CSS3 Descriptive Question and Answer

*IDB-BISEW IT Scholarship Project*

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Chapter 1

1. **What are the advantages of using CSS in separate file?**

**Ans:** • Less-cluttered HTML code, making it easier to read and maintain.  
• Changing the look of multiple pages across a site by editing a single file.  
• Greater control over the way page elements look.

1. **How many ways CSS can be applied in a web page?**

**Ans:**There are three ways of inserting a style sheet:

* **External style sheet**  
  Example: <link href="css/basic.css" rel="stylesheet">
* **Internal style sheet**  
  Example:

h1 {

font-family: Arial, Helvetica, sans-serif;

color: #900;

}

* **Inline style**  
  Example:

<h1 style="font-family: Arial, Helvetica, sans-serif; color: #900;">Heading with an Inline Style</h1>

1. **Shortly explain the each part of the CSS declaration.**

**Ans:**

**Selector:** This tells the browser where you want to apply the rule.  
**Declaration block:** This begins with a left curly brace and ends with a right curly brace.  
**Property:** This is one of the properties defined in the CSS specification.  
**Value:** This is the value you want to apply to the property.

1. **Write the characteristics of CSS.**

**Ans:**

* **Styles trickle down:** A style rule applied to the <body> affects everything inside the page unless something else overrides it.
* **Styles are cumulative**: Most property values are inherited, so you need to apply only new ones.
* **Inherited styles can be overridden:** When you want to treat an element differently, you can create more detailed style rules and apply them selectively.

1. **Define the two ways of attaching external stylesheet.**

**Ans:** Two ways of attaching external style sheet:

1. Using a **<link>** tag

**Example:** <head> <link href="css/basic.css" rel="stylesheet"> </head>

1. CSS **@import** rule

**Example:** <style>  
@import url(css/basic.css);  
</style>

1. **What is the benefit of using CSS@import rule?**

**Ans:** This can be useful when we organize our rules in several style sheets. Instead of linking each style sheet separately to our web pages, we can link just one, which then imports the rules from the other style sheets.

Chapter -2

1. **How do DOM and CSS relate with each other?**

The browser uses the DOM as a roadmap to apply styles in accordance with the selector associated with each style rule.CSS relies on the DOM to apply styles to specific elements.

1. **What is the importance of DOCTYPE declaration in CSS?**

**Ans:** Importance of DOCTYPE! declaration in CSS:

DOCTYPE! is required to ensure that the browser renders our CSS correctly.

1. **Write the differences between ID selector and class selector.**

**Ans:**

|  |  |  |
| --- | --- | --- |
| **ID selector** |  | **class selector** |
| An *ID selector* applies styles to the elements that have the equivalent id attribute in their opening HTML tag. |  | A *class selector* applies style rules to elements that have the equivalent class attribute in their opening HTML tag. |
| IDs must be unique within a page. |  | Classes can be applied to multiple elements in the same page. |
| The ID selector is created by prefixing the ID with the hash or pound sign (#). |  | The class selector is created by prefixing the class name by a period. |

Chapter -3

1. **How many ways length unit can be set? What are they?**

Ans: Length units can be set either relative or absolute.

**Relative unit:** A relative unit is not a fixed size but is relative to another length. Ex- em, rem etc.

**Absolute unit:** An absolute unit is anchored to a physical measurement, such as an inch.

1. **What is the purpose of calc() function?**

Ans: The css3 calc() function is designed to solve the situation frequently arises where we want to combine absolute values with relative ones. To calculate the width available alongside the element we can use the calc() function like this: calc(30%-20px).

1. **Mention the color formulas used in css3 with example.**

**Ans:** CSS3 offers the following **color formulas**

**HSL**(hue, saturation, lightness) **:** hsl(0, 100%, 50%)

**RGBA:**(red, green, blue with alpha transparency) rgba(255, 0, 0, 0.5)

**HSLA**(hue, saturation, lightness with alpha transparency)**:**hsla(0, 100%, 50%, 0.5)

Chapter 4

1. **Why is rem unit better than em unit?**

**Ans:** *em* unit calculates the relative value of the inherited value. A nested element uses *em*. But rem unit calculates the relative value of the fontsize of the root element. If no fontsize is set for the root element, *rem* uses the browser default. So the *rem* unit is better than *em* unit.

1. **Which unit is better for setting font-size? Why?**

**Ans:** *rem* unit is better for setting fontsize. Because if no fontsize is set for root element. rem uses the browser default.

