Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Analytical Chemistry II – Quiz (24th March, 2020)**

1) Write down the equation for Beer’s law. Define all the variables and constants in this equation, and specify their units.

*A* – absorbance (no units)

– molar absorptivity (L/(mol ⋅ cm))

*b* – optical pathlength (cm)

*c* – analyte concentration (M or mol/L)

2) What factors contribute to the broadening of spectral line widths in atomic spectroscopy?

* Line broadening due to uncertainty effect
* Doppler broadening
* Pressure (collisional) broadening