

**ACIDS, BASES AND SALTS**

1. The turmeric solution will turn red by an aqueous solution of - 2017  
(1) potassium acetate (2) copper sulphate  
(3) sodium sulphate (4) ferric chloride
2. Compound A on strong heating in a boiling tube gives off reddish brown fumes and a yellow residue with a few drops of sodium hydroxide solution, a white precipitate appeared. Identify the cation and anion present in the compound A. 2015  
(1) Copper (II) and nitrate (2) Lead (II) and chloride  
(3) Zinc and sulphate (4) Lead (II) and nitrate
3. A substance A reacts with another substance B to produce the product C and a gas D. If a mixture of the gas D and ammonia is passed through an aqueous solution of C, baking soda is formed. The substances A and B are  
(1) HCl and NaOH (2) HCl and Na<sub>2</sub>CO<sub>3</sub>  
(3) Na and HCl (4) Na<sub>2</sub>CO<sub>3</sub> and H<sub>2</sub>O
4. Which of the following represents the correct order of the acidic strength for equimolar aqueous solution of HCl, H<sub>2</sub>SO<sub>4</sub>, NH<sub>4</sub>OH and NaOH 2014  
(1) HCl < NH<sub>4</sub>OH < NaOH < H<sub>2</sub>SO<sub>4</sub>  
(2) NH<sub>4</sub>OH < NaOH < H<sub>2</sub>SO<sub>4</sub> < HCl  
(3) HCl < H<sub>2</sub>SO<sub>4</sub> < NH<sub>4</sub>OH < NaOH  
(4) NaOH < NH<sub>4</sub>OH < HCl < H<sub>2</sub>SO<sub>4</sub>
5. A metal carbonate X on treatment with a mineral acid liberates a gas which when passed through aqueous solution of a substance Y gives back X. The substance Y on reaction with the gas obtained at anode during electrolysis of brine gives a compound Z which can decolorise coloured fabrics. The compounds X, Y and Z respectively are 2013  
(1) CaCO<sub>3</sub>, Ca(OH)<sub>2</sub>, CaOCl<sub>2</sub>  
(2) Ca(OH)<sub>2</sub>, CaO, CaOCl<sub>2</sub>  
(3) CaCO<sub>3</sub>, CaOCl<sub>2</sub>, Ca(OH)<sub>2</sub>  
(4) Ca(OH)<sub>2</sub>, CaCO<sub>3</sub>, CaOCl<sub>2</sub>

**ANSWER KEYS**

1.1

2.4

3.2

4.4

5.1