

Daily Tutorial Sheet 4

Level – 1

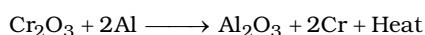
46.(C) Gun metal has a composition of Cu = 88 %

Sn = 10 %

Zn = 2 %

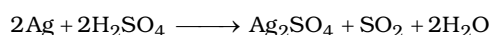
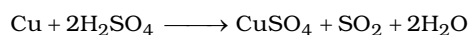
47.(A) Stainless steel is an alloy of iron with chromium and nickel. Its composition is 82% Fe and 18% Cr + Ni. It resists corrosion and used for making automobile parts and utensils.

48.(A) Thermite process is used for the reduction of oxides of less electropositive metals. Oxides of less electropositive metals such as Cr_2O_3 , Mn_3O_4 etc are reduced by using Al. This process is called thermite process.



49.(C) Au is a member of 5d-series. Fe, Co and Cu all are the members of 3d-series.

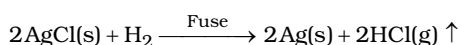
50.(D) Impurities of Cu and Ag from gold are removed by boiling impure gold with conc. H_2SO_4 and also by electrolytic method.



Electrolysis using Anode of Au with impurity of Ag and Cu can remove Ag and Cu.

This method is called parting. Conc. HNO_3 can also be used for this purpose.

51.(A) On fusing AgCl with H_2 metallic silver is obtained.



52.(A) Cu, Ag, Au group of elements are called coinage metals as these are used in minting coins.

53.(A) Monel metal or constantan is an alloy of Cu, Ni, Fe, Mn.

54.(B) Bronze is a mixture of Cu and Sn.

55.(D) AgBr , silver bromide is used in photography.

56.(B) Aqueous silver nitrate solution is used as indelible ink.

57.(B) Alloy is a homogeneous mixture of two or more metals. Mercury forms amalgams (alloy) with gold, silver and tin. But it does not react with iron or platinum.

58.(D) Brass is an alloy of Cu and Zn.

Bronze is an alloy of Cu and Sn

German silver is an alloy of Cu, Zn and Ni

Hence, Cu is the common metal in brass, bronze and German silver.

59.(B) Cast iron or pig iron contains 2 to 4.5% of carbon. It is least ductile and least pure form of iron. It is brittle and cannot be welded.

60.(C) d-Block elements have higher melting point due to greater forces of attraction between two atoms.