Name $\qquad$

UD Email address (e.g. jsample@udel.edu) $\qquad$

Please circle your section number:

010
(Tuesday lab)
011
(Thursday Lab)

Answer the multiple choice questions on a "Scantron Form"
Bubble in ONLY your Unix userid and your answers DO NOT bubble in your id number or section If you bubble in your SSN, the computer will reject your form!!!

## Answer the remaining questions directly on the exam paper.

## General Instructions

- The exam is @ @\% multiple choice, @ @\% short answer.
- The short-answer questions start with number 8 . You may want to tackle them first, since they may take more time.
- DO NOT WRITE YOUR NAME ON ANY PAGE EXCEPT THIS ONE!
- You have 75 minutes. Pace yourself, and pay attention to the point values.
- The points values are a good approximation of how long you should spend on each program (e.g. 10 minutes for a 10 point question.) That will leave you 15 minutes at the end to finish up your work.
- Read all the directions carefully on each problem.
- Good luck.

1. (3 pts) The number system that corresponds to how computers store information internally using the flow of electricity is:
(a) hexadecimal
(b) decimal
(c) binary
(d) octal
2. (3 pts) Which is true of the process of converting between hexadecimal and binary:
(a) bits are grouped in groups of three, from right to left
(b) bits are grouped in groups of three, from left to right
(c) bits are grouped in groups of four, from right to left
(d) bits are grouped in groups of four, from left to right
3. (3 pts) Color codes such as "\#FFOOFF" represent a practical use of the number system known as:
(a) binary
(b) octal
(c) decimal
(d) hexadecimal
4. (3 pts) Consider the following line of JavaScript code:
```
alert("Welcome to my web page.");
```

Which of the following is a correct use of terminology to describe the part of this code inside the parentheses, i.e. "Welcome to my web page."?
(a) It is the value of an attribute.
(b) It is an integer constant.
(c) It is an argument to a method.
(d) It is a unary operator.
(e) It is an assignment statement.
5. (3 pts) In the binary number 00010111 , the bits containing ones represent:
(a) $4,2,1,0$
(b) $5,3,2,1$
(c) $10,6,4,2,1$
(d) $16,4,2,1$
(e) $16,8,4,2,1$
6. (3 pts) The octal number 432 would be represented in binary as:
(a) 100011101
(b) 100011010
(c) 100001000010
(d) 010000110010
(e) 010000110101
7. (3 pts) Consider the following line of XHTML code with inline JavaScript:

<body onLoad="alert('Welcome to my Web Page');">

Which of the following is a correct use of terminology to describe the part of this code inside the double quotation marks i.e. "alert('Welcome to my Web Page');"?
(a) It is an XHTML open tag.
(b) It is the name of an XHTML attribute.
(c) It is the value of an XHTML attribute.
(d) It is an argument to a method.
(e) It is an assignment statement.

\section*{Section 2. Short Answer (answer on this sheet)}
8. (10 pts) A web designer was asked to make a table converting Farenheit to Celsius. The table is supposed to look like the one on the left, but instead, it looks like the one on the right:


On the following page is the source code, and the contents of the JavaScript console, showing an error message.

First, describe what should be done to fix the page ( 5 pts ).
Then ( 5 pts ) indicate which of the following principles is illustrated by this example (circle one):
- the importance of ending JavaScript statements with semicolons
- the importance of understanding the difference between addition and string concatenation
- the fact that JavaScript is case sensitive
- the fact that XHTML is case sensitive
- the fact that XHTML tags must be properly nested

\section*{view-source: - Source of: http://copland.udel}

File Edit View
\(\langle\) html>
\(\langle\) head><title>JavaScript Celsius to Farenheit Table</title></head> <body>
<table border="10" cellspacing="3" cellpadding="2">
<!-- write the table header -->
<tr><th>Celsius</th><th>Farenheit</th></tr>
<!-- use a script to fill in the table rows -->
<script language="JavaScript" type="text/javascript">
var tempC, tempF; // temperature in Celsius or Farenheit
var step \(=2\);
for (tempC \(=-10\); tempC \(<=40\); tempC+=step)
\{
document.write("<tr>"); // start the row
document.write("<td>" + tempc + "</td>"); // celsius temp
tempF \(=1.8 *\) tempC \(+32 ; / /\) convert the temperature
document.write ("<td>" + tempF + "</td>"); // farenheit temp
document.write("</tr>"); // end the row
)
</script>
</table>
</body>
</html>

| (3) JavaScript Console |  |  | - | $\square x$ |
| :---: | :---: | :---: | :---: | :---: |
| All Errors Warnings Messages Clear $^{\text {W }}$ |  |  |  |  |
|  |  |  |  | Evaluate |
| (i) | Error: tempc is not defined |  |  |  |

End of Practice Exam. Total Points: 31
2DKB37TP182D6IF3SQXAPE38A

Answer Key, version $\boldsymbol{A}$

1. (c) lecture notes, 09/06/05
2. (c) lecture notes, 09/06/05
3. (d) lecture notes, 09/01/05
4. (c) lecture notes, 09/08/05
5. (d)
lecture notes, 09/06/05
6. (b)
lecture notes, 09/06/05
7. lecture notes, 09/08/05, event_v2.html

## Section 2. Short Answer (answer on this sheet)

8. The fix is to change tempc to tempC. This illustrates that JavaScript is case sensitive. This comes from the lecture notes for 09/15/05

End of Key, version $\boldsymbol{A}$
Total Points: 0