1. **What is the purpose of important keyword?**

**Ans: Important** is a keyword, by which CSS allows us to override the normal rules of specificity in a single style declaration by adding the **!important** keyword just before the semicolon.

body {

font-size: 250% !important;

background-color: #000;

color: #FFF;

}

Chapter-5

1. **What is the function of @font-face rule?**

Ans: The *@font-face* rule allows authors to specify online fonts to display text on their web pages. By allowing authors to provide their own fonts, *@font-face* eliminates the need to depend on the limited number of fonts users have installed on their computers.

1. **What is the purpose of Unicode-range property?**

**Ans**: The unicode-range in CSS descriptor sets the specific range of characters to be downloaded from a font defined by *@font-face* and made available for use on the current page. This descriptor can be used to make a custom *@font-face* containing only the characters that need to be downloaded.

1. **What is font’s aspect ratio?**

**Ans:** A font’s aspect ratio is defined as being equal to the height of a lowercase “x” divided by font size. Changing the aspect ratio of the generic sans-serif text in the second row with font-size-adjust makes it easier to read. It also occupies a similar amount of vertical space as the other fonts.

Chapter 6

1. **What are the components of CSS box model?**

Ans:

* **Content:**This is the content of an HTML element, such as a paragraph, image,<div> or <span>.
* **Padding:**Horizontal and vertical space surrounding the content.
* **Border:**A border drawn around the padding.
* **Margin:**Horizontal and vertical space outside the border.

1. **Write the differences between padding and margin properties.**

|  |  |
| --- | --- |
| **Padding** | **Margin** |
| Add space surrounding the content. | Add space outside the border of the content. |
| Padding goes inside the border. | Margins go outside the border. |
| Padding never collapses. | Adjacent vertical margins collapse. |
| Negative values cannot be used. | Negative values can be used. |
| “Auto” keyword is not supported. | Accept “Auto” keyword. |

1. **What is the purpose of negative margin?**

**Ans:** Negative margin is used to reduce the gap between elements or move an element further to the left—the opposite of indenting.

1. **Write the difference between display and visibility properties.**

**Ans**:

* *Display* property is used to hide an element and all its children by removing them completely from the flow of the document.

The *visibility* property is used to hide an element, but it doesn’t remove it from the document flow.

* The *visibility* of child elements can be controlled independently. But *display* property can’t be controlled independently for child elements.

Chapter 7

1. **What is the function of float property?**

The float property takes an element out of the normal flow of the document; and moves it to one side to make room for whatever follows. So if we float an image to the left, the following text follows into the empty space created on the right.

1. **What is the purpose of using clear property?**

The clear property is used to prevent elements from moving alongside a floated element and force the element to move down below.

1. **How does image can be centered within content?**

We can center an image within its content by setting its left and right margin to ‘auto’ and setting the display property to ‘block’. Such as:

.imagecentered{margin:10px auto; display: block;}

Chapter 8

1. **What are two new values of background-image property of CSS3?**

**Space** : Any space left over is evenly distributed between the images.

Example:   
#space {

background-repeat: space;

}

**Round**: The images are rescaled to fit the background.

Example: #round {

background-repeat: round;

}

1. **How does background image can be controlled during scrolling?**

The background-attachment property controls what happens to background images when the page or element is scrolled. It accepts three values.

* 1. **Scroll** - The image scrolls with the page and this is the default value.
  2. **Fixed** - The image is fixed in relation to the browsers viewpoint.
  3. **Local** - The background is fixed in relation to the element’s content. If the element has a scrollbar, the background scrolls with the content.

1. **What are the function of background-origin and background-clip?**

* The background-origin property controls the background positioning area, which determines where the offsets for background-position are calculated from.
* The background-clip property controls the background painting area—in other words, the extent of the background.

1. **What is CSS sprite?**

A CSS sprite combines multiple background images in a single file then allows us to use negative background-position to offsets to display only a portion of that image. This technique reduces the number of request to the server and speed up the download of the page.

1. **Write the differences between contain and cover.**

Both the contain and cover are the value of background-size property, but

* **Contain** scales the image to the largest possible size so that both its width and height fit into the background positioning area. On the other hand;
* **Cover** scales the image to its smallest size so that both its width and height can completely cover the background positioning area.

Chapter 9

1. **What are the four values of box-shadow property?**

The four values of the box-shadow property are:

*1. Horizontal offset:* A positive value places the shadow to the right, negative one does to the left.

