

1. Define responsive design and its importance in modern web development.

Ans:

Responsive design means creating web pages that automatically adjust their layout, images, and text, so the page looks good and is easy to use on every device — desktop, tablet, and mobile.

2. Explain the role of media queries in responsive design.

Ans:

Media queries let you apply different CSS styles depending on the device's screen width, height, or orientation.

They “detect” the screen size and switch layouts or styles, accordingly, making the design adaptive and user-friendly.

3. Describe how viewport settings affect mobile display.

Ans:

The viewport tag controls how a webpage is displayed on mobile devices.

It tells the browser to match the page width to the screen width, preventing automatic zooming or shrinking.

Without it, the design won't scale properly on phones or tablets.

Example:

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```