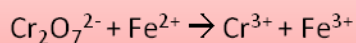
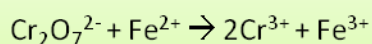


REDOX REACTIONS

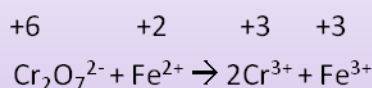
Balancing Redox Reaction in Acidic Medium



Step 1: Balance all atoms except H and O .



Step 2: Find out ON of all atoms

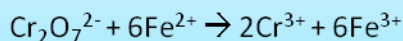


(1 atom of Cr is undergoing a decrease in ON from 6 to 3 i.e. by 3; 2 atoms of Cr undergo a change in ON by $3 \times 2 = 6$ and 1 atom of Fe is undergoing an increase in ON from 2 to 3 i.e. by 1)

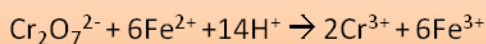
Total dec in ON is by 6 while Total inc in ON is by 1)



Step 3: Equate the increase and decrease in ON, Decrease in ON of Cr is by 6, make Fe atoms 6 on both sides so that increase in ON is also by 6



Step 4: Balance charges (adding H^+ as this is acidic medium)



Step 5: Add water to balance Oxygen (Hydrogen gets balanced automatically)