*2.Vertical offset*: a positive value moves the shadow down, negative one moves it up.

*3.Blur radius*: if omitted or set to zero, the shadow has a crisp edge. Negative value is not allowed.

*4.Spread distance*: a positive value causes the shape to expand in all directions.

1. **How does handle the slices when using border image?**

border-image-repeat property allows us specify how to handle the slices with the following keywords:

1. **stretch** This is the default. The slices are scaled along the axis to fill the gap.
2. **repeat** The image is tiled from the center of the side to fill the gap.
3. **round** The image is rescaled if necessary to fill the gap an exact number of times
4. **space** The image is repeated an exact number of times to fill the gap.
5. **What is focus rectangle? How does it can be removed?**

Most browsers automatically add a dotted line around links and other clickable elements when they have focus. This is known as a focus rectangle.

* One way to deal with the focus rectangle is to use outline-color to make it blend better with our design.
* The other approach is to remove the focus rectangle on links :

a {outline: none;}

Chapter 10

1. **How does the position of list items can be changed?**

Position of list item can be changed using the list-style-position property which accepts two values:

**Inside** This pushes the bullet or number inside the list item

**Outside** This is the default position, which puts the bullet or number outside the list item like a hanging indent.

1. **How many ways symbol of the list item can be replaced by the image?**

Thesymbol of the list item can be changed with image by two ways:

1. The list-style-image property allows us to replace the symbol with an image of our own. Such as:

ul {list-style-image: url(images/redsquare.png);}

2. We can also do it by embedding an encoded image in the Style Sheet using a data URI (Uniform Resource Identifier).

ul {list-style-image:url()}

Chapter 11

1. **Shortly describe the four position property value.**

**absolute**: This removes the element, including any child elements, completely from

the flow of the document, and positions it at the specified offsets.

**fixed** : The offsets are always calculated with reference to the browser viewport.

**relative** :This moves the element relative to its normal position in the document flow,

but without affecting the position of other elements.

**static** :This leaves the element in the normal document flow.

1. **What is containing block?**

Web pages are made up of boxes or blocks nested inside each other. This blocks are called containing blocks. In the normal flow of the document, the size and position of a nested element are determined by its parent—or *containing block*.

1. **Write the differences between relative and absolute position.**

**Absolute**: This removes the element, including any child elements, completely from the flow of the document, and positions it at the specified offsets.

**Relative**: This moves the element relative to its normal position in the document flow, but without affecting the position of other elements.

1. **What is purpose of using z-index?**The z-index property specifies the stack order of an element. An element with greater stack order is always in front of an element with a lower stack order.

**Example**:

img { position: absolute; z-index: 10;}

Chapter 12

1. **What is faux column?**

To get around the problem of the background of one column being shorter than the other, the most reliable cross browser solution is a technique known as faux column (*faux* is French for “false”).

1. **What is anonymous table object?**

If we set the display property of an element to ***table-row***, it’s not necessary for the display property of its parent to be ***table*** because the browser automatically generates any missing elements as anonymous table objects.

Chapter 13

1. **Which one is better to use “:first-child” or “of-type”?**

The “of-type” pseudo-classes are more flexible than “:first-child” because The :first-child pseudo-class applies style to the first element nested inside its parent, whereas the

:first-of-type applies style to the first element of that particular type within its parent.

1. **How can you specify a recurring sequence of a table?**

We can select a recurring sequence of elements, such as every third table row, by using the formula an ± b, in which a and b are numbers and n is the literal character.

Here we have to treat n as zero and increment it by one throughout the series.

For example, tr:nth-child(3n + 1) selects the first, fourth, and seventh table rows like this:

(3 × 0) + 1 = 1

(3 × 1) + 1 = 4

(3 × 2) + 1 = 7

Chapter 14

1. **What are the functions of border-collapse and visibility properties**?

**border-collapse** : To eliminate the gap between cell borders, we can use border-collapse.

Example: table {

border: #000 solid 5px;

border-collapse: collapse;

}

**Visibility**: visibility property is used to hide table cell, columns or rows.

Example: tr:nth-child(3) {

visibility: collapse;

}

1. **How does baseline value works for vertical-align property?**

Setting vertical-align to baseline aligns the first line of content with the baseline of the tallest similarly aligned content in the same row. The baseline value affects only the first line of content in a cell, and is determined independently for each row.