# MMP350 Key Concepts

## CSS

Question 1: What is the difference between position fixed, absolute, relative and static?

For answers please review https://developer.mozilla.org/en-US/docs/Web/CSS/position and https://www.w3schools.com/cssref/pr_class_position.asp

Note that an element with the position:absolute style is positioned relative to its first positioned (non-static) ancestor.

Question 2:  Can you set the height attribute of inline elements?
Answer: No. The vertical space taken up by inline elements is determined by font-size, line-height and padding.

Question 3:  What is the color of the text "What color am I"?

```html
<html>
<style>
body{color:red;}
.body{color:blue;}
#body{color:green;}
</style>
<body>
    What color am I?
</body>
</html>
```

Answer: Red. Only the stylings for <body> element apply. The class `.body` and the id `#body` are not used.

Question 4: In the following example, is the text in the #grandchild element black or blue?

```
<html>
<style>
    body{color:black;}
    .child-text{color:blue;}
</style>
<body>
    <div id="child-container" class="child-text">
        <p class="">Child paragraph</p>
        <div>
            <p id="grandchild" class="blue">Grandchild paragraph</p>
        </div>
    </div>
</body>
<html>
```

Figure for Question 4.

Answer: blue. The styling for the class `.child-text` is inherited. The class `blue` is irrelevant because it is undefined.

Question 5: What color is the text of the #grandchild element?

```
<html>
<style>                                         these updates now or
    body{color:black;}
    .blue{color:blue;}
    #grandchild{color:red;}
</style>
<body>
    <div id="child-container" class="child-text">
        <p class="">Child paragraph</p>
        <div>
            <p id="grandchild" class="blue">Grandchild paragraph</p>
        </div>
    </div>
</body>
<html>
```

Answer: Red. Id stylings take precedence over class and element stylings, so `#grandchild` takes precedence over `.blue`, which takes precedence over `body`.

## WordPress Functions

Question 1: In WordPress, how do you change the length of an excerpt retrieved using `the_excerpt()` function to 10 characters? Where do you put this code?

Answer: You set the length of excerpts by including the following function in functions.php.

```
function my_excerpt_length($length) {
     return 10;
}
add_filter('excerpt_length', 'my_excerpt_length');
```

Question 2: Widgets are attached to which WordPress element?
Answer: Sidebars

Question 3: How do you create a sidebar?
Answer: Add the following code to functions.php. Note that the name and id are variable.

```
$sidebar = array(
     'name' => 'Sidebar',
     'id'   => 'sidebar',
     'description' => 'Place sidebar widgets here.'
);
register_sidebar($sidebar);
```

Question 4: How do you allow your theme to use a video and audio post formats?
Answer: Add the following code to functions.php

```
add_theme_support( 'post-formats', array( 'video',
'audio');
```

Question 5: List all the post formats:

Answer: There are currently 8 post formats in WordPress: `gallery, image, video, link, status, audio, quote, aside`

Question 6: What arguments are passed to the `the_post_thumbnail()` function to display a small, medium and large and unedited version of the featured image?

```
the_post_thumbnail("thumb");
the_post_thumbnail("medium");
the_post_thumbnail("large");
the_post_thumbnail("full");
```

Note that the images do not scale up. If you upload an image smaller than the medium size, for example, it will not expand to the large size.

Question 9: What determines the size of the image output from the `the_post_thumbnail("thumb")` function?

Answer: The settings in the Dashboard menu Settings Media Thumbnail Size.

Question 10: If you change the setting thumbnail size in Settings / Media will existing files be automatically resized?

Answer: No. You will need to reimport your images or use a plugin to resize existing images. That is why it is important to figure out your images sizes at the beginning of your project.

Question 11: If you are using a child theme, what is the difference between `get_template_directory_uri()` and `get_stylesheet_directory_uri()`?

Answer: `get_template_directory_uri()` returns the path to the parent theme, get_stylesheet_directory_uri() returns the path to the child theme.

Question 12: What is the difference between `get_template_directory_uri()` and `get_stylesheet_directory_uri()` when you are ***not*** using a child theme?

Answer: There is no difference.

Question 13: What function do you use to register a sidebar?
Answer: register_nav_menu("menuname", 'menudescription');

Note that `menuname` refers to a menu you have created in the Appearance/Menus section of your Dashboard.

Question 14: What do the numbers mean in the following gallery shortcode?

[gallery link="file" size="medium" ids="247,243,197"]

Question 15: How do you change the number of columns in a gallery to five and tell it to use medium sized images?

Answer: [gallery columns="5" size="medium" ids=.... ]

Question 16: Name 4 other shortcodes

Reference: https://codex.wordpress.org/Shortcode

Question 17: What is the command to add support for featured images?

Answer: `add_theme_support( 'post-thumbnails' );`

Question 18: Where do plugins go in WordPress?

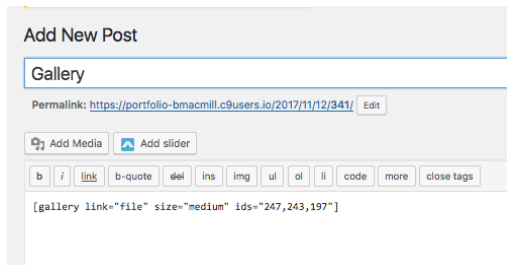Answer: In the folder `wp-content/plugins`

Question 19: What is the HTML response code 404?

Answer: Page not found

Question 20: What is the WordPress file that handles the 404 error?

Answer: 404.php, in the root folder of your theme or child theme.

Question 21: On the following post page, which values will be returned by the functions `the_content(), the permalink() the_title()`?



Question 22: How do you access a shortcode in a template file?

Answer: `<?php echo do_shortcode("[shortcode]"); ?>`

## PHP

Question 1: What characters begin and end php code?

Answer: `<?php   ?>`

Question 2: What is the php concatenation operator?

Answer: The period is the concatenation operator, for example: "A" . "B" == "AB"

Question 3: What is the 'Or' operator in php?

Answer: The 'or' operator in php is `||`. The 'and' operator is `&&`.

Question 4: What is the assignment operator in php?

Answer: The assignment operator in php is the equals sign, for example $tempVar = '1';

Question 5: What is the comparison operator in php?
Answer: The comparison operator is ==.  See
http://php.net/manual/en/language.operators.comparison.php for more examples.

Question 6: What is the character that begins all variable names in php?
Answer: The dollar sign $.