

## HTML & CSS

1. What is wrong with the following HTML snippet? (max 1 sentence, **1 point**)

```
<div>
  </p>This is a <a href="#">link</a><p>
</div>
```

2. What does the following CSS snippet do? (max 1 sentence, **1 point**)

```
p, span strong {
  font-style: italic;
}
```

## HTTP

3. The most commonly used HTTP methods are GET, PUT, DELETE and POST. Which one of these is neither **Safe** nor **Idempotent** and why?

(max 3 sentences, **2 points**)

4. ★ Which of the following are true about cookies? Select all that apply. (**1 point**)

- a. Cookies can expire
- b. Browser automatically requests for cookies from a standardized URL
- c. Cookies are included in the `head` element of html pages
- d. Cookies are often used in implementing sessions
- e. Cookies are given in the HTTP headers
- f. Cookies are given using the `link` tag and loaded as separate files
- g. Cookies are always set using Ajax

## JavaScript & jQuery

5. How does the Same-Origin-Policy affect using javascript? (max 2 sentences) (**1 point**)

6. Explain briefly **what happens** in the following lines of jQuery/JS code. You can refer to the line numbers in your explanation. **When** are the different parts of the code executed? (**3 points**)

```
1. $(document).ready(function() {
2.   var code = ['function', 'method', 'closure'];
3.   $.each(code, function(index, value) {
4.     $("#menu").append("<p>" + (index+1) + ". " + value + "</p>");
5.   });
6. });
```

## APIs

7. Explain briefly what is meant by REST and how it works (max 5 sentences, **3 points**)

## Sessions & Security

8. Mallory is writing a blog post on a blogging service where she wrote the following as a title for the post. The **beginnings** of the texts she wrote are shown below. What is she trying to do in the two cases? Name the attacks and explain them briefly. (2 points, 1 for each)
- a) Cat<script> ..... rest of the text not shown ....
- b) Cat'); INSERT INTO ..... rest of the text not shown ....
9. Explain briefly the basic idea of Cross-Site Request Forgery (CSRF)? (max 3 sentences) (2 points)

## Django

10. Assume you have a working Django view. What (if any) changes do you need to do to make so that this view can be called **also** using AJAX? Why? (max 4 sentences) (2 points)
11. ★ Which of the following statements are **true** for Django templates? (1 point)
- a. Templates are typically rendered client-side
  - b. Templates can inherit other templates
  - c. Variables can be used in templates this way: {{variable\_name}}
  - d. Templates can contain and execute arbitrary Python code
  - e. Views can provide data to templates
  - f. Templates can specify any HTTP Headers for the response