Assignment

Chemical Reactions and Equations

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 substances 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 nitrate. In order to obtain a yellow precipitate, you should mix it with a solution of:
   (a) Potassium chloride
   (b) Potassium Nitride
   (c) Potassium sulphate
   (d) Potassium Iodide

4. An acid which can decolorize 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 magnetism
8. 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 product
9. $2Pb(NO_3)_2 \rightarrow 2PbO + nA + O_2$
(a) 4NO
(b) $4NO_2$
(c) $2PbNO_2$
(d) NO_2

10. Which of the following reaction will not take place?
(a) $Zn + FeSO_4 \rightarrow ZnSO_4 + Fe$
(b) $2KI + Cl_2 \rightarrow 2KCL + I_2$
(c) $Zn + MgSO_4 \rightarrow ZnSO_4 + Mg$
(d) $Mg + CuSO_4 \rightarrow MgSO_4 + Cu$
11. The equation
$Cu + XHNO_3 \rightarrow Cu(NO_3)_2 + YNO_2 + 2H_2O$, the value of X and Y are:

(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 sulphide mix in the presence of water, the reaction $SO_2 + 2H_2S \rightarrow 2H_2O + 3S$ occurs. Here hydrogen sulphide is acting as:
(a) an oxidising agent
(b) a 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 react are known as:
(a) Reactant
(b) Product
(c) Reaction
(d) Catalyst

15. The new substances formed during chemical reaction are known as:
(a) Catalyst
(b) Reactant
(c) Product
(d) Equation

16. The process of Respiration is:
(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 reactions, 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 double 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) $2Mg + HCl \rightarrow MgCl_2 + H_2$

22. The term rancidity represents
(a) Acid rain
(b) Oxidation of fatty food
(c) rottening of fruit
(d) fading of the coloured clothes in the sun

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

(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) Higher tendency to oxidise
(b) lesser tendency to oxidise
(c) equal tendency to oxidise
(d) none of the above

Answers :-

1) c	6) c	11) c	16) d	21) b
2) c	7) b	12) b	17) a	22) b
3) d	8) a	13) b	18) c	23) a
4) d	9) b	14) a	19) d	24) d
5) a	10) c	15) c	20) c	25) a