

**Practice Question – Set 3**

**Subject – Chemistry**

**Class - X**

1. Study the following table and choose the correct option: (1)

	Salt	Parent acid	Parent Base	pH
(a)	Sodium Chloride	HCl	NaOH	4.6
(b)	Ammonium Chloride	HCl	NH <sub>4</sub> OH	7
(c)	Sodium Acetate	CH <sub>3</sub> COOH	NaOH	8.9
(d)	Ammonium Acetate	CH <sub>3</sub> COOH	NH <sub>4</sub> OH	10

2. Give Reason: (2)

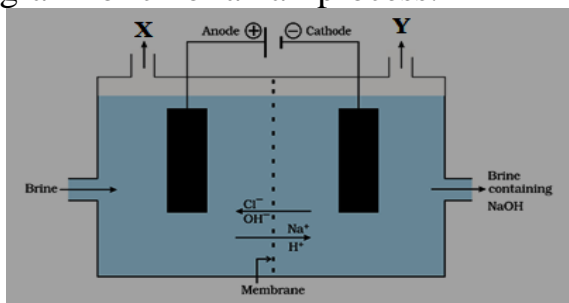
- i) Plaster of Paris should be stored in moisture proof container.
- ii) Tooth decay starts when the pH of the mouth is lower than 5.5.

3. Soda-acid fire extinguisher uses 'X' as one of its constituents. 'X' is produced using sodium chloride as one of the raw materials. 'X' on heating produces 'Y' which is used for removing permanent hardness of water. Identify 'X' and 'Y'. Also write the balanced chemical equations for the reactions involved. (3)

4. i) How is bleaching powder prepared from brine?  
ii) Write the relevant reactions.  
iii) What is its use in textile industry? (3)

5. i) What is a neutralisation reaction?  
ii) What is Universal indicator?  
iii) How is a pH paper made? What will be the colour of the pH paper when it is dipped in an aqueous solution of sodium chloride. (3)

6. i) Following is the diagram for chlor alkali process.



- (a) Identify X and Y.  
(b) Why is this process called chlor alkali process?  
ii) Identify the following from the given statement and write its chemical formula:  
A blue crystalline salt when heated in a test tube it turns white, again when moistened with water, it turns blue. (3)