VISWABHARATHI WISEWOODS

TYPES OF REACTIONS LAW OF CHEMICAL COMBINATION - PRACTICE SHEET

GRADE : V – VI **SUBJECT : CHEMISTRY**

I. Choose the correct answer :

1. A balanced chemical equation is in accordance with : ( )

   A) Avogadro's Law B) Law of multiple proportion

   C) Law of conservation of mass D) None of these

2. The equation

   $$N_2 + XH_2 \rightarrow YNH_3$$

   the values of 'X' and 'Y' are ( )

   A) 2 and 3 B) 3 and 2 C) 8 and 6 D) 1 and 2

3. Rusting of an iron is an example of ( )

   A) Reduction B) Ionization C) Oxidation D) Dissociation

4. Natural gas is mostly ( )

   A) Methane B) Ethane C) Hydrogen D) Butane

5. Water can produce hydrogen and oxygen gases in the presence of ( )

   A) Electricity B) Sunlight C) Heat D) Catalyst

6. Which of the following reaction is balanced ( )

   A) $H_2 + Cl_2 \rightarrow 2HCl$ B) $H_2 + O_2 \rightarrow H_2O$

   C) $CaCO_3 \rightarrow CaO + CO_2$ D) Both (A) and (C)

7. The reaction in which two compounds exchange their ions to form two new compounds is ( )

   A) A displacement reaction B) a decomposition reaction

   C) an addition reaction D) a double displacement reaction

8. $Zn + H_2SO_4 \rightarrow ZnSO_4 + H_2$ above reaction is : ( )

   A) Decomposition reaction B) Single displacement reaction

   C) Combination reaction D) None of these

9. Identify the number of reactants and products in the following reaction $Zn + HCl \rightarrow ZnCl_2 + H_2$ _____.

10. Symbol of element iron is _____.

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

12. The addition of oxygen to a substance is called ( )

A) Oxidation B) Decomposition C) Reduction D) None of these

13. How many atoms of oxygen are on the reactant side : $2H_2O \rightarrow 2H_2 + O_2$. ( )

A) One B) Two C) Four D) Three

14. How many hydrogen atoms are on the product side : $N_2 + 3H_2 \rightarrow 2NH_3$. ( )

A) Six B) Five C) Four D) Three

15. Chemical reaction $2Na + Cl_2 \rightarrow 2NaCl$ is an example of ( )

A) Combination reaction B) Decomposition reaction

C) Oxidation reaction D) Displacement reaction

16. Identify the number of elements present in the Perchloric acid $(HClO_4)$ ( )

A) 2 B) 3 C) 6 D) 1

17. How many atoms hydrogen are on the reactant side : $HCl + NaOH \rightarrow NaCl + H_2O$. ( )

A) 3 B) 2 C) 4 D) 1

18. The equation : $XH_2 + O_2 \rightarrow YH_2O$, the values of '$X$' and '$Y$' are ( )

A) $X = 2, Y = 2$ B) $X = 2, Y = 3$ C) $X = 1, Y = 1$ D) None of these

19. Identify the combination reaction from the following : ( )

A) $A \rightarrow C + D$ B) $A + B \rightarrow C$ C) $A + BC \rightarrow AC + B$ D) $AC + B \rightarrow BC + A$

20. The symbol of sodium is _____ and its atomic number is _____.

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