Daily Tutorial Sheet 8	Level - 2

96. **[A-s] [B-r] [C-q] [D-p]**

(A) $Cu_2S + 2Cu_2O \longrightarrow 6Cu + SO_2$; Bessemerisation

(B) $Ni + 4CO \longrightarrow Ni(CO)_4 \xrightarrow{\Delta} Ni + CO$; Mond's process

(C) $Ti + 2I_2 \longrightarrow TiI_4 \xrightarrow{\Delta} Ti + 2I_2$; Van-Arkel method

(D) Si and Ge $\longrightarrow$ Zone refining

97. **[A-s] [B-q] [C-r] [D-p]**

(A) Cyanide process $\rightarrow$ Extraction of Au **(B)** Floatation process $\rightarrow$ Pure oil

(C) Electrolytic reduction $\rightarrow$ Ext. of Al **(D)** Zone-refining $\rightarrow$ Ultra pure Ge

98.(A) To extract Mg : electrolysis of fused/molten salt.

99.(C) In Hall Haroult's process : electrolyte $= \underset{\text{(molten mixture)}}{Al_2O_3 + Na_3AlF_6 + CaF_2}$

100.(B) $2Al_2O_3(s) + 3C(s) \longrightarrow \underset{\text{(molten)}}{4Al} + 3CO_2(g)$; $\underset{\text{(reaction)}}{\Delta H^\circ} = +(ve)$

101.(BC) Coal gas consist of major % of CO which create a passive layer that present reduction of Mg with O_2 and N_2.

102.(A) Ni-anodes and Fe-cathodes are been used in the castner's process.

103.(C) K is more reactive than Mg; thus Mg^{2+} is easier to get discharge at cathode as compared to K^+ ions.

104.(B) Oxide + Al $\longrightarrow$ Oxide of Al + metal

105.(D) Mg^{2+} can be preferentially discharge over Al^{3+} at cathode.