Name: Key

## Question 1

Give the oxidation numbers for each element in the following compounds

## Question 2

Identify the reducing agent and the oxidizing agent in each reaction

$$C_3H_8(g) + 5O_2(g) \longrightarrow 3CO_2(g) + 4H_2O(g)$$

or tized feducing agent oxidizing agent

 $SH_2S(g) + 8Cl_2(g) \longrightarrow S_8(s) + 16HCl(g)$ 

oxidized feducing agent oxidizing agent

## Question 3

## State whether the reactions will proceed Worst Oxidizing Agents **Best Reducing Agents** spontaneously or not Al3+ $Fe(NO_3)_2(aq) + Sn(s) \longrightarrow Sn(NO_3)_2(aq) + Fe(s)$ Cr3+ Non-Sportuneous Fe2+ >Fe Sn2+ $Cr(NO_3)_3(aq) + Al(s) \longrightarrow Al(NO_3)_2(aq) + Cr(s)$ ₹ Sn **Best Oxidizing Agents** Worst Reducing Agents Spontaneous

**Activity Series**