) tell when the anonymous (unnamed) and *validateForm* functions are executed.
Note: this question counts twice as much as the others.

```
    window.onload = function() {  
        document.getElementById("theForm").onload = validateForm; }  
    
```