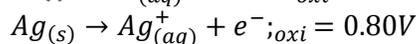
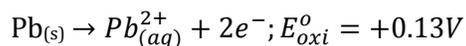


Class: 11
Subject: Chemistry
Topic: Redox Reactions
No. of Questions: 20

- Q1. Justify that the reaction
 $2\text{Cu}_2\text{O}_{(s)} + \text{Cu}_2\text{S}_{(s)} \rightarrow 6\text{Cu}_{(s)} + \text{SO}_{2(g)}$ is a redox reaction.
- Q2. Which of the following species do not show disproportionation reaction and why?
 ClO^- , ClO_2^- , ClO_3^- and ClO_4^-
- Q3. Permanganate ion reacts with bromide ion in basic medium to give manganese dioxide and bromate ion. Write the balanced chemical equation for the reaction.
- Q4. Suggest a scheme of classification of the following redox reaction:
 $2\text{NO}_{2(g)} + 2\text{OH}^-_{(aq)} \rightarrow \text{NO}^-_{2(aq)} + \text{NO}^-_{3(aq)} + \text{H}_2\text{O}_{(liq)}$
- Q5. In which compounds is the oxidation number of Oxygen -1 and +2?
- Q6. Is it possible to store Copper Sulphate Solution in a Zinc vessel?
- Q7. Calculate the oxidation number of S in $\text{Na}_2\text{S}_4\text{O}_6$.
- Q8. Is the sum of oxidation numbers of all atoms in an ion is equal to 0?
- Q9. Can the oxidation number of an element be zero?
- Q10. The electrode potential of four metallic elements (A, B, C and D) are +0.80V, -0.76V, +0.12V and +0.34V respectively. Arrange them in order of decreasing electropositive character.
- Q11. Define oxidation in terms of oxidation numbers.

Q12. Justify that the reaction $2\text{Na}_{(s)} + \text{H}_{2(g)} \rightarrow 2\text{NaH}_{(s)}$ is a redox reaction.

Q13. The half-cell reactions with their Oxidation potentials are:



Write the cell reaction and calculate its EMF.

Q14. What is Standard Electrode Potential?

Q15. Define Reduction in terms of oxidation numbers.

Q16. A solution of silver nitrate was stirred with iron rod. Will it cause any change in the concentration of silver and nitrate ions?

Q17. The standard electrode potentials of a few metals are given below:



Which of these will behave as the strongest oxidizing agent and which as the strongest reducing agent?

Q18. What are the two ways by which a Redox equation is balanced?

Q19. Choose the strongest oxidizing agent among F_2 , Br_2 , I_2 , Cl_2 .

Q20. Why is it not possible to balance the following equation?

