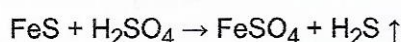
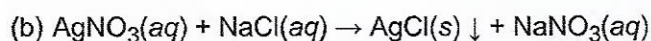


## 1. Very Short Answer Type Questions

(a) State one basic difference between a physical change and a chemical change.



Consider the above mentioned two chemical equations with two different kinds of arrows ( $\uparrow$  and  $\downarrow$ ) along with product. What do these two different arrows indicate?

(c) Hydrogen being a highly inflammable gas and oxygen being a supporter of combustion, yet water which is a compound made up of hydrogen and oxygen is used to extinguish fire. Why?

(d) What happens chemically when quicklime is added to water filled in a bucket?

(e) On what basis is a chemical equation balanced?

(f) What change in colour is observed when white silver chloride is left exposed to sunlight? State the type of chemical reaction in this change.

## 2. Short Answer Type Questions [I]

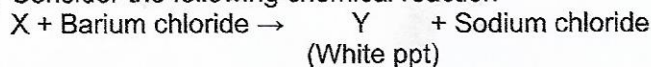
(a) A zinc plate was put into a solution of copper sulphate kept in a glass container. It was found that blue colour of the solution gets fader and fader with the passage of time. After a few days when zinc plate was taken out of the solution, a number of holes were observed on it.

(a) State the reason for changes observed on the zinc plate.

(b) Write the chemical equation for the reaction involved.

(b) Write any two observations in an activity which may suggest that a chemical reaction has taken place. Give an example in support of your answer.

(c) Consider the following chemical reaction



(a) Identify 'X' and 'Y'

(b) The type of reaction

(d) A white salt on heating decomposes to give brown fumes and a residue is left behind.

(a) Name the salt.

(b) Write the equation for the decomposition reaction.

(e) What happens when an aqueous solution of sodium sulphate reacts with an aqueous solution of barium chloride? State the physical conditions of reactants in which the reaction between them will not take place. Write the balanced chemical equation for the reaction and name the type of reaction.

(f) When the powder of a common metal is heated in an open china dish, its colour turns black. However, when hydrogen is passed over the hot black substance so formed, it regains its original colour. Based on the above information answer the following questions:

(a) What type of chemical reaction takes place in each of the two given steps?

(b) Name the metal initially taken in the powder form. Write balanced chemical equations for both reactions.