

DELHI PUBLIC SCHOOL, JAMMU
ASSIGNMENT
SESSION (2017-18)

CLASS: X

SUBJECT: CHEMISTRY

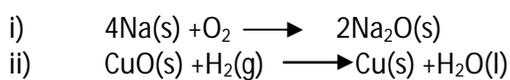
Topics: Chemical Equations and Reactions, Acids,bases and Salts

Q1. Why should a magnesium ribbon be cleaned before burning in air?

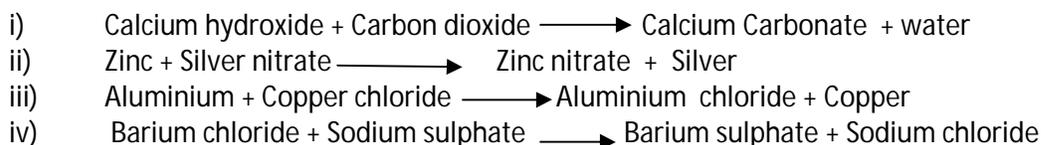
Q2. What is a balanced chemical equation? Why should the chemical equation be balanced?

Q3. Why is the amount of gas collected in one of the test tubes double of the amount collected in the other on electrolysis of water? Name this gas.

Q4. Identify the substances oxidized and the substances reduced in the following reactions:-



Q5. Write the balanced chemical equations for the following reactions:-



Q6. You are provided with three test tubes. one of them contains distilled water and the other two contain an acidic solution and a basic solution respectively. If you are given only red litmus papers, how will you identify the contents of each test tube?

Q7. Why should curd and sour substances not be kept in brass and copper vessels?

Q8. Why do HCl, HNO₃, etc., show acidic character in aqueous solutions while solutions of compounds like C₂H₅OH and glucose do not show acidic character?

Q9. While diluting an acid why is it recommended that the acid should be added to water and not water to the acid?

Q10. Five solutions A, B, C, D and E when tested with universal indicator showed PH as 4, 1, 11, 7 and 9 respectively. Which solution is :

- a) Neutral
- b) Strongly alkaline
- c) Strongly acidic
- d) Weakly acidic
- e) Weakly alkaline

Arrange the PH in increasing order of hydrogen ion concentration.

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Q1. Write one equation each for decomposition reactions where energy is supplied in the form of heat, light or electricity.

Q2. What do you mean by precipitation reaction? Explain with examples.

Q3. Explain the following terms with example:

- i) Corrosion ii) Rancidity

Q4. Why do we store Silver Chloride in dark coloured bottles?

Q5. What happens when a piece of :

- a) Zinc metal is added to copper sulphate solution?
- b) Aluminium metal is added to dilute hydrochloric acid?
- c) Silver metal is added to copper sulphate solution?

Also, write the balanced chemical equation if the reaction occurs.

Q6. A milkman adds a very small amount of baking soda to fresh milk.

- a) Why does he shift the PH of the fresh milk from 6 to slightly alkaline?
- b) Why does this milk take a long time to set as curd?

Q7. Give two important uses of washing soda and baking soda.

Q8. What will be the action of the following substances on litmus paper?

Dry HCl gas, moistened NH_3 , lemon juice, carbonated soft drink, curd, soap solution.

Q9. Name the acid present in ant sting and give its chemical formula. Also give the common method to get relief from the discomfort caused by the ant sting.

Q10. In one of the industrial processes used for manufacture of sodium hydroxide, a gas 'X' is formed as by-product. The gas 'X' reacts with lime water to give a compound 'Y' which is used as a bleaching agent in chemical industry. Identify 'X' and 'Y' giving the chemical equation of the reaction involved.