

7] The covalent bonds in a molecular crystal hold the molecule together. The molecules in the crystal are held together by **Van der Waals forces**

- 9] a. Van der Waals forces  
b. Covalent bonds  
c. Ion - Ion (Coulombic attractions)  
d. Metallic bonds

- 11] a.  $\text{CaCO}_3$  **Ionic**    b. Pt **Metallic**    c. ZnO **Ionic**  
d.  $\text{C}_{12}\text{H}_{22}\text{O}_{11}$  **Molecular**    e.  $\text{C}_6\text{H}_6$  **Molecular**    f.  $\text{I}_2$  **Molecular**

- 28] b. NiCo alloy  
c. W  
d. Ge

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a. True

b. False - interstitial

alloys form between elements with very different bonding atomic radii

c. False - nonmetallic elements are typically found in interstitial alloys.

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conducting bands are created from overlaps of  $M, O_s$ .

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a. Ionic solids are more likely to dissolve in water due to the energy release from Ion-dipole forces.

d. Covalent solids can become electricity conducting by substitution