$\textbf{18.} \quad \text{When acidified } K_2 Cr_2 O_7 \text{ solution is added to } Sn^{2+} \text{ salts then } Sn^{2+} \text{ changes to}$ 

- (i) Sn
- (ii) Sn<sup>3+</sup>
- (iii) Sn<sup>4+</sup>
- (iv) Sn+

18. (iii)

- 21. Why is HCl not used to make the medium acidic in oxidation reactions of KMnO<sub>4</sub> in acidic medium?
  - Both HCl and KMnO<sub>4</sub> act as oxidising agents.
  - (ii)  $\mathrm{KMnO_4}$  oxidises  $\mathrm{HCl}$  into  $\mathrm{Cl_2}$  which is also an oxidising agent.
  - (iii) KMnO<sub>4</sub> is a weaker oxidising agent than HCl.
  - (iv)  $KMnO_4$  acts as a reducing agent in the presence of HCl.

21. (ii)