BRAIN INTERNATIONAL SCHOOL

CHEMISTRY Assignment

Class XI

Oct.24-25

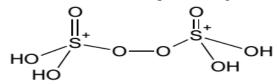
CH: Redox Reaction:

- Q1. What is meant by disproportionation? Give one example.
- Q2. What is galvanization?
- Q3. Write the balanced redox reaction.
 - (I) $MnO_4^-(aq) + Fe^{2+}(aq) \rightarrow Mn^{2+}(aq) + Fe^{3+}(aq)$ [acidic medium]
 - (II) $Cr_2O_7^{2-} + Fe^{2+} \rightarrow Cr^{3+} + Fe^{3+}$ [acidic medium]
- Q4. Determine the oxidation no. of all the atoms in the following oxidants: KMnO4, $K_2Cr_2O_7$ and $KClO_4$.
- Q5. Identify the oxidizing and reducing agents in the following equations:

(i)
$$MnO_4^-(aq) + 5Fe^{2+}(aq) + 8H^+(aq) \rightarrow Mn^{2+}(aq) + 5Fe^{3+}(aq) + 4H_2O$$

(ii)
$$Cr_2O_7^{2-} + 6Fe^{2+} + 14H^+ \rightarrow 2Cr^{3+} + 6Fe^{3+} + 7H_2O$$

- Q6. Identify the strongest and weakest reducing agent from the following metals: Zn, Cu, Na, Ag, Sn
- Q7. Calculate O. S. of sulphur in the following oxoacids of 'S': H_2SO_4 , H_2SO_3 , $H_2S_2O_8$ and $H_2S_2O_7$
- Q8. Balance the equation $MnO4^- + I^- \rightarrow Mn^{2+} + I_2 + H_2O$ by ion electron method in acidic medium.
- Q9. Indicate O.S. of each atom present in given structure of peroxodisulphuric acid.



- Q10. Define:
 - (a) Electrochemical series (b) Redox reactions (c) Oxidizing agents

MCQ Type Questions:

. Q11.. Oxidation state of Fe in Fe₃O₄ is

- Q12. Oxide which cannot act as reducing agent is
 - (i) CO_2 (ii) CIO_2 (iii) NO_2 (iv) SO_2