Assignment 2

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

1. What is the similarity between adhesion and cohesion?
   - Reversible work done
   - Energy to separate two different media
   - Surface tension
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: Reversible work done

2. What is the surface tension/surface energy?
   - A. Energy generated by the surface
   - B. Force per unit length
   - C. Force per unit area
   - D. Force at a distance
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: Force per unit length

3. Which of the following have lowest surface energy?
   - A. Teflon
   - B. Mercury
   - C. Glass
   - D. Water
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: Teflon

4. The contact angle (θ) is measured for the angle between
   - A. α and β or α+β
   - B. β and γ across
   - C. γ and γ across
   - D. None of these
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: α and β or α+β

5. Young-Laplace relation states
   - A. Work of adhesion, interfacial tension and contact angle
   - B. Interfacial tension and surface charge
   - C. Surface roughness, interfacial tension and contact angle
   - D. Interfacial tension and contact angle
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: Work of adhesion, interfacial tension and contact angle

6. Spreading of a liquid on the surface will occur spontaneously if
   - A. S = 0
   - B. S < 0
   - C. S > 0
   - D. None of these
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: S = 0

7. Metastable non-equilibrium state is the function of
   - A. Surface homogeneity
   - B. Orientation of surface properties due to contact with liquid
   - C. Adsorption over the surface
   - D. All of these
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: All of these

8. Malleability of surface with physical homogeneity is explained by
   - A. Cassie equation
   - B. Wenzel equation
   - C. Young equation
   - D. Dupre-equation
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: Wenzel equation

9. What are the difficulties in measuring the surface tension of solids?
   - A. All the applied work does not reappear as surface free energy
   - B. Solids exhibit various capillaries
   - C. Solid possesses high boiling point
   - D. Solids exhibit higher surface factor
   - No, the answer is incorrect.
   Score: 0
   Accepted Answers: All the applied work does not reappear as surface free energy

10. For a hydrogen nucleus system at 25 °C, calculate the p(1/2) allowed?
    - A. 8
    - B. 10
    - C. 15
    - D. 20
    - No, the answer is incorrect.
    Score: 0
    Accepted Answers: A. 8