**SHRI DHARMASTHALA MANJUNATHESHWARA SCHOOL,ASHOKNAGAR MANGALURU**

**GRADE:1O** **SUBJECT :CHEMISTRY**

**MULTIPLE CHOICE QUESTIONS**

1. In a chemical reaction between sulphuric acid and barium chloride solution, the white precipitates formed are of: (a) Hydrochloric acid (b) Barium sulphate (c)Chlorine (d) Sulphur
2. The respiration process during which glucose undergoes slow combustion by combining with oxygen in the cells of our body to produce energy, is a kind of: (a) Exothermic process

(b) Endothermic process (c) Reversible process (d) Physical process

3. You are given the following chemical reaction: This reaction represents: (a) Combination reaction as well as double displacement reaction (b) Redox reaction as well as displacement reaction (c) Double displacement reaction as well as redox reaction (d) Decomposition reaction as well as displacement reaction
4. A chemical reaction does not involve: (a) Formation of new substances having entirely different properties than that of

the reactants (b) Breaking of old chemical bonds and formation of new chemical bonds (c) Rearrangement of the atoms of reactants to form new products (d) Changing of the atoms of on element into those of another element to form new products.

5. The neutralisation reaction between an acid and a base is a type of: (a) Double displacement reaction (b) Displacement reaction (c) Addition reaction (d) Decomposition reaction

**ASSERTION-REASONING QUESTIONS**

For the following questions, two statements are given-one labelled Assertion (A) and the other labelled Reason(R). Select the correct answer to these questions from the options (i) , (ii), (iii) and (iv)as given below:

(i)Both A and R are true and R is the correct explanation of the Assertion.

(ii)Both A and R are true but R is not the correct explanation of the Assertion. (iii)A is true but R is false.

(iv)A is false but R is true.

6. Assertion:- Calcium carbonate when heated gives calcium oxide and water.

Reason:- On heating calcium carbonate, decomposition reaction takes place.

7. Assertion: After white washing the walls, a shiny white finish on walls is obtained after two to three days.

Reason: Calcium Oxide reacts with Carbon dioxide to form Calcium Hydrogen Carbonate which gives shiny white finish.

8. Assertion:- Lead nitrate on thermal decomposition gives lead oxide, brown coloured nitrogen dioxide and oxygen gas.

Reason:- Lead nitrate reacts with potassium iodide to form yellow ppt of lead iodide and the reaction is double displacement as well as precipitation reaction.

9. Assertion:- Exposure of silver chloride to sunlight for a long duration changes it to grey due to the formation of silver by decomposition of silver chloride.

Reason:- In this process, sublimation of silver chloride takes place.

**ONE MARK QUESTIONS**

10. Why do potato chips manufacturers fill the packet of chips with nitrogen gas?
11. Identify in the following reaction:

$ZnO + C \rightarrow Zn + CO$

(a) The substance oxidised and (b)

The substance reduced.

12. In electrolysis of water, why is the volume of gas collected over one electrode is double than that of gas collected over the other electrode?
13. What can be seen when a strip of copper metal is placed in a solution of silver nitrate?
14. Write balanced chemical equation for a reaction between sodium chloride and silver nitrate indicating the physical states of the reactants and the products

**THREE MARK QUESTIONS**

15. Give the characteristic tests for the following gases.

(a) $CO_2$ (b) $O_2$ (c)$H_2$

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

(a) Sodium carbonate on reaction with hydrochloric acid in equal molar concentrations gives sodium chloride and sodium hydrogen carbonate.

(b) Sodium hydrogen carbonate on reaction with hydrochloric acid gives sodium chloride, water and liberates carbon dioxide.

(c) Copper sulphate on treatment with potassium iodide precipitates cuprous iodide, liberates iodine gas and also forms potassium sulphate.

17. A student takes 2g of Ferrous sulphate crystal in a dry test tube and heats the

test tube. Answer the following questions on the basis of the observations made by the student.

(a) Write an observation about colour of residue or smell of gas involved.

(b) Name the type of chemical reaction.

(c) Write balanced chemical equation for the reaction involved.

**FIVE MARK QUESTIONS**

18. (a) State the various characteristics of chemical reactions.

(b) State one characteristic each of the chemical reaction which takes place when:

(i) Dilute hydrochloric acid is added to sodium carbonate.

(ii) Dilute sulphuric acid is added to barium chloride solution.

(iii)Quick lime is treated with water.

19. A brown substance X on heating in air forms a substance Y. When hydrogen gas is passed over heated Y, it again changes back into X.

(i) Name the substance X and Y.

(ii) Name the type of chemical reactions that take place here.

(iii) Write the chemical equations of the reactions.

20. Identify the type of reactions taking place in each of the following:

(a) Barium chloride solution is mixed with copper sulphate solution and white ppt is formed.

(b) On heating copper powder in china dish, the surface of copper turns black. (c) On heating green coloured ferrous sulphate crystals, reddish brown solid is left and smell of a gas having odour of burning sulphur is experienced.

(d) Iron nails when left dipped in blue coloured copper sulphate solution become reddish brown in colour and the blue colour of the solution fades away.

(e) Quick lime reacts vigorously with water releasing a large amount of heat.

21. (a) Why is respiration considered an exothermic reaction? (b)

Define the term oxidation and reduction.

(c) Identify the substance oxidised and reduced in the following reaction.

$CuO + Zn \rightarrow Cu + ZnO$

(d) Define combination reaction. Give one example of a combination reaction which is also exothermic.