**Assignment 3 Solutions**

**Q.1 What is a Media Query in CSS, and what is its purpose?  
Ans. Media queries** allow us to apply CSS styles depending on a device's characteristics such as screen resolution or browser viewport width. It helps in creating responsive web pages.

**Q.2 How do you define a media query in CSS?  
Ans.** A media query consists of a media type and can contain one or more expressions, which resolve to either true or false.  
@media not|only mediatype and (expressions) {  
 CSS-Code;  
}  
The result of the query is true if the specified media type matches the type of device the document is being displayed on and all expressions in the media query are true. When a media query is true, the corresponding style sheet or style rules are applied, following the normal cascading rules.

**Q.3 Explain the concept of Breakpoints in Responsive Web Design and How They are used in Media Queries.  
Ans.** Media query breakpoints are pixel values that a developer/designer can define in CSS. When a responsive website reaches those pixel values, a transformation (such as the one detailed above) occurs so that the website offers an optimal user experience.  
CSS kicks in when the device width is **768px** and **above**  
@media only screen (min-width: 768px){  
...  
}  
CSS kicks in within the limits : **768px to 959px**  
@media only screen and (min-width: 768px) and (max-width: 959px){  
...  
}

**Q.4 What is the purpose of using Media Queries for Print Media?  
Ans.** It is used for viewing the paged material or document in the print preview mode.

**Q.5 What is the purpose of the orientation media feature?  
Ans.** It allow adjusting layout based on the screen orientation.  
@media screen and (orientation: **portrait**) {  
 …  
}  
@media screen and (orientation: **landscape**) {  
 …  
}