Read this before starting!

- The total possible score for this test is 100 points.
- This test is closed book and closed notes.
- All answers must be placed in blanks provided. Failure to do so will result in no credit for answer.
- If you perform work on the back of a page in this test, indicate that you have done so in case the need arises for partial credit to be determined.
- Make sure all of your tags follow the XHTML standard.

“Fine print”

Academic Misconduct:
ETSU Policy No. 3.13, October 1, 1979:

"All students in attendance at East Tennessee State University are expected to be honorable."

"Academic misconduct will be subject to disciplinary action. Any act of dishonesty in academic work constitutes academic misconduct. This includes plagiarism, the changing or falsifying of any academic documents or materials, cheating, and the giving or receiving of unauthorized aid in tests, examinations, or other assigned school work. Penalties for academic misconduct will vary with the seriousness of the offense and may include, but are not limited to: a grade of "F" on the work in question, a grade of "F" for the course, reprimand, probation, suspension, and expulsion. For a second academic offense, the penalty is permanent expulsion."
Short-ish Answers (2 points each)

1.) Check the box for all image formats for which each of the following statements is true. JPEG refers to non-progressive. (2 points for each statement)

<table>
<thead>
<tr>
<th>Format</th>
<th>JPEG</th>
<th>GIF87a</th>
<th>GIF89a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will degrade more and more each time it is saved:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can display up to 16,777,216 (24-bit) colors:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supports interlacing:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suited best to logos or cartoons:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can have at most 256 colors in an image:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can be played back as an animation:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses dithering to approximate colors not available in the palette:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can indicate that part of the image is transparent:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slowest to uncompress (check only one):</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.) An image that has had the sharp boundaries between two colors softened by adding intermediate colors is considered ________________.

3.) The duration of each frame of an animated GIF can be set in:
   a) seconds       b) 1/10ths of a second       c) 1/100ths of a second
   d) 1/1000ths of second       e) 1/10,000ths of seconds       f) None of these

4.) True or false: An animated GIF can contain transparent areas.
5.) True or false: Animated GIFs can support interlacing.
6.) True or false: GIF87a reduces file size by only allowing web-safe colors in an image.
7.) True or false: You can reduce the size of a JPEG file by reducing the number of colors.
8.) True or false: The width of a cell within a table can be set as a percentage of the width of the browser.
9.) True or false: If a cell within table is defined to have a rowspan of 99, but the table only has 5 rows, then the cell will only span the 5 rows just as if rowspan was set to 5.
10.) True or false: The color of a table's border can be set with the table tag attribute "bordercolor".
11.) True or false: The dimensions of a web page should be based on the physical size of the prospective audience's monitor, e.g., 15", 17", 20", etc.
12.) Which design restriction give the designer LESS horizontal room to design a web page:
   a.) a fixed design for printing on 8_" x 11" paper or
   b.) a fixed design for a 640x480 display resolution?

Medium-ish Answers (5 points each)

13.) Write the table tag and the attributes you would use to set a table background to the file "bg.gif" and turn all borders off. Only give me the begin tag.
14.) If a cell within a table is empty, some browsers won't display the border or background color of that cell. How can you force the background and border of the empty cell to display properly?

15.) The GIF image format is considered a loseless except for one situation. What is that situation?

16.) Name two of the three advantages discussed in class of flexible design over fixed design.

17.) Name an advantage discussed in class of fixed design over flexible design.

18.) Give a purpose and an application for using a grayscale palette in images.

19.) List the three things you must do to ensure that absolutely no space occurs between the cells of a table. E.g., if an image is broken up then put back together by displaying it in a table, how can you make sure all of the space between each part of the image is removed?

20.) Give one example and a short justification of the type of site that would use each of the following design structures.

   Sequence –

   Hierarchy –

21.) List three of the four disadvantages discussed in class of using graphics to display text.
22.) Write the HTML code to create the following table:

- The table is centered in the browser window and spans 65% of the displayed page's width. It also has 2 pixels of space between adjacent cells and 3 pixels of space between the items within a cell and the cell's border.
- Cell 1 contains an image called header.gif. Don't worry about setting the image's width and height.
- Cell 2 contains the text "Home" placed in the very center of the cell. The background color of the cell is #660066 and the cell spans exactly one third of the table's width. The cell is 45 pixels high.
- Cell 3 contains the text "Menu" placed in the lower right corner of the cell. The background color of the cell is #003300 and the cell spans exactly one third of the table's width. The cell is 45 pixels high.
- Cell 4 contains an image called "ad.gif" and spans exactly one third of the table's width. Don't worry about setting the image's width and height.

As for setting the column widths and heights, just use the tag attributes. Don't worry about adding phantom columns and rows, i.e., the additional cells with the shim image.