WORKSHEET 4

(61.) $2Zn(aq) + 2e \rightarrow Zn(s)$. This is –

(1) oxidation (2) reduction

(3) redox reaction (4) none of these .

(62.) Combustion reaction of coal is a/an reaction.

(1) exothermic (2) auto-catalytic

(3) endothermic (4) None of these

(63.) $Zn^{2+}(aq.) + 2e^{-} \rightarrow Zn(s)$. This is

(1) Oxidation

(2) Reduction

(3) Redox reaction

(4) None of the above

(64.) A redox reaction is one in which –

(1) both the substance are reduced

(2) both the substance are oxidised

(3) an acid is neutralised by the base

(4) one substance is oxidised while the other is reduced

(65.) $HgO(s) \xrightarrow{\text{Heat}} Hg(l) + O_2(g)$

The above given reaction is:

(1) combustion reaction

(2) displacement reaction

(3) thermal decomposition reaction

(4) photolytic decomposition reaction

(66.) The substances you start with are called and after the chemical change, what is formed is called the

(1) reactants, products

(2) reactants, gases

(3) element, products

(4) element, compounds

(67.) Name the type of following chemical reaction.

$KNO_3 + H_2SO_4 \rightarrow HNO_3 + KHSO_4$

(1) Displacement Reaction

(2) Double Displacement Reaction

(3) Combination Reaction

(4) Decomposition Reaction

(68.) Choose the correct equation where the abbreviations are correctly stated to represent the correct states of the reactants and the products, taking an exothermic reaction into consideration?

(1) $CH_4(g) + 2O(l) \rightarrow CO(g) + 2H_2O(g)$

(2) $CH_4(g) + 2O(g) \rightarrow CO(g) + 2H_2O(g)$

(3) $CH_4(l) + 2O(g) \rightarrow CO(g) + 2H_2O(l)$

(4) $CH_4(g) + 2O(g) \rightarrow CO(g) + 2H_2O(l)$

(69.) Two aqueous solutions are mixed and a precipitate is formed. What type of reaction is it?

(1) Decomposition

(2) Synthesis

(3) Combustion

(4) Double displacement

(70.) Consider the following reactions :

$CuSO_4 + Fe \rightarrow FeSO_4 + Cu$

$FeSO_4 + Zn \rightarrow ZnSO_4 + Fe$

Among these:

(1) Zn is most reactive and Fe is least reactive

(2) Fe is most reactive and Cu is least reactive

(3) Zn is most reactive and Cu is least reactive

(4) Cu is most reactive and Fe is least reactive

(71.) What happens when copper rod is dipped in iron sulphate solution?

(1) Copper displaces iron

(2) Blue colour of copper sulphate solution is obtained

(3) No reaction takes place

(4) Reaction is exothermic

(72.) Which of the following is (are) a decomposition reaction?

(1) $2HgO \xrightarrow{Heat} 2Hg + O_2$

(2) $CaCO_3 \xrightarrow{Heat} CaO + CO_2$

(3) $2H_2O \xrightarrow{Electrolysis} H_2 + O_2$ More than One Option Correct :

(4) $N_2 + 3H_2 \rightarrow 2NH_3$

(73.) Black and white photography uses –

(1) decomposition of silver chloride

(2) decomposition of silver bromide

(3) both

(4) none of these

(74.) Identify the values of a, b, c, d in the given equation:

$aHg(OH)_2 + bH_3PO_4 \rightarrow cHg(PO_4)_2 + dH_2O$

(1) 1, 3, 2, 6 (2) 3, 2, 1, 6

(3) 2, 3, 6, 1 (4) 6, 3, 2, 1

(75.) Write a balanced chemical equation with state symbols for the following reaction:
When lithium hydroxide pellets are added to a solution of sulphuric acid, lithium sulphate and water are formed.

(1) $LiOH(s) + 2H_2SO_4(aq) \rightarrow Li_2SO_4(aq) + 2H_2O(l)$

(2) $LiOH(s) + H_2SO_4(aq) \rightarrow Li_2SO_4($ aq $) + H_2O(l)$

(3) $2LiOH(s) + 2H_2SO_4(aq) \rightarrow Li_2SO_4(aq) + 2H_2O(l)$

(4) $2LiOH(s) + H_2SO_4(aq) \rightarrow Li_2SO_4(aq) + 2H_2O(l)$

(76.) In a balanced chemical reaction, the electric charge and total number of moles before reaction and after the reaction are :

(1) conserved (2) not same

(3) different (4) None of these

(77.) Which symbol represents a precipitate in a chemical equation?

(1) $\rightarrow$ (2) $\uparrow$ (3) $\downarrow$ (4) $\leftrightarrow$

(78.) Which of the following reactions involves the combination of two elements?

(1) $CaO + CO_2 \rightarrow CaCO_3$

(2) $4Na + O_2 \rightarrow 2Na_2O$

(3) $SO_2 + \frac{1}{2}O_2 \rightarrow SO_3$

(4) $NH_3 + HCl \rightarrow NH_4Cl$

(79.) $Fe_2O_3 + 2Al \rightarrow Al_2O_3 + 2Fe$ This reaction is an example of –

(1) Combination reaction

(2) Double displacement reaction

(3) Decomposition reaction

(4) Displacement reaction

(80.) Consider the following statements about a chemical reaction. Which one is true?

(1) The total number of molecules remains unchanged

(2) The total number of moles remains the same

(3) The total mass is not altered

(4) The total number of reaction molecules is equal to the total number of molecules of the products formed

(79.)	4	**(80.)**	3		