SAI International School Class-X Subject_ Chemistry Topic- Acids, Bases & Salts Sub Topic- Study of Salts – 3. Baking Soda Home Assignment

OBJECTIVE:

MCQs

NICOS				
Q.1	Chemical formula of baking soda is-			
	(a) $MgSO_4$ (b) Na_2CO_3			
0.2	(c) NaHCO ₃ (d) MgCO ₃			
Q.2	Acetic acid was added to a solid X kept in a test tube. A colourless and odourless gas was evolved. The gas was passed through lime water which turned milky. It was concluded that.			
	 (a) Solid X is sodium hydroxide and the gas evolved is CO₂ 			
	(b) Solid X is sodium bicarbonate and the gas evolved is CO ₂			
	(c) Solid X is sodium acetate and the gas evolved is CO2			
	(d) Solid X is sodium chloride and the gas evolved is CO ₂			
Q.3	An acid (A) with sodium hydrogen carbonate is used in making the cakes fluffy and spongy. It is due to the release of (B) gas in the reaction. Here, X and Y are			
	(a) A : Oxalic acid : B : CO ₂			
	(b) A : Tartaric acid : B : O ₂			
	(c) A : Succinic acid : B : H_2			
	(d) A : Tartaric acid : B : CO ₂			
For Assertion& Reason question follow the following directions.				
DIRECTION: Each of these questions contains an Assertion followed by Reason. Read them carefully and answer the question on the basis of following options. You have to select the one that best describes the two statements.				
(a) If both Assertion and Reason are correct and Reason is the correct explanation of Assertion.				
(b) If both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.				
(c) If Assertion is correct but Reason is incorrect.				
(d) If Assertion is incorrect but Reason is correct.				
(e) If Assertion & Reason both are incorrect.				
Q.4	Assertion: Baking soda creates acidity in the stomach. Reason: Baking soda is alkaline.			
Q.5	Assertion: Gas bubbles are observed when sodium carbonate is added to dilute hydrochloride acid. Reason: Carbon dioxide is given off in the reaction.			

SUBJECTIVE:

S.L No.	Questions	Mark	Skill
Q.1	Write the chemical name and chemical formula of washing soda. [CBSE 2014]	1	R
Q.2	Name the chemicals used in acid fire extinguisher and the gas evolved from it when it is used? [CBSE 2012, 2011]	1	u
Q.3	 A substance 'X' is used as antacid reacts with hydrochloric acid to produce a gas W which is used in fire extinguishers: a. Name the substance X and 'Y'. b. Write a balanced equation of the reaction between X and hydrochloric acid. 	3	R+A
Q.4	"Sodium hydrogen carbonate is a basic salt." Justify the statement. How is it converted into washing soda? Explain. [CBSE2012]	3	U+A
Q.5	 a. A metal compound 'X' reacts with dilute H2SO4 to produce effervescence. The gas evolved extinguishes a burning candle. If one of the compound formed is calcium sulphate, then what is 'X' and the gas evolved? Also write a balanced chemical equation for the reaction which has occurred. b. (i) Name one antacid. How does it help to relieve indigestion in stomach? (ii) A farmer treats the soil with quicklime or calcium carbonate. What is the nature of the soil? Why does the farmer treat the soil with quicklime? [CBSE 2012] 	5	HOT