Unit 5 - Week 3: Potential Energy Functions and Intermolecular Forces

Assessment 3

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

1) Nature of London's dispersion forces is:
   - Adhesive
   - Attractive
   - Both repulsive and attractive
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   Attractive
   4 points

2) For salts which own d-d electrostatic interactions, comparatively which of the energy given below is of larger magnitude and long range?
   - Electrostatic coulomb energy
   - Thermal energy
   - Coulomb and thermal energies are of same magnitude and range
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   Electrostatic coulomb energy
   4 points

3) For salts which own d-d electrostatic interactions, comparatively which of the energy given below is of short range?
   - Electrostatic coulomb energy
   - Thermal energy
   - Coulomb and thermal energies are of same range
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   Thermal energy
   4 points

4) Dipole moment points from?
   - Does not have dipole
   - One charge to the other
   - One charge to the other charge
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   One charge to the other
   4 points

5) For a symmetrical molecule C₂H₆O, what is the dipole moment in Debye?
   - 0.62
   - 0.42
   - 1.5
   - 0
   No, the answer is incorrect. 
   Accepted Answer:
   0
   4 points

6) Due to the dipole-dipole interactions, no average intermolecular potential is?
   - 
   - 
   - 
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   None of the above
   4 points

7) How easily the electrons of a molecule can be displaced by an electric field may be represented by its?
   - Induction
   - Attractive
   - Polarizability
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   Polarizability
   4 points

8) It is easier to melt or vapourise a covalent substance than an ionic substance because in ionic substance?
   - Attractive forces dominate sharply as separation distance increases
   - Attractive forces does not decrease sharply, as separation distance increases
   - Attractive forces are independent of separation distance
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   Attractive forces dominate sharply as separation distance increases
   4 points

9) Which of the following potential function is also known as soft sphere potential?
   - Lennard-Jones potential
   - Sutherland potential
   - Square well potential
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   Lennard-Jones potential
   4 points

10) Evaluate the potential function when α = 7?
   - Zero
   - Infray
   - None of the above
   No, the answer is incorrect. 
   Accepted Answer:
   Zero
   4 points