

## QUIZ on Lecture P1\_Wk3\_L2

1. Within the context of this course, VEDA is an acronym that means

- a) Very Easy Demonstrations for AFM
- b) Vast Exercises for Dynamic AFM
- c) Vermont Economic Development Association
- d) Virtual Environment for Dynamic AFM

2. VEDA requires

- a) essentially no input from the user
- b) the user to specify values for important parameters relevant to an AFM experiment
- c) the user to specify only the tip and substrate material
- d) the user to become proficient in solving non-linear differential equations

3. Below is an example of three VEDA simulations of the interaction force between a tip and a substrate as a function of the tip-substrate separation. In all three simulations the tip radius was kept constant. What is your best guess for the interaction model used in these simulations?

- a) JKR
- b) Hertz
- c) Bradley
- d) DMT

4. Using the plot given above, which curve was performed using the largest Hamaker constant?

- a) curve a)
- b) curve b)
- c) curve c)
- d) the Hamaker constant is the same for all simulations plotted

