



University of Maryland College Park

Department of Computer Science

CMSC122 Fall 2022

Exam #1

FIRSTNAME, LASTNAME (PRINT IN UPPERCASE):

KEY

STUDENT ID (e.g. 123456789):

Instructions

- Please print your answers and use a pencil.
- This exam is a closed-book, closed-notes exam with a duration of 50 minutes and 100 total points.
- **Do not remove the exam's staple.** Removing it will interfere with the scanning process (even if you staple the exam again).
- Write your directory id (e.g., terps1, not UID) at the bottom of pages with **DirectoryId**.
- Provide answers on the provided lines or the rectangular areas.
- Do not remove any exam pages. Even if you don't use the extra pages for scratch work, return them with the rest of the exam.
- Your code must be efficient and as short as possible.
- If you continue a problem on the extra page(s) provided, make a note on the particular problem.
- You don't need to use meaningful variable names; however, we expect good indentation.
- **You must write your name and id at this point (we will not wait for you after time is up).**
- You must stop writing once time is up.

Grader Use Only

#1	Part #1 (Short Answer 2pts)	28
#2	Part #2 (Short Answer 4pts)	24
#3	HTML Code	24
#4	JS Code	24
Total	Total	100

Part #1 (Short Answer – 2 pts each)

1. Circle just the attribute value of the following HTML element:

```
<p id = "myPar"> Exam 1 </p>
```

2. Circle just the property in the following CSS rule:

```
h2 { color : green; }
```

3. What symbol is used in front of an id selector in CSS? **#**
4. Write a CSS comment that says: Exam 1. **/*Exam 1*/**
5. Write a **single line** JavaScript comment that says: Exam 1. **//Exam 1**
6. **DNS (Domain Name System)** is the protocol for translating domain names to IP addresses.
7. **<a>** is an example of a self-closing tag. True or False? **False**
8. All URLs are webpage addresses. True or False? **False**
9. GET, HEAD, POST are methods (operations) defined as part of this protocol ? **http**
10. The goal of HTML is to describe **structure** only. Presentation should be left to CSS.
11. Explain the purpose of the **** tag in no more than 2 sentences?

Generic inline element to select some content. Can be styled in CSS like other elements.

12. Show how to use the keyword **let** to declare a JavaScript variable named **num** and assign to it **27** all in one statement.

let num =27;

13. What HTML attribute is used when writing an inline CSS rule? **style**
14. What HTML tag is used when connecting an external CSS file to your HTML document? **link**

Part #2 (Short Answer – 4 pts each)

15. What are the 4 pseudo-classes for anchors (i.e. **<a>** tag) that can be used in CSS:

- 1) **a:link** 2) **a:visited**
3) **a:hover** 4) **a:active**

16. Write just the HTML code to make the following unordered list (just write the code for the list). No styling needed (e.g. make it bold), just write HTML for the list.

- HTML
- CSS
- JS

```
<ul>
  <li>HTML</li>
  <li>CSS</li>
  <li>JS</li>
</ul>
```

17. Assume you have an image called terrapin.jpg in the same folder as your HTML file. Show the HTML code you would write so when it is clicked it would go to www.umd.edu

```
<a href="http://www.umd.edu"></a>
```

18. Show how you would write a CSS rule that would change the color of all <p> elements to be blue using internal style sheet. Just write everything you would put in the head section for this CSS rule.

```
<style >
  p {color: blue;}

</style>
```

19. Write a CSS rule such that the elements with class examInfo will be red.

```
.examInfo {color: red;}
```

20. Write a CSS rule such that all <p> elements that descend from a <div> will be blue.

```
div p {color: blue;}
```

Directory id:

Part #3 – Write the HTML Code (NO CSS) 24 Pts

21. Write just the code in the <body> you need to make the webpage seen below. The value of the border in the table is 1. Note there is no table header. **My List** is level 2 heading. The second list item of the outer list is a definition list (the indentations are browser defaults).

margin	padding
Box Model	
content	border

My List

1. HTML

2. CSS

Use for Presentation

3. JS

```
<table border ="1">
  <tr>
    <td>margin</td>
    <td>padding</td>
  </tr>
  <tr>
    <td colspan="2">Box Model</td>
  </tr>
  <tr>
    <td>content</td>
    <td>border</td>
  </tr>
</table>

<h2>My List</h2>
<ol>
  <li>HTML</li>
  <li>
    <dl>
      <dt>CSS</dt>
      <dd> Use for Presentation</dd>
    </dl>
  </li>
  <li>JS</li>
</ol>
```

Part #4 – Write the JS Code 24 Pts

22. Write a JS program (just what goes in the script tag) that will prompt the user for 2 numbers with the text Enter first number: for the first prompt and Enter second number: for the second prompt. If the product (i.e. first number multiplied by second) is less than or equal to 100, the program will write to the webpage as a paragraph Product is less than or equal to 100. Otherwise it will write, Product is greater than 100.

```
"use strict";

let num1 = prompt("Enter first number:");
let num2 = prompt("Enter second number:");

let answer = num1 * num2;

if (answer <= 100) {
    document.writeln("Product is less than or equal to 100");
}
else{
    document.writeln("Product is greater than 100");
}
```

EXTRA PAGE IN CASE YOU NEED IT (SUBMIT WITH THE EXAM)

LAST PAGE