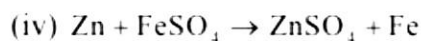
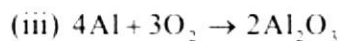
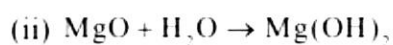


### WORKSHEET 3

(41.) Magnesium ribbon is burnt in an atmosphere of nitrogen gas to form solid magnesium nitride. This is a :

- (1) decomposition reaction
- (2) combination reaction
- (3) displacement reaction
- (4) double displacement reaction

(42.) Which of the following is/are combination reaction(s)?

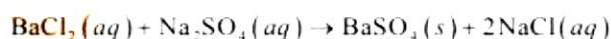


- (1) (i) and (iii)                      (2) (iii) and (iv)
- (3) (ii) and (iv)                    (4) (ii) and (iii)

(43.) Assertion:-Paheli bought a statue made of copper. To her surprise, it acquired a dull green coating after a couple of months.  
Reason:-Copper gets corroded due to the reaction of atmospheric moisture and carbon dioxide gas which thus turns green on exposure to the atmosphere.

- (1) Both Assertion and Reason are correct and Reason is the correct explanation for Assertion
- (2) Both Assertion and Reason are correct but Reason is not the correct explanation for Assertion
- (3) Assertion is correct but Reason is incorrect
- (4) Both Assertion and Reason are incorrect

(44.)



Above reaction involves which type of reaction :

- (a) Displacement
- (b) Precipitation
- (c) Combination

(d) Double displacement

- (1) (a) & (c)                      (2) (a), (b) & (c)
- (3) (b) & (c)                      (4) (b) & (d)

(45.) Number of moles  $\text{MnO}_4^-$  required to oxidise one mole of ferrous oxalate in acidic medium will be

- (1) 2.5 mol                      (2) 0.2 mol
- (3) 0.6 mol                      (4) 0.4 mol

(46.) Oxidation numbers of P in  $\text{PO}_4^{3-}$ , of S in  $\text{SO}_4^{2-}$  and that of Cr in  $\text{Cr}_2\text{O}_7^{2-}$  are respectively.

- (1) +3, +6 and +5                      (2) +5, +3 and +6
- (3) +3, +6 and +6                      (4) +5, +6 and +6

(47.) Which of the following is a redox reaction?

- (1)  $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
- (2)  $\text{H}_2 + \text{Cl}_2 \rightarrow 2\text{HCl}$
- (3)  $\text{CaO} + 2\text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O}$
- (4)  $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$

(48.) Which of the following statements about the given reaction are correct?



- i Iron metal is getting oxidised
- ii Water is getting reduced
- iii Water is acting as reducing agent
- iv Water is acting as oxidising agent

- (1) (i), (ii) and (iii)                      (2) (iii) and (iv)
- (3) (i), (ii) and (iv)                      (4) (ii) and (iv)

(49.) Select the reaction in which electricity is responsible for the chemical change.

- (1) Formation of lead(II) bromide
- (2) Decomposition of water
- (3) Hydrogenation of oils
- (4) None of these

(50.) Oxidation number of oxygen atom in  $O_2$  molecule is

- (1) 0                                      (2) -2  
(3) +2                                      (4) 1 2

(51.) The process of oxidation involves –

- (1) the addition of oxygen atoms  
(2) the acceptance of hydrogen atoms  
(3) the release of hydrogen atoms  
(4) neither acceptance nor release of hydrogen atoms<sup>7</sup>

(52.)  $Pb(NO_3)_2 + 2KI \rightarrow PbI_2 + 2KNO_3$  What constitutes this reaction?

- (1) Decomposition  
(2) Combustion  
(3) Double displacement  
(4) Synthesis

(53.) What happens when dil hydrochloric acid is added to iron fillings?

- (1) Hydrogen gas and Iron chloride are produced.  
(2) Chlorine gas and Iron hydroxide are produced.  
(3) NO reaction takes place  
(4) Iron salt and water are produced.

(54.) In a balance equation  $H_2SO_4 + xHI \rightarrow H_2S + yI_2 + zH_2O$ , the values of x, y, z are

- (1)  $x = 3, y = 5, z = 2$   
(2)  $x = 4, y = 8, z = 5$   
(3)  $x = 8, y = 4, z = 4$   
(4)  $x = 5, y = 3, z = 4$

(55.) 1.0 g of  $CaCO_3$  is taken in a test tube. On heating it over a flame, a colorless gas is evolved. The reaction is called:

- (1) decomposition reaction  
(2) displacement reaction

(3) combination reaction

(4) double displacement reaction

(56.) In the reaction  $PbO + C \rightarrow Pb + CO$

- (1) PbO is reduced  
(2) C acts as a oxidising agent  
(3) C acts as a reducing agent  
(4) this reaction does not represent redox reaction

(57.) Correct balanced equation from the following reactions is:

- (1)  $Al_4C_3 + 12H_2O \rightarrow 4Al(OH)_3 + 3CH_4$   
(2)  $Al_4C_3 + 2H_2O \rightarrow 2Al(OH)_3 + 3CH_4$   
(3)  $2Al_4C_3 + 12H_2O \rightarrow 4Al(OH)_3 + 3CH_4$   
(4)  $Al_4C_3 + 16H_2O \rightarrow 4Al(OH)_3 + CH_4$

(58.) Which of the following is a reversible reaction?

- (1)  $H_2 + I_2 \rightleftharpoons 2HI$   
(2)  $NaOH + HCl \rightarrow NaCl + H_2O$   
(3)  $N_2 + 3H_2 \rightleftharpoons 2NH_3$   
(4)  $2SO_2 + O_2 \rightleftharpoons 2SO_3$

(59.) During the reaction of some metals with dilute hydrochloric acid, the following observations were made. The reaction of sodium metal is found to be highly explosive because:

- (1) Heat is evolved  
(2) Due to the catalyst  
(3) It is an endothermic reaction  
(4) It is an exothermic reaction

(60.) Copper sulphate solution, which is blue in colour, will change to a colourless solution with the addition of which metal?

- (1) Au                                      (2) Ag  
(3) Zn                                      (4) All of these

<b>(50.)</b>	1	<b>(51.)</b>	1,3	<b>(52.)</b>	3
<b>(53.)</b>	1	<b>(54.)</b>	3	<b>(55.)</b>	1
<b>(56.)</b>	1,2	<b>(57.)</b>	1	<b>(58.)</b>	1,3,4
<b>(59.)</b>	1,4	<b>(60.)</b>	3		