# Saitechinfo NEET-JEE Academy

Here is the key to the questions for identifying the oxidizing and reducing agents:

---

1. $Zn + Cu^{2+} \rightarrow Zn^{2+} + Cu$
   - **Oxidizing agent:** $Cu^{2+}$
   - **Reducing agent:** $Zn$
2. $H_2 + F_2 \rightarrow 2HF$
   - **Oxidizing agent:** $F_2$
   - **Reducing agent:** $H_2$
3. $2Fe^{3+} + 3Sn^{2+} \rightarrow 2Fe^{2+} + 3Sn^{4+}$
   - **Oxidizing agent:** $Fe^{3+}$
   - **Reducing agent:** $Sn^{2+}$
4. $2H_2O_2 \rightarrow 2H_2O + O_2$
   - **Oxidizing agent:** $H_2O_2$
   - **Reducing agent:** $H_2O_2$ (acts as both)
5. $Cl_2 + 2I^- \rightarrow 2Cl^- + I_2$
   - **Oxidizing agent:** $Cl_2$
   - **Reducing agent:** $I^-$
6. $H_2SO_4 + 2HI \rightarrow I_2 + SO_2 + 2H_2O$
   - **Oxidizing agent:** $H_2SO_4$
   - **Reducing agent:** $HI$
7. $MnO_4^- + 5Fe^{2+} + 8H^+ \rightarrow Mn^{2+} + 5Fe^{3+} + 4H_2O$
   - **Oxidizing agent:** $MnO_4^-$
   - **Reducing agent:** $Fe^{2+}$
8. $HClO + H_2O_2 \rightarrow Cl^- + O_2 + H_2O$
   - **Oxidizing agent:** $HClO$
   - **Reducing agent:** $H_2O_2$
9. $Cr_2O_7^{2-} + 6Cl^- + 14H^+ \rightarrow 2Cr^{3+} + 3Cl_2 + 7H_2O$
   - **Oxidizing agent:** $Cr_2O_7^{2-}$
   - **Reducing agent:** $Cl^-$
10. $2NO + O_2 \rightarrow 2NO_2$
    - **Oxidizing agent:** $O_2$
    - **Reducing agent:** $NO$
11. $2K + Br_2 \rightarrow 2KBr$
    - **Oxidizing agent:** $Br_2$
    - **Reducing agent:** $K$
12. $H_2 + O_2 \rightarrow H_2O$

- **Oxidizing agent:** $O_2$
- **Reducing agent:** $H_2$

13. $Cu + 4HNO_3 \rightarrow Cu(NO_3)_2 + 2NO_2 + 2H_2O$
    - **Oxidizing agent:** $HNO_3$
    - **Reducing agent:** $Cu$
14. $SO_2 + 2H_2O + Cl_2 \rightarrow H_2SO_4 + 2HCl$
    - **Oxidizing agent:** $Cl_2$
    - **Reducing agent:** $SO_2$
15. $Ag + HNO_3 \rightarrow AgNO_3 + NO + H_2O$
    - **Oxidizing agent:** $HNO_3$
    - **Reducing agent:** $Ag$

---