

# Front End acadEMy Final Examination

Recommended timing: 30min Q1–10, 90min Q11–15.

5p

## #1

Name 3 ways to decrease page load (perceived or actual load time).  
Specify what you would do to speed up the loading if you would have a site using a lot of large images.

5p

## #2

Why is it generally a good idea to position CSS `<link>`s between `<head>``</head>` and JS `<script>`s just before `</body>`?  
Do you know any exceptions?

5p

## #3

How is CSS Specificity calculated?  
What are the best practices adopted by EveryMatrix in that particular regard?

5p

## #4

Explain the box model. List the attributes inside out.  
Does `margin-top` or `margin-bottom` have any effect on an inline element?  
Can the padding have negative values? What's the `outline` used for?

5p

## #5

Describe the different values of the CSS "position" property. Give examples of use for each.  
Describe the z-index property and give an example of its use.

5p

## #6

Why would you use an UL and LIs instead of DIVs?  
What about a DL with DTs and DDs?

5p

## #7

What's your strategy for solving a difficult task to which you can't find an immediate solution to? What steps do you go through?

5p

## #8

How do you style a mobile-first progressively enhanced responsive layout, in regards to your media query tactics? Give at least 1 example.

5p

## #9

What does `box-sizing: border-box;` do?  
What are its advantages?

5p

## #10

What effect do the following CSS snippets have on a list of N elements:  
`li:nth-last-child(3) { color: red; }`  
`li:nth-child(4n+1) { color: blue; }`

10p

#11

Write an HTML code snippet of the EveryMatrix logo as a `<picture>` element with two variants: full (for resolutions 600px and above) and favicon (for 599px and below). Write the CSS for it to rotate slowly while you hover over it.

10p

#12

Write an HTML code snippet (no CSS) that describes a fully featured live broadcast event about our Summer 2015 Team Building, using correct microformats.

10p

#13

Build a semantically correct contact form for your own website (with the fields: name, email, phone, message), including HTML and CSS styles.

10p

#14

Using only HTML and CSS, build an apartment block with 10 stories, a triangular roof and 5 windows on each floor. Its design and colors are irrelevant as long as you can clearly see it's a building following the required specifications.

10p

#15

Replicate the EveryMatrix top dropdown menu, but add animations for expanding and collapsing the items. If you have time, also make it responsive.

# # Thank you!