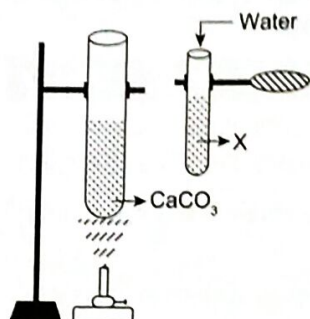
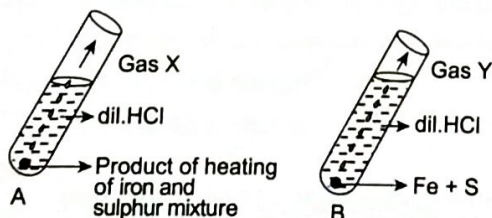


Directions for questions 1 and 2: Answer questions based on the diagrams given below.



- Q1.** What could be the substance 'X' obtained from heating in the first test tube?
- (a) CaCO_3 (b) CaO
 (c) CO_2 (d) CaC_2
- Q2.** What happens in the second test tube?
- (a) X dissolves in water
 (b) X reacts with water with evolution of heat
 (c) X reacts with water with absorption of heat
 (d) No characteristic change is observed

Directions for questions 3 to 7: Answer questions based on the diagrams given below.

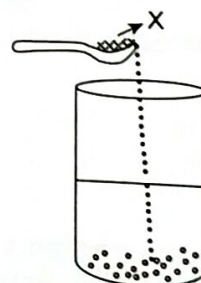


- Q3.** Name the solid substance taken in the test tube A.
- (a) Mixture of Fe and S
 (b) FeSO_4
 (c) Only Fe
 (d) FeS
- Q4.** Name the gas coming out of the test tube A.
- (a) H_2S (b) H_2
 (c) SO_2 (d) $\text{SO}_2 + \text{SO}_3$

- Q5.** Name the gas coming out of test tube 'B'.
- (a) H_2S (b) H_2
 (c) SO_2 (d) HCl

- Q6.** In one of the test tubes, the gas catches fire with pop sound. Identify the test tube and give reason
- (a) Test tube 'A' as H_2S evolved catches fire with pop sound
 (b) Test tube 'A' as H_2 evolved catches fire with pop sound
 (c) Test tube 'B' as H_2S evolved catches fire with pop sound
 (d) Test tube 'B' as H_2 evolved catches fire with pop sound
- Q7.** Which of the following could be the identification test for gas 'X'?
- (a) Passing through lime water
 (b) Passing through CuSO_4 solution
 (c) Exposure to paper dipped in $\text{K}_2\text{Cr}_2\text{O}_7$
 (d) Exposure to burning splinter

Directions for questions 8 and 9: Answer questions based on the diagram given below.



- Q8.** The solution in the above beaker shows Brownian motion and the components cannot be separated by filtration. Identify 'X' added to water.
- (a) Starch powder (b) Chalk powder
 (c) Sand (d) Common salt
- Q9.** What is the term used to describe 'X'?
- (a) Solute (b) Suspended particles
 (c) Dispersed phase (d) Dispersion medium