

Chem12 Ionic and Molecular Substances : W.S.-30

1) Explain why solutions of salts (ionic substances) are good conductors of electricity, while solutions of molecular substances are poor conductors.

2) Identify each of the following as ionic (I) or molecular (M).

- a) BaCl_2 b) HBr c) CH_3OH d) $\text{Fe}(\text{NO}_3)_3$
e) NaCH_3COO f) table salt g) sugar h) SO_2

Answers : 1) Ionic substances break apart (dissociate) into positive and negative ions which will conduct electricity. These ionic substances are called **electrolytes**. Molecular substances do not break apart and remain neutral when dissolved in water. These are generally polar substances., 2) a) I, b) I, c) M (methanol), d) I, e) I, f) I, g) M, h) M.