Unit 8 - Structure Determination

Assignment 7

1. Which of the following has a dipole intermolecular interaction in the solid state?

A. Ne
B. I₂
C. H₂O
D. CO₂
E. Ne

2. Which of the following has a dipole-dipole interaction in the solid state?

A. Ne
B. I₂
C. H₂O
D. CO₂
E. Ne

3. Which of the following has a hydrogen bond in the solid state?

A. Ne
B. I₂
C. H₂O
D. CO₂
E. Ne

4. Which of the following has a dipole-induced dipole interaction in the solid state?

A. Ne
B. I₂
C. H₂O
D. CO₂
E. Ne

5. Which of the following has a dispersion interaction in the solid state?

A. Ne
B. I₂
C. H₂O
D. CO₂
E. Ne

6. What is the energy of the first excited state of an inorganic compound?

A. 0.01 eV
B. 0.1 eV
C. 1.0 eV
D. 10 eV
E. 100 eV

7. Which of the following is a nonpolar molecule?

A. H₂O
B. CO₂
C. I₂
D. CH₄
E. LiF

8. Which of the following is a polar molecule?

A. H₂O
B. CO₂
C. I₂
D. CH₄
E. LiF

9. Which of the following is a molecular solid?

A. Ne
B. I₂
C. H₂O
D. CO₂
E. Ne

10. What is the difference between a molecular bond and a covalent bond?

11. Which of the following is an ionic bond?

A. Ne
B. I₂
C. H₂O
D. CO₂
E. Ne