D and F Block Elements: V

EXEMPLAR PROBLEMS:

- 5. On addition of small amount of KMnO₄ to concentrated H₂SO₄, a green oily compound is obtained which is highly explosive in nature. Identify the compound from the following.
 - (i) Mn_2O_7
 - (ii) MnO₂
 - (iii) MnSO₄
 - (iv) Mn₂O₃

Ans. (i)

- 8. Which of the following reactions are disproportionation reactions?
 - (a) $Cu^* \longrightarrow Cu^{2*} + Cu$
 - (b) $3MnO_4^- + 4H^+ \longrightarrow 2MnO_4^- + MnO_2 + 2H_2O$
 - (c) $2KMnO_4 \longrightarrow K_2MnO_4 + MnO_2 + O_2$
 - (d) $2MnO_4 + 3Mn^{2+} + 2H_2O \longrightarrow 5MnO_2 + 4H^+$
 - (i) a, b
 - (ii) a, b, c
 - (iii) b, c, d
 - (iv) a, d