

- 76.(A)** In (b, c, d) carbon show + 4 oxidation state while in (A) carbon show - 4 oxidation state.
- 77.(A)** $\overset{x}{\text{C}}\text{H}_2\text{Cl}_2 \quad x + 2 - 2 = 0 \Rightarrow x = 0$
- 78.(B)** $\overset{*}{\text{S}}\text{O}_2 = +4$; $\overset{*}{\text{H}}_2\overset{*}{\text{S}}\text{O}_4 = +6$; $\overset{*}{\text{Na}}_2\overset{*}{\text{S}}_2\text{O}_3 = +2$; $\overset{*}{\text{Na}}_2\overset{*}{\text{S}}_4\text{O}_6 = +\frac{5}{2}$.
- 79.(B)** Oxidation number of C in
 $\text{HCHO} = 0$; $\text{CHCl}_3 = +2$; $\text{CH}_3\text{OH} = -2$; $\text{C}_{12}\text{H}_{22}\text{O}_{11} = 0$
- 80.(D)** Fluorine always shows - 1 oxidation state.
- 81.(B)** In all alkali and alkaline earth metal hydride hydrogen always shows - 1 oxidation state.
- 82.(C)** Oxygen has 6 electrons in the outer most shell and shows common oxidation state - 2.
- 83.(C)**

$$\begin{array}{c}
 \text{Oxidation} \\
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 \overbrace{\text{H}_2 + \text{Br}_2}^{\text{Oxidation}} \rightarrow \text{2H}^+ + \text{Br}^- \\
 \underbrace{\hspace{10em}}_{\text{Reduction}}
 \end{array}
 \end{array}$$
- 84.(C)** Al_2O_3 cannot act as both oxidising and reducing agent.
- 85.(AB)** In H_2S sulphur shows -2 oxidation state and in SO_2 shows +4 oxidation state. Hence SO_2 shows both oxidising and reducing properties.