

MCQ

1. One of the following does not happen during a chemical reaction. This is:
- (a) Breaking of old chemical bonds and formation of new chemical bonds
 - (b) Formation of new substance with entirely different properties
 - (c) Atoms of one element change into those of another element to form new products.
 - (d) A rearrangement of atoms takes place to form new products.
2. Which of the following does not involve a chemical Reaction.
- (a) Digestion of food in our body
 - (b) Process of respiration
 - (c) Burning of candle wax when heated
 - (d) melting of candle wax on heating.

3 You are given the solution of lead. In order to obtain a yellow precipitate, you should mix it with a solution of

- (a) Potassium chloride
- (b) Potassium Nitrate
- (c) Potassium sulphate
- (d) Potassium Iodide.

4 An acid which can de-colourize purple coloured potassium permanganate solution is:

- (a) Sulphuric acid
- (b) Citric acid
- (c) Carbonic acid
- (d) Hydrochloric acid.

5 The chemical reaction between quick lime and water is characterized by:-

- (a) evolution of hydrogen gas
- (b) Formation of slaked lime precipitate
- (c) Change in temperature of mixture
- (d) Change in colour of the product

6. One of the following is an exothermic reaction. This is:

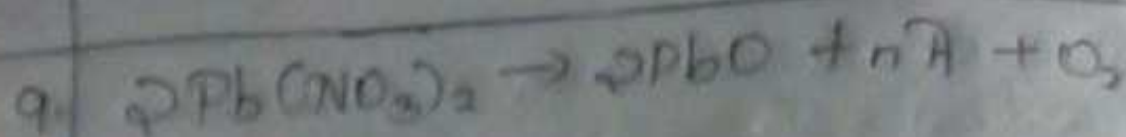
- (a) Electrolysis of Water
- (b) Conversion of lime stone into quick lime
- (c) Process of respiration
- (d) Process of Photosynthesis

7. The Chemical equations are balanced to satisfy one of the following laws in chemical reactions. This law is known as

- (a) Law of conservation of momentum
- (b) Law of conservation of mass
- (c) Law of conservation of motion
- (d) Law of conservation of magnesium

8. The Chemical reaction between Quick lime water is characterized by:

- (a) Evolution of hydrogen gas
- (b) Formation of slaked lime precipitate
- (c) Change in temperature of mixture
- (d) Change in colour of product



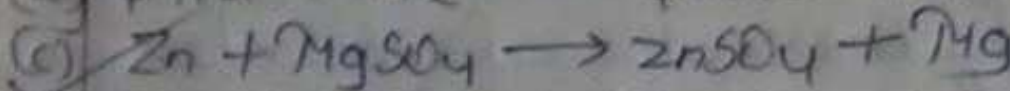
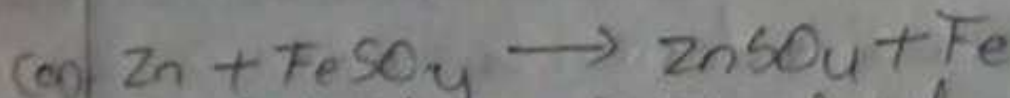
(a) 4NO

~~(b) 4NO_2~~ (b) 4NO_2

(c) 2PbO_2

(d) NO_2

10. Which of the following reaction will not take place?



11. The equation $\text{Cu} + x\text{HNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + y\text{NO}_2 + 2\text{H}_2\text{O}$, the value x and y

(a) 3 and 1 respectively

(b) 8 and 6 respectively

~~(c) 4 and 2 respectively~~

(d) 7 and 1 respectively

12. When the gases Sulphur dioxide and Hydrogen sulphite mix in the presence of water, the reaction $\text{SO}_2 + 2\text{H}_2\text{S} \rightarrow 2\text{H}_2\text{O} +$

36. Consider. Here hydrogen sulphide is acting as:

- (a) an oxidising agent
- (b) an reducing agent
- (c) a dehydrating agent
- (d) a catalyst

13. The layer on iron nails when they are dipped in copper sulphate solution is

- (a) Soft and dull
- (b) Hard and Shiny
- (c) Hard and dull
- (d) None of these

14. The substances which combine or separate are known as:

- (a) Reactant
- (b) Product
- (c) Reaction
- (d) Catalyst

16. The new substance formed during chemical reaction are known as

16. Catalyst
17. Reactant
18. Product
19. Equation.

16. The process of respiration:

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

17. In the context of redox reaction, the removal of hydrogen from a substance is known as:-

- (a) Oxidation
- (b) Dehydration
- (c) Reduction
- (d) Dehydrogenation

18. The chemical reaction involved in the corrosion of iron metal is that of

- (a) Oxidation as well as displacement
- (b) Reduction as well as combination
- (c) Oxidation as well as combination
- (d) Reduction as well as displacement

19. $4M + 3O_2 \rightarrow 2M_2O_3$
This equation represents:

- (a) Combination reaction as well as reduction reaction
- (b) Decomposition reaction as well as oxidation reaction
- (c) Oxidation reaction as well as displacement reaction
- (d) Combination reaction as well as oxidation reaction

20. $Mg + CuO \rightarrow MgO + Cu$
This equation represents

- (a) Decomposition reaction as well as displacement reaction

- (b) Combination reactions as well as displacement reaction.
- (c) Redox reaction as well as displacement reaction.
- (d) Double displacement reaction as well as redox reaction.

21. Which of the following is a balanced chemical equation?

- (a) $H_2O_2 \rightarrow H_2O + O_2$
- (b) $2Fe_2O_3 + 3C \rightarrow 4Fe + 3CO_2$
- (c) $SO_2 + O_2 + 2H_2O \rightarrow 4H_2SO_4$
- (d) $Mg + HCl \rightarrow MgCl_2 + H_2$

22. The term rancidity represents

- (a) Acid rain
- (b) Oxidation of fatty food
- (c) Spoiling of fruit
- (d) Fading of the coloured cloths in the sun.

23. $a Pb(NO_3)_2 \rightarrow b PbO + c NO_2 + d O_2$
 in the above balanced equation $b + d$

- (a) 2, 2, 4
- (b) 4, 4, 8
- (c) 3, 3, 6
- (d) 2, 2, 2

24. Corrosion can be prevented by:

- (a) Alloying
- (b) Tinning
- (c) Galvanizing
- (d) All of the above

25. As compare to iron, Aluminium has:

- (a) Highest tendency to oxidise
- (b) lesser tendency to oxidise
- (c) equal tendency to oxidise
- (d) none of the above