Sure 👍 below are **very long, clear, exam-oriented answers** for all **9 questions**, written exactly in the style expected for **LPU / MCA / Web Technologies** exams.

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1. How do you assign absolute values using the font-size property?

The font-size property in CSS is used to control the size of text. **Absolute values** specify a fixed font size that does not depend on the parent element or screen size.

Absolute units used with font-size include:

- px (pixels)
- pt (points)
- cm (centimeters)
- mm (millimeters)
- in (inches)
- pc (picas)

Example using absolute values:

```
p {
  font-size: 16px;
}
h1 {
  font-size: 24pt;
}
```

Explanation:

- The size remains **constant** regardless of screen resolution or parent font size.
- Absolute values are useful when precise control over text size is required.
- However, they are **not responsive** and can cause accessibility issues.

Conclusion:

Absolute font sizes are easy to use but should be avoided in responsive design.

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2. Explain the font-size property using percentage values

When the font-size property is defined using **percentage values**, the size is calculated relative to the **parent element's font size**.

Example:

```
div {
  font-size: 20px;
```

```
}

p {
  font-size: 150%;
}
```

Explanation:

- If the parent element has a font size of 20px,
  150% = 30px
- Percentage-based font sizes are **relative**, making them flexible.

Advantages:

- Improves responsiveness
- Easier scaling across devices
- Better accessibility

Conclusion:

Percentage values are recommended when designing responsive and scalable web pages.

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3. What is the main property of the Box Model in CSS? Explain with an example

The **CSS Box Model** defines how elements are structured and spaced on a webpage. Every HTML element is treated as a rectangular box.

Main components of the Box Model:

1. **Content**
2. **Padding**
3. **Border**
4. **Margin**

Diagram representation (conceptual):

```
Margin
  Border
    Padding
      Content
```

Example:

```
div {
  width: 200px;
  padding: 20px;
```

```
  border: 5px solid black;
  margin: 10px;
}
```

Explanation:

- Content: Actual text or image
- Padding: Space between content and border
- Border: Surrounds padding
- Margin: Space outside the border

The Box Model is fundamental for layout design in CSS.

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4. What are the two properties that influence the dimensions of the content in the CSS Box Model?

The two properties that directly influence the **dimensions of content** are:

1. width

- Defines the horizontal size of the content area.

2. height

- Defines the vertical size of the content area.

Example:

```
div {
  width: 300px;
  height: 150px;
}
```

Explanation:

- These properties control only the **content area**
- Padding, border, and margin are added **outside** these dimensions

These properties are crucial for controlling element size.

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5. Tell us about the property used for image scroll controlling

The CSS property used for **image scroll controlling** is:

background-attachment

This property specifies whether a background image scrolls with the page or stays fixed.

Values:

- scroll – Image scrolls with the page (default)
- fixed – Image remains fixed
- local – Scrolls within the element

Example:

```
body {
  background-image: url("image.jpg");
  background-attachment: fixed;
}
```

Use:

- Creates parallax scrolling effects
- Enhances visual design

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6. How to use the margin property of a box? Explain with an example

The margin property controls the **space outside the border** of an element.

Ways to use margin:

1. Single value (all sides):

```
div {
  margin: 20px;
}
```

2. Four values (top right bottom left):

```
div {
  margin: 10px 20px 30px 40px;
}
```

3. Individual sides:

```
div {
  margin-top: 10px;
  margin-right: 20px;
}
```

Purpose:

- Controls spacing between elements
- Improves layout clarity

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7. How to set the top margin property of an element? Are negative values allowed?

The **top margin** of an element is set using the margin-top property.

Example:

```
p {
  margin-top: 20px;
}
```

Negative values:

Yes, **negative values are allowed**.

Example:

```
p {
  margin-top: -10px;
}
```

Explanation:

- Negative margins pull elements closer or overlap them
- Used carefully for advanced layout adjustments

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8. Display a margin of 10cm from the right and 10cm from the top

This can be achieved using margin-top and margin-right.

Example:

```
div {
  margin-top: 10cm;
  margin-right: 10cm;
}
```

Explanation:

- cm is an absolute unit
- Useful for print-based layouts
- Not recommended for responsive design

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9. Tell us about column-span and column-fill properties

These properties are used in **CSS multi-column layouts**.

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column-span

Defines whether an element should span across all columns.

Example:

```
h1 {
  column-span: all;
}
```

Use:

- Makes headings span across multiple columns

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column-fill

Controls how content is distributed across columns.

Values:

- balance – Evenly distributes content
- auto – Fills columns sequentially

Example:

```
div {
  column-fill: balance;
}
```

Conclusion:

- column-span controls width across columns
- column-fill controls content distribution
