

Assignment No. 4

STD 10.

Chemistry

Covalent Bonding & Co-ordinate Bond

1. Compare carbon tetrachloride and sodium chloride
With regard to
 - Solubility in water
 - Electrical conductivity

(Carbon Tetrachloride is covalent while sodium chloride is electrovalent .Refer to the table on page 30, Properties and Comparison of electrovalent and covalent compounds)
2. Give a reason why-covalent compounds exist as gases, liquids or soft solids.
(Refer to the table on page 30, Properties and Comparison of electrovalent and covalent compounds)
3. Draw electron dot diagram for the structure of :
 - a) Nitrogen molecule
 - b) Ammonia
 - c) Methane
 - d) Water molecule
4. Name two compounds that are covalent when taken pure but produce ions when dissolved in water.
5. Acids dissolve in water and produce positively charged ions . Draw the electron dot structure of these ions. State the type of bonding in it .
6. Draw the formation of ammonium ion.
7. Define a co-ordinate bond. Give another name for this bond.