Ans1:  
The Box Model is a fundamental concept in CSS (Cascading Style Sheets) that describes how elements are rendered on a web page. It defines the structure and layout of an element, including its content, padding(space between content and border), borders, and margin(space outside the border).

border

padding

Content area

margin

Ans 2:

CSS Selector:

* Simple selectors like element ,id, class selector

for eg:

P{

Property:value;

}

Combinator selectors : it select elements based on a specific relationship between them

Pseudo-class selectors : itselect elements based on a certain state

Pseudo-elements selectors : it select and style a part of an element

Attribute selectors : itselect elements based on an attribute or attribute value

Ans 3: vh and vw are units . vh stands for viewport height and vw stands for viewport width.

Ans 4:  
Inline : Displays an element as an inline element. Any height and width properties will have no effect.

Few inline elements are : span , a , img, I , small, strong

Inline-block: Displays an element as an inline-level block container. You CAN set height and width values.

Block:Displays an element as a block element .It starts on a new line and takes up the whole width.

Ans 5: When using “box-sizing: content-box;” the content size remain same while border-box size grows as padding and border grow whereas when using “ box-sizing: border-box; “, the size of border-box remains same while size of content decreases as padding and border grow.

Ans 6:  
z-index is a CSS property that controls the layering and stacking order of elements on a web page. It determines which elements appear in front of or behind other elements. Elements with a higher z-index value are positioned in front of elements with a lower z-index value.

Ans 7 :

Both CSS Grid and Flexbox are layout systems in CSS that provide different ways to structure and align elements on a web page.  
  
Difference between grid and flex are:

* Grid is 2-D layout system while Flex is 1-D layout system.
* CSS Grid offers precise alignment control for both rows and columns, allowing you to align items horizontally and vertically within the grid. Flexbox specializes in alignment within a single axis, providing powerful alignment capabilities for flex items along the main and cross axes.
* CSS Grid supports nesting of grids within grids, allowing for more complex layouts. Flexbox is designed for linear layouts and does not have built-in support for nesting flex containers.

Ans 8 :  
  
Absolute position: Elements are positioned relative to their nearest positioned ancestor or the document itself. They are taken out of the normal flow of the document and their position is explicitly defined using top, bottom, left, or right properties.

Relative position: Elements are positioned relative to their normal position in the document flow. They can be moved from their original position using top, bottom, left, or right properties, but they still affect the layout of other elements on the page.

Sticky position: Elements behave like relatively positioned elements until a specific threshold is reached while scrolling, at which point they become fixed. They remain in their position even if the user continues scrolling.

Fixed position: Elements are positioned relative to the browser window or the nearest positioned ancestor with a fixed position. They remain fixed at their specified position, regardless of scrolling.