Assignment 8

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

Note: Please note that one or more options are correct for some of the questions.

1. The above is an example of a chinmal nanotube
   True
   False
   No, the answer is incorrect.
   Accepted Answers:
   True

2. The cell vertices of graphene sheet are correctly expressed in
   \[ a = \sqrt{\frac{3}{2}} \text{ \text{nm}}, b = \sqrt{\frac{3}{2}} \text{ \text{nm}} \]
   \[ a = \sqrt{\frac{3}{2}} \text{ \text{nm}}, b = \sqrt{\frac{3}{2}} \text{ \text{nm}} \]
   No, the answer is incorrect.
   Accepted Answers:
   True

3. The choice of (A), (B), and (C) are respectively
   
   \[ \mathrm{A}, \quad \mathrm{B}, \quad \mathrm{C} \]
   \[ \mathrm{A}, \quad \mathrm{B}, \quad \mathrm{C} \]
   No, the answer is incorrect.
   Accepted Answers:
   \[ \mathrm{A}, \quad \mathrm{B}, \quad \mathrm{C} \]

4. The gap between the two walls of a double walled carbon nanotube comprised of (0, 1) inner tube and (1, 1) outer tube in ‘nanometer’ is equal to
   \[ \frac{1}{3}, \text{nm} \]
   \[ \frac{1}{4}, \text{nm} \]
   \[ \frac{1}{5}, \text{nm} \]
   No, the answer is incorrect.
   Accepted Answers:
   \[ \frac{1}{3}, \text{nm} \]

5. Calculate the interlayer spacing for (1, 1) carbon nanotube
   \[ \quad \text{nm} \]
   \[ \quad \text{nm} \]
   No, the answer is incorrect.
   Accepted Answers:
   \[ \quad \text{nm} \]

6. Which of the following methods can be employed to synthesize graphene
   - Chemical vapor deposition
   - Aqueous solution technique
   - Reduction of graphene oxide
   - Mechanical exfoliation
   No, the answer is incorrect.
   Accepted Answers:
   Chemical vapor deposition, Mechanical exfoliation

7. Which of the following is not regarding Graphene
   - Graphene is applicable to electronic devices
   - Graphene is an excellent material for high-speed electronic devices
   - Graphene has excellent conductivity at room temperature
   - Graphene is an insulator
   No, the answer is incorrect.
   Accepted Answers:
   Graphene is an insulator

8. Outer planar distance in highly ordered graphite is
   \[ \text{A} \]
   \[ \text{A} \]
   \[ \text{A} \]
   No, the answer is incorrect.
   Accepted Answers:
   \[ \text{A} \]

9. In hydrogenation in carbon nanotube is
   - Only sp²
   - Only sp³
   - A and B
   No, the answer is incorrect.
   Accepted Answers:
   A and B

10. Bonding within graphite plane is stronger than that in diamond
    True
    False
    No, the answer is incorrect.
    Accepted Answers:
    True

Due on 2019-09-26, 23:59:00 IST.