



Class 11 Chemistry | Redox Reactions

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Oxidation number of Mn in KMnO_4 is:

A. +4 B. +2 C. +6 D. +7

2. Oxidation number of sulfur in SO_4^{2-} is:

A. +6 B. +4 C. -2 D. +8

3. Oxidation number of oxygen in H_2O_2 is:

A. 0 B. +1 C. -1 D. -2

4. In $\text{Zn} + \text{Cu}^{2+} \rightarrow \text{Zn}^{2+} + \text{Cu}$, the reducing agent is:

A. Cu^{2+} B. Zn^{2+} C. Zn D. Cu

5. Oxidation is associated with:

- A. Electron loss
- B. Electron gain
- C. Decrease in oxidation number
- D. Proton gain only

6. Which change is a reduction?

- A. $\text{Cl}^- \rightarrow \text{Cl}_2$
- B. $\text{Zn} \rightarrow \text{Zn}^{2+}$
- C. $\text{Fe}^{2+} \rightarrow \text{Fe}^{3+}$
- D. $\text{Fe}^{3+} \rightarrow \text{Fe}^{2+}$

7. Electrons accepted by one MnO_4^- to form Mn^{2+} in acid are:

A. 5 B. 2 C. 7 D. 3

8. Electrons lost when one Cr^{2+} becomes Cr^{3+} are:

A. 2 B. 1 C. 5 D. 3

9. Which reaction is disproportionation?

- A. $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$
- B. $\text{Zn} + \text{CuSO}_4 \rightarrow \text{ZnSO}_4 + \text{Cu}$
- C. $2\text{H}_2\text{O}_2 \rightarrow 2\text{H}_2\text{O} + \text{O}_2$
- D. $\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{H}_2\text{O}$

10. Oxidation number of H in NaH is:

A. +2 B. 0 C. +1 D. -1

11. In $\text{Cl}_2 + 2\text{OH}^- \rightarrow \text{Cl}^- + \text{ClO}^- + \text{H}_2\text{O}$, chlorine changes from 0 to:

- A. -2 and +2
- B. -1 and +1
- C. -1 and +5
- D. +1 and +3

12. In acid, $\text{Cr}_2\text{O}_7^{2-}$ needs how many electrons to form 2Cr^{3+} ?

A. 12 B. 2 C. 3 D. 6

13. Which is not a redox reaction?

- A. $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$
- B. $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$
- C. $2\text{Na} + \text{Cl}_2 \rightarrow 2\text{NaCl}$
- D. $\text{H}_2 + \text{Cl}_2 \rightarrow 2\text{HCl}$

14. For $\text{MnO}_4^- + \text{Fe}^{2+}$ in acid, the mole ratio $\text{MnO}_4^- : \text{Fe}^{2+}$ is:

A. 1:5 B. 2:1 C. 1:2 D. 5:1

15. The average oxidation number of S in $\text{S}_2\text{O}_3^{2-}$ is:

A. +2 B. +6 C. +4 D. -2

ANSWER KEY — check after completing all 15 questions

1.D 2.A 3.C 4.C 5.A 6.D 7.A 8.B 9.C 10.D 11.B 12.D 13.B 14.A 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper

Plot No. 15, Second Floor, Jaisingh Chowk, Sector 85, Gurgaon - 122004

8800 8800 28 | www.goodmarksclasses.com