

SAINIK SCHOOL GOPALGANJ

SUB – SCIENCE

Class X

ASSIGNMENT – 2

Chemical Reaction and Equations

1. Given below are four options against each question. Choose the option which you consider the most appropriate as your answer:

(i) In which of the following solution iron gets oxidized?

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|-------------------------|----------------------|
| (i) Silver nitrate | (iii) Zinc sulphate |
| (ii) Magnesium sulphate | (iv) Copper sulphate |
| (a) (ii) and (iv) | (c) (i) and (iii) |
| (b) (ii) and (iii) | (d) (i) and (iv) |

(ii) The process of respiration is

- (a) an oxidation reaction which is endothermic
- (b) a reduction reaction which is exothermic
- (c) an oxidation reaction which is exothermic
- (d) a combination reaction which is endothermic

(iii) Which of the following can be decomposed by the action of light

- | | |
|----------|----------|
| (a) NaCl | (c) KCl |
| (b) AgCl | (d) CuCl |

(iv) Aluminium window frames do not corrode away because aluminium is

- (a) not reactive enough with oxygen
- (b) coated a layer of aluminium oxide
- (c) not capable of forming an oxide
- (d) None

(v) The solution to be mixed with lead nitrate to obtain yellow precipitate is

- | | |
|-----------------------|------------------------|
| (a) Potassium iodide | (b) Potassium sulphate |
| (c) Potassium nitride | (d) Potassium chloride |

2. Fill in the blanks:

(i) Addition of hydrogen in a substance in a reaction is known as _____ reaction.

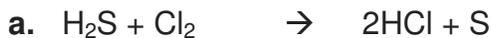
(ii) In a _____ reaction two or more substances combine to form a new single substance.

(iii) Reactions in which heat is given out along with the products are called ___ reactions.

(iv) Those reactions, in which two compounds react by an exchange of ions to form two new compounds, are called _____ reactions.

(v) The digestion of food in the body is an example of _____ reaction.

Q.2 In the following Chemical reaction identify oxidizing agent, reducing agent, oxidation half and reducing half:



3. What is the difference between displacement and double displacement reactions? Write equation for these reaction.

4. What happens when silver nitrate solution is added to sodium chloride solution?

(a) Write the equation for the reaction which takes place.

(b) Name the type of reaction involved.

Long answer type questions:

5. Explore real life situations of corrosion and rancidity taking place in your home or surrounding. List the conditions required for corrosion and rancidity to take place. Write what measure you will take to stop or reduce rancidity and corrosion.

6. Write five examples with balanced chemical equations each of combination, decomposition, single and double displacement reactions.
