

NEW ALWUROOD INTERNATIONAL SCHOOL - JEDDAH, KSA

HOLIDAY ASSIGNMENT

STD: X

CHEMISTRY

LESSON- 1 (CHEMICAL REACTIONS & BALANCING EQUATIONS):

One mark questions:

1. Define Rancidity.
2. What are anti-oxidants?
3. Why respiration is exothermic reaction?
4. A shiny brown coloured element 'X' on heating in air becomes black in colour. Name the element 'X' and the black coloured compound formed.
5. What is the chemical formula of 'rust'?
6. Name the substance that has been oxidised & reduced in the following reaction:
$$\text{Cl}_2 + \text{H}_2\text{S} \rightarrow 2\text{HCl} + \text{S}$$
7. Suggest two methods to prevent rusting.
8. Suggest two methods to prevent rancidity.

Two mark questions:

1. Name the type of reaction represented by the following:
(i) $\text{P} + \text{Q} \rightarrow \text{PQ}$ (ii) $\text{PQ} \rightarrow \text{P} + \text{Q}$
(iii) $\text{PQ} + \text{R} \rightarrow \text{RQ} + \text{P}$ (iv) $\text{PQ} + \text{RS} \rightarrow \text{PS} + \text{RQ}$
2. Can we stir silver nitrate solution with a copper spoon?
Why? Or Why not?
3. Why does the blue colour of copper sulphate solution change when a piece of iron dropped into it?
4. Write balanced chemical equations for the following reactions:
(i) Silver bromide on exposure to sunlight decomposes into silver & bromine.
(ii) Sodium metal reacts with water to form sodium hydroxide & hydrogen gas.
5. Write two observations that you will make when an iron nail is kept in an aqueous solution of copper sulphate? Write the chemical equation for this reaction.

Three mark questions:

1. Give an example of decomposition reaction which is carried in the presence of:
(i) Electrical energy (ii) Sun light (iii) Heat energy.
2. A small amount of quick lime is added to water in a beaker.
(i) Name and define the type of reaction that has taken place.
(ii) Write balanced chemical equation for the above reaction.
Write the chemical name of product obtained.
(iii) State one observation that you will make in the reaction.
3. Give two examples of everyday life situations where redox reactions are taking place.
4. What type of chemical reactions take place when:
(i) Electric current is passed through water
(ii) Limestone is heated.
Also write balanced chemical equations for the above reaction.

Four mark questions:

1. Write balanced chemical equations for the reaction that take place during respiration. Identify the type of combination reaction that take place during this process & justify the name. Give one more example of this type of reaction.
2. A chemical is heated in a test tube brown fumes comes out and a black residue is left behind.
(i) Name the chemical which gives brown fumes.
(ii) Write the balanced chemical equation.
(iii) Name the compound which gives black residue.

LESSON -2 (ACIDS, BASES & SALTS):

1. Name two natural indicators.
2. Give example for olfactory indicators.
3. Zinc reacts with dil. H_2SO_4 . Write the products.
4. Give one example for neutralization reaction.
5. Give the harmful effect of strong acids and bases to humankind.
6. Give the chemical name of baking soda.
7. Write the formula for gypsum salt.
8. Give two examples for hydrated salt.

9. Which of the following solutions A B C and D whose p^H values are 3.3, 4.8, 1.2, 8.8 may respond to Red litmus paper? Give the reason for your answer.
10. List four uses of beaching powder.
11. What is called dead burnt plaster.
12. What are called hydrated salts?
10. List the uses of plaster of paris.
11. How is bleaching powder prepared ?
12. Metal compound X react with dil.Hcl to produce effervescence. The gas evolved extinguishes the burning candle. Write a balanced chemical equation for the reaction if one of the compound formed is calcium chloride.
13. Arrange the following solutions in the increasing acidity whose p^H values are 4.2, 3.2, 6.1, 4.8, 1.1 , 2.1 , 1.3
14. Chlorine is passed over slaked lime - write a balanced equation for the reation.
15. How will you classify acids on the basis of their occurrence ?
16. Sodium hydroxide reacts with sulphuric acid. write the resulting products
17. Name two substances which are used to remove acidity of soil.
18. Name two substances which are used to remove alkalinity of the soil .
19. What is the p^H value within which our body works?
20. Name the raw material(s) used for the manufacture of washing soda.
21. Why is baking soda solution is applied when a honey bee stings a person?
22. Name two substances that are used as antacids.