CLASS X
CHEMISTRY
WORKSHEET1

CHAPTER: METALS AND NON-METALS

Q1 Two wires of equal length ,one of copper and the other of some alloy have the same thickness. Which one can be used for (i) electrical transmission lines (ii) electric heating device? Why?

Q2 Write the chemical equations for reactions taking place when

(i) Manganese dioxide is heated with aluminium.

(ii) Steam is passed over red hot iron.

Q3 Define the term alloy .Write two advantages of making alloy.

Q4 Show the formation of NaCl from sodium and chlorine atoms by the transfer of electrons.

Q5 Name the anode and cathode used in electrolytic refining of copper.

Q6 Name two metals which react violently with cold water .Write any three observations which would you make when such metal is dropped in cold water. How would you identify the gas evolved, if any, during the reaction

Q7 Name a metal in each case;

(i) It does not react with cold as well as hot water but reacts with steam.

(ii) It does not react with any physical state of water

Q8 When calcium metal is added to water ,the gas evolved does not catch fire but the same gas evolved on adding sodium metal to water catches fire .Why is it so?

Q9 Give reasons for the following

(i) To make hot water tanks, copper is used and not steel.

(ii) Lemon is used for restoring the shine of tarnished copper decorations

(iii) Addition of some silver to pure gold for making ornaments.

Q10 In what forms are metals found in nature? With the help of examples, explain how metals react with oxygen and dilute acids. Also write chemical equation for the reactions.

Q11 Explain how the following metals are obtained from their compounds by reduction process:

(i) Metal X which is low in reactivity series.

(ii) Metal Y which is in the middle of series.

(iii) Metal Z which is high in reactivity series.

Q12 With a labelled diagram describe an activity to show that metals are good conductor of electricity.

Q13 Account for the following

(i) Hydrogen gas is not evolved when a metal reacts with nitric acid.

(ii) The reaction of iron(III) oxide with aluminium is used to join cracked iron parts of machines.

Q14 Which of the following will form acidic oxide?

P, K, Na, Ca

Q15 Name the constituents of the following alloys

(i) Brass

(ii) Stainless steel

(iii) Bronze