

**BRAIN INTERNATIONAL SCHOOL**

Chemistry Assignment

Class: X

June'21

**Chapter 2: Acids, Bases and Salts**

**1. MULTIPLE CHOICE QUESTIONS:**

- (i) An aqueous solution turns red litmus solution blue. Excess addition of which of the following solution would reverse the change?  
(a) Baking powder      (b) Lime      (c) Ammonium hydroxide solution      (d) HCl
- (ii) One of the constituents of baking powder is sodium hydrogen carbonate, the other constituent is  
(a) HCl      (b) Tartaric acid      (c) Acetic acid      (d) Sulphuric acid

**2. ASSERTION-REASON QUESTIONS:**

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

- (i) Both A and R are true and R is correct explanation of the assertion.  
(ii) Both A and R are true but R is not the correct explanation of the assertion.  
(iii) A is true but R is false.  
(iv) A is false but R is true.

(a) Assertion: Antacids are used to get rid of pain caused by indigestion.

Reason: Antacids neutralise the excess acid produced in the stomach.

(b) Assertion: Tooth decay starts when pH of the mouth is lower than 5.5.

Reason: Bee-sting leaves an acid which causes pain and irritation.

3. How is baking soda obtained from common salt? Explain its use (a) as medicine (b) in food and drinks (c) fire extinguisher.
4. Write any three chemical properties of acids and bases.
5. What are strong and weak acids? Give examples.
6. Why do crystals of washing soda change to white powder on exposure to air.
7. Why do we feel burning sensation in the stomach when we over eat.
8. What happens when dil. HCl is added to bleaching powder? Write chemical equation also.
- 9. Question nos. (a) to (d) are based on the two tables given below. Study this table and answer the questions that follow:**

S. No.	Salt	Base	Acid	pH
1.	Na <sub>2</sub> SO <sub>4</sub>	NaOH	H <sub>2</sub> SO <sub>4</sub>	=7
2.	NH <sub>4</sub> Cl	NH <sub>4</sub> OH	HCl	<7
3.	KNO <sub>3</sub>	KOH	HNO <sub>3</sub>	=7
4.	NaCl	NaOH	HCl	=7

- (a) Why is the pH of ammonium chloride less than 7?  
(b) What is the nature of ammonium sulphate solution?  
(c) Sodium hydrogen carbonate gives brisk effervescence when reacts with

- (i) HCl      (ii) NH<sub>4</sub>Cl      (iii) NaOH      (iv) K<sub>2</sub>CO<sub>3</sub>
- (d) Which species formed on heating sodium hydrogen carbonate is used to make bread and cakes fluffy, soft and spongy?
- (i) Na<sub>2</sub>CO<sub>3</sub>      (ii) CO<sub>2</sub>      (iii) H<sub>2</sub>O      (iv) H<sub>2</sub>CO<sub>3</sub>