Chapter 4: Reactions in Aqueous Solutions

1.) Which of the following compounds is a strong electrolyte?

A.) H_2O B.) CH_3OH C.) CH_3CH_2OH D.) HF E.) NaF

2.) Which of the following compounds is a weak electrolyte?

A.) HNO_3 B.) $NaNO_3$ C.) HNO_2 D.) $NaNO_2$ E.) NaOH

3.) Which of the following compounds is a nonelectrolyte?

A.) NaF B.) HNO_3 C.) CH_3COOH (acetic acid) D.) $C_6H_{12}O_6$

4.) The distinguishing characteristic of all electrolyte solutions is that they

A.) Contain molecules B.) Conduct electricity C.) React with other solutions D.) Always contain acids E.) Conduct heat

5.) What is the correct formula of the salt formed in the neutralization reaction of hydrochloric acid with calcium hydroxide?

A.) CaO B.) $CACl_2$ C.) CaH_2 D.) CaCl E.) CaClH

6.) What is the chemical formula of the salt produced by the neutralization of hydrobromic acid with magnesium hydroxide?

A.) MgBr B.) Mg_2Br_3 C.) Mg_3Br_2 D.) Mg_2Br E.) $MgBr_2$

7.) Identify the major ionic species present in an aqueous solution of Na_2CO_3

A.) Na_2^+, CO_3^{2-} B.) Na_2^+, C^{2-}, O_3 C.) Na^+, C^{4+}, O_3^{2-} D.) Na^+, CO_3^{2-}