Assessment week 7

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

9. Which of the following is true?
   - Electronic Hamiltonian does not include nuclear kinetic energy
   - Electronic Hamiltonian includes electromagnetic interaction between electrons and nucleus
   - Electronic Hamiltonian does not include electronic kinetic energy
   - Both (a) and (b) are true
   No, the answer is incorrect. Score: 0
   Accepted Answers
   Both (a) and (b) are true

D. Equilibrium point on a potential energy surface indicates a point
   where no force is acting on any nucleus
   where potential energy is at equilibrium
   where kinetic energy is at equilibrium
   where vibration stops
   No, the answer is incorrect. Score: 0
   Accepted Answers
   where no force is acting on any nucleus

9. Which one of the following is true?
   - Force represents equilibrium point
   - Force represents a point where vibration stops
   - Force represents gradient of potential energy
   - Force represents velocity
   No, the answer is incorrect. Score: 0
   Accepted Answers
   Force represents gradient of potential energy

9. Which one of the following is true?
   - Born-Oppenheimer approximation does not include all electronic states
   - Born expansion of total wavefunction includes different electronic states
   - Conical intersections cannot be explored using Born-Oppenheimer approximation
   - All these are true
   No, the answer is incorrect. Score: 0
   Accepted Answers
   All these are true

9. What is 6/360?
   - 360 is not
   - molar kinetic energy
   - electronic kinetic energy
   - just a number
   No, the answer is incorrect. Score: 0
   Accepted Answers
   just a number

9. Which one of the following is true in a dispersive medium (revision from earlier chapter):
   - red light travels faster than blue light
   - blue light travels faster than red light
   - red and blue light travels with equal velocity
   - green light travels faster than red light
   No, the answer is incorrect. Score: 0
   Accepted Answers
   red light travels faster than blue light

9. In a birefringent crystal, ordinary and extraordinary rays experience (revision from earlier chapter)
   - the same refractive index
   - different refractive index
   - different direction of reflection
   - all above
   No, the answer is incorrect. Score: 0
   Accepted Answers
   different refractive index

9. For a plane wave, magnitude of wave vector is (revision from earlier chapter)
   - proportional to the wavelength
   - inversely proportional to the wavelength
   - proportional to the square of wavelength
   - inversely proportional to the square of wavelength
   No, the answer is incorrect. Score: 0
   Accepted Answers
   inversely proportional to the wavelength
   You were allowed to submit this assignment only once.