

Take Home Questions On Chemical Bonding-1

1. Write Lewis dot structure of SO_2 , CN^- , peroxide ion.
2. Write Lewis dot symbols for atoms of the following elements: Be, Na, B, O, N, Br.
3. Write Lewis symbols for the following atoms and ions: S and S^{2-} ; Al and Al^{3+} ; H and H^-
4. Draw the Lewis structures for the following molecules and ions: H_2S , SnCl_2 , BeF_2 , CO_3 , HCOOH .
5. Define octet rule. Write its significance and limitations.
6. Write the favourable factors for the formation of ionic bond.
7. Define the bond length and bond angle.
8. Use Lewis symbols to show electron transfer between the following atoms to form cations and anions : (a) K and S (b) Ca and O (c) Al and N.
9. Define electro negativity. How does it differ from electron gain enthalpy?
10. What do you understand by bond pairs and lone pairs of electrons? Illustrate by giving one example of each type.